




WAC 170-201A
Surface Water Quality Standards
for the State of Washington

RESPONSIVENESS SUMMARY

July 1, 2003
Publication Number 03-10-060

 *Printed on Recycled Paper*

WAC 170-201A
Surface Water Quality Standards
for the State of Washington
RESPONSIVENESS SUMMARY

Prepared by

Watershed Management Staff
Department of Ecology

July 1, 2003
Publication Number 03-10-060



Printed on Recycled Paper

For additional copies of this document contact:

Department of Ecology
Publications Distribution Center
P.O. Box 47600
Olympia, WA 98504-7600

Telephone: (360) 407-7472

If you need this document in an alternate format, please call us at (360) 407-6404. The TTY number is 711 or 1-800-833-6388.

Table of Contents

Introduction and Summary	1
Responsiveness Summary	3
201A-010 Purpose	3
201A-020 Definitions	4
201A-200 Freshwater Criteria	10
201A-200(1) Aquatic Life	14
201A-200(1)(a)(i) Sub-Category of Char	17
201A-200(1)(c) Temperature – General	18
201A-200(1)(c) Temperature Measure	28
201A-200(1)(c) Temperature-Char	30
201A-200(1)(c) Temperature-Salmon & Other	33
201A-200(1)(c) Temperature-Application	37
201A-200(1)(c)(i)-(vii) Temperature Notes	39
201A-200(1)(c)(i) Natural Condition	40
201A-200(c)(ii) Point Sources	43
201A-200(1)(c)(iii) Warm Weather Exemption	45
201A-200(1)(c)(iii) Measurements	46
201A-200(1)(c)(iv) Downstream Criteria	46
201A-200(1)(c)(v) Lethality	46
201A-200(1)(c)(vii) CWA Section 316	49
201A-200(1)(d) Dissolved Oxygen	49
201A-200(1)(d)(110) Dissolved Oxygen Notes	55
201A-200(1)(e) Turbidity	57
201A-200(1)(f) Total Dissolved Gas	58
201A-200(1)(g) pH	61
201A-200(2) Water Contact Uses	62
201A-200(2)(b) Bacteria	62
201A-200(3)(b) Water Supply Criteria	66
201A-200(3)(b) Agricultural Water Supply	66
201A-200(4) Miscellaneous Uses	68
201A-210 Marine Uses	69
201A-210(1)(c) Marine Temperature Criteria	70
201A-210(1)(g) Marine Aquatic Life Bacteria Criteria	70
201A-200(2)(b) Marine Water Contact Bacteria	71
201A-210(3) Marine Miscellaneous Uses	73
201A-230 Lake Nutrient Criteria	73
201A-240 Toxics Criteria	73
201A-260 Other Water Quality Criteria and Applications	75
201A-260(1) Other Water Quality Criteria	76
201A-260(2) Natural Conditions	78
201A-260(3) Procedures	81
201A-260(3)(f) Human Created Waters	83
201A-260(3)(i) Wetlands	85
201A-300 Antidegradation	86
201A-310 Tier I Antidegradation	91
201A-320 Tier II General	95

201A-320(1) Tier II Application	100
201A-320(3) Tier II Activities.....	105
201A-320(4) Tier II Overriding Public Interest.....	108
201A-320(6) Tier II General Permits	111
201A-330 Tier III Antidegradation.....	114
201A-330(1) Tier III Eligibility.....	116
201A-330(2) tier III Request for Designation	120
201A-330(3) Tier	120
201A-330(4) Tier III Allowance for Temporary Pollution.....	122
PART IV Tools for Application of Criteria.....	123
201A-400 Mixing Zones.....	124
201A-410 Short Term Modifications.....	127
201A-420 Variance	132
201A-430 Site Specific Criteria.....	133
201A-440 Use Attainability Analysis.....	135
201A-450 Water Quality Offsets	137
201A-510(1) Implementation	140
201A-510(5) Compliance Schedules for Dams	141
201A-520 Monitoring and Compliance	144
201A-600 Use Designation.....	144
201A-602 Table for Uses and Waters.....	147
Switch to Use-Based	152
DRAFT Environmental Impact Statement.....	160
Administrative Procedures Act (APA)	162
Small Business Economic Impact Statement (SBEIS)	168
General Comments.....	170
Appendix A.....	A-1
Appendix B	B-1
Index	Index-1

Introduction and Summary

The Department of Ecology held a formal 60-day public review and comment period on proposed revisions to Chapter 173-201A WAC, Water Quality Standards for Surface Waters of the State of Washington, from January 2 through March 7, 2003.

As part of the public notification process, Ecology directly mailed out approximately 3320 announcements, 550 email announcements, and 621 CDs to: potential interested citizens, regulated businesses, governmental officials, and every city, county, and Tribe in the state. The Water Quality Program conducted public workshops and hearings for proposed changes to WAC 173-201A on the following dates and locations:

- January 27, 2003 – Wenatchee
- January 28, 2003 – Spokane
- January 29, 2003 – Pasco
- January 30, 2003 – Yakima
- February 3, 2003 – Bellingham
- February 4, 2003 – Seattle
- February 5, 2003 – Port Angeles
- February 6, 2003 - Vancouver

The following responsiveness summary table is organized first by sections of WAC 173-201A (comment sections 1-65) and then by comments on the proposed switch to use-based standards (section 66), the Draft Environmental Impact Statement (section 67), documents related to the Administrative Procedures Act (section 68), the Small Business Economic Impact Statement (section 69), and finally, general comments on the rule itself (section 70).

Specific comments in the table are followed by key words representing a person or entity who commented on the rule. Appendix 1 contains the full names and key words associated with each. Appendix 2 contains a list of 758 names from emails that were received with the same set of comments. These comments, where found in the table, reference Appendix 2. An index follows the appendices, referencing the commenter and page numbers that corresponds with comments made from that entity.

If you have any questions on the use of this table, or on the responses, please contact Susan Braley at the Department of Ecology at (360) 407-6414 or by email at subr461@ecy.wa.gov.

Responsiveness Summary

WAC 170-201—June 13, 2003

201A-010 Purpose

(1a) 201A-010

Purpose

- Suggested word changes

The sentence “All actions must comply with this chapter” should be deleted. This is an unbelievable overreaching of authority. Neither the CWA nor the SWPCA was intended to apply its regulatory burden (and citizen suit oversight provisions) to every single human action. (Seattle Port)

RESPONSE: All entities, private or otherwise, must conduct their activities so as not to cause or contribute to violations of the state water quality standards. This is consistent with state law established as the foundation for the state water quality standards (e.g., Chapters 90.48 and 90.54 Revised Code of Washington).

The personal pronoun “one” should be replaced with “the water body segment.” (Weyerhaeuser)

RESPONSE: We agree and have redesigned the sentence accordingly.

(1)(a) should be rewritten to: “All surface waters are protected by narrative criteria, designated beneficial uses, and the antidegradation policy, particularly that providing for the protection of existing uses”. (NEA)

RESPONSE: We agree that it is more accurate and more informative to include mention of the antidegradation policy, and so have redesigned the sentence accordingly.

Section (2) should state that irrigation and drainage ditches are included. (NEA)

RESPONSE: This is essentially a restatement of the state laws governing the water quality standards and so we are not making changes to the regulation. The phrase “and all other surface waters and water courses” has always been sufficient for the task of covering irrigation and drainage ditches.

Section (3) the word “will” replaces “shall” and may change the meaning. (NEA)

RESPONSE: We agree and have made the change.

Section (4) should read “criteria were established based on existing, present, and potential uses” to recognize antidegradation, and should be followed with “Designation of uses were, to the best of the Department’s ability, based on existing uses. Where existing uses were not designated, whether inadvertently or intentionally, existing uses have the same protection pursuant to these standards as designated uses”. (NEA)

RESPONSE: We agree that it is more accurate and appropriate to include the term “existing uses” in this language, and so we have redesigned the sentence accordingly. The other suggested changes are not believed needed to carry out the proper protection of the uses and would add confusing verbiage to an already complicated rule.

The last sentence in (4) should be clarified to align water quality standards “compliance” with Water Quality Program Policy 1-11 (September 2002), the 303(d) policy. (Weyerhaeuser)

RESPONSE: This existing language is important to clarifying that the sediment standards were adopted as part of the the federal Clean Water Act package submitted for EPA approval. The statement of notice is already in the existing regulation. The policy was developed in part to set priorities for conducting TMDLs and is not a revised Ecology position on what constitutes compliance with the standards.

The final sentence of subsection (4) is unclear. It states that “one” must comply with the standards without referring to any particular context. Because other, more specific,

	<p>regulations address compliance PacifiCorp suggests that it be deleted. (PacifiCorp) RESPONSE: We have redesigned the sentence to make it clearer.</p> <p>Suggest putting in the rule language a statement about the fact that Ecology is committed to working with tribes in developing a consultation and co-management process with respect to this rule. I think it's going to be far more complicated than we are obviously going to get done by the date that you have. But actually just putting a placeholder in there that this is coming, opening up that door later to define it would be a good way to go. (Wilshusen) RESPONSE: Ecology has directly included statements on the need to consult with tribes on issues of particular concern in the standards, such as with the change of designated uses using a use attainability analysis. We are committed to consulting with the tribes, and will continue to explore with the tribes the issue of whether broader language is needed in the standards to make consultation happen.</p>
<p>(1b) 201A-010</p> <p>Purpose</p> <ul style="list-style-type: none"> General comments 	<p>To make the most stringent criteria possible on multi-use designated stream the governing factor is very short sighted. This completely ignores best available science. It further doesn't give enough flexibility in trying to come up with solutions. (Jenkins) RESPONSE: This is important to clarifying how to use the new "use-based" standards. In the old classification system there was only one generic set of criteria that was set to ensure the most sensitive designated uses in the class would be fully protected. Now that we have many uses designated with separate sets of criteria it becomes important to specify that the most stringent criteria is to be used to accomplish the same objective – the protection of the most sensitive designated uses.</p> <p>Provide a requirement to review standards regularly to allow for revision to reflect improvements in monitoring methods and to gauge the protectiveness of the standards implemented. (Oregon OOE) RESPONSE: We have a statement that the standards will be reviewed and appropriate revisions made. There are many reasons for making changes and it would add unnecessary complexity to try and list them.</p> <p>Ecology has failed to require compliance with State Sediment Management Standards by permitting the aquatic use of carbaryl for controlling burrowing shrimp in Willapa Bay and Grays Harbor for many years. I hope in the future Ecology will take seriously this stated requirement for compliance with Sediment Management Standards. (Warnberg) RESPONSE: Ecology is obliged to properly implement all of its regulations. The sediment standards are part of the states overall water quality standards package. Issues with sediment protection have been addressed in the permit itself.</p>
<p>201A-020 Definitions</p>	
<p>(2a) 201A-020</p> <p>Definitions</p> <ul style="list-style-type: none"> Suggestions for new or revised definitions 	<p>7DADMax: The second sentence is incongruous and should be deleted. (PacifiCorp) RESPONSE: We find it very instructive as there are multiple ways that a 7-day average can be taken and we are specifying how to do it for the state standards.</p> <p>“Actions” - We support this broad definition. (NEA) RESPONSE: The broad definition is consistent with our directives from state law standards (e.g., Chapters 90.48 and 90.54 Revised Code of Washington).</p> <p>“Action” definition is too ambiguous. Use the definition found in Tier II. (Seattle City) RESPONSE: All sources must meet the water quality standards established to protect instream uses. This broad definition is consistent with our directives from state law standards (e.g., Chapters 90.48 and 90.54 Revised Code of Washington). The Tier II antidegradation requirements establish a pollution prevention mechanism that requires some reviews on public good and technological alternatives. These ask for controls above that necessary to protect the existing and designated uses of the state's waters. That is why only a subset of activities is included.</p> <p>Adding mandatory requirements for storm water to the WAC would be an added burden</p>

to taxpayers, schools, businesses and the city. It would be too much for people who are below poverty level now. Please do not add the storm water requirements to the WAC. (Huffman)

RESPONSE: *The draft regulation was not proposing to add mandatory requirements for stormwater. The rule provides substantial additional flexibility for stormwater both in how the water quality standards are applied and how compliance is assessed. The definition of AKART in the existing rule contained language referencing the western Washington stormwater manual as guidance for best management practices. Ecology proposed to broaden this language to include other stormwater manuals. However, upon review, this language does not appear to add clarity, therefore reference to the stormwater manuals has been dropped.*

AKART: Anytime “all” “known” and “reasonable” are used in a requirement statement, an accompanying statement on what is meant by those terms should be included so to clarify that the statement is not over broad, impractical or economically infeasible. (USACE)

RESPONSE: *AKART is a requirement of state law at Chapter 90.54 RCW. Since it is based on evolving technologies and operational understandings it seems to defy a static definition. It appears most effectual and appropriate to leave the definition as it is at this time.*

We are concerned that AKART does not clearly state that best management practices (BMPs) for non-point sources need to be cost-effective and reasonable. Cost-effectiveness and reasonableness are included in EPA 40 CFR 131 and should to be included in the water quality standards. (Olympia)

RESPONSE: *The existing definition was written to parallel the requirement for AKART as established in state law (Chapter 90.48 RCW and Chapter 90.54 RCW) and it directly includes the directive that the BMP must be reasonable. Since including the undefined concept of "cost effective" would likely create the argument that we have substantially changed the requirements for an element of the rule that was not discussed during the public process, and we are ourselves unsure how the change would alter the legal obligations, we are not making the suggested change at this time.*

If designated use is to be only existing uses documented on or after November 28, 1975, then Ecology could preclude water quality protection sufficient to restore numerous anadromous fish species to their home ranges. This is unacceptable and may be detrimental to ongoing restoration efforts to restore salmon to the Walla Walla basin. (Umatilla Tribe)

RESPONSE: *This definition follows the federal regulations on use-protection and Ecology is not making changes to it at this time. We believe that the broad existing coverage of spawning and recreational uses under our existing system, combined with the federal requirement to show that designated uses are not attainable before removing them from the standards, will effectively guard against your concerns.*

Existing uses means ...”Introduced nonnative species and put and take fisheries comprised of non-self-replicating introduced native species, do not need to receive full support as an existing use. (CRITFC).

RESPONSE: *The deletion of the comma is an appropriate correction and will be made.*

Question the definition of “existing uses”. (USACE)

RESPONSE: *Ecology believes it to be an appropriate definition for implementing state and federal laws and regulations.*

The “existing uses” definition should be further expanded to recognize that exotic species detrimental to native aquatic ecosystems need not receive any protection under the requirements of the CWA since the protection of these species is directly contrary to the goals and purposes of the Act. (CRK)

RESPONSE: *We believe the proposed definition, coupled with some additional statements being added on use-protection requirements for restoring natural biotic*

	<p><i>communities, accomplishes your objective.</i></p> <p>“Existing Uses” - We support this definition but note that, as discussed above, it needs to be integrated into the fundamental aspects of the standards rules. In addition, we agree with the statements about introduced nonnative and native species. (NEA) RESPONSE: It is intended to be fully integrated as suggested.</p> <p>“New or Expanded Actions” - We support the broad breadth of this definition but note that “human actions that occur for the first time” is subject to ambiguity. In addition, we suggest that the definition include “newly-regulated recurrent actions” in order to reflect the changes that are occurring and will continue to occur with regard to regulation of nonpoint sources and previously unregulated point sources. It is worth noting that the use of this definition is to avoid application of federal regulations to existing sources, as discussed below. (NEA) RESPONSE: We agree. It is intended that existing sources when first brought under controls will be appropriately reviewed, and have added more clarity on the “newly-regulated” part of the definition.</p> <p>“New or expanded actions” definition should be changed from “modified” to “significantly expanded.” (Seattle City) RESPONSE: Ecology has changed the definition to specify that these modifications are those that result in increased pollution.</p> <p>“Thermal Refuge” - We disagree that water a mere 2°C cooler than surrounding water can be deemed to be a thermal refuge. It should depend upon the size of the area covered, the temperature of the surrounding water, the species at issue, and other considerations. (NEA) RESPONSE: We are eliminating this definition at this time since we have not done the background work needed to ensure that it will accomplish the appropriate and desirable protection and outcome.</p>
<p>(2b) 201A-020</p> <p>Definitions</p> <ul style="list-style-type: none"> • suggestions for existing definitions 	<p>“Background,” “Natural conditions,” and “Natural background levels” need better definitions. It is very poor science to try to overlay one watershed condition onto another. (Jenkins) RESPONSE: These are existing definitions that seem to work well. Our only proposed change is to correct a typographic error that was inadvertently made during a prior rulemaking which makes both definitions appear equal. The use of reference watersheds is a well established practice in determining what level of water quality and use-support should be expected. We agree, however, that it must be done with care.</p> <p>“Background” - We recommend that this definition be better integrated with that given for “natural conditions” and “natural background conditions.” First, for the ultimate in clarity, both definitions should contain an explanation as to the difference between them. Second, there are very few circumstances in which the background conditions are relevant. (NEA) RESPONSE: We believe their contextual application is sufficient to distinguish their differences. Since these are existing definitions, we are not making further changes given that problems with their use do not appear likely.</p> <p>"Best management practices (BMP)" is used inconsistently with other water quality programs. Recommend: “schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state.” (Boeing) RESPONSE: The definition suggested is good and we will try and retain it for future rulemakings. Since we have not discussed possible revisions to this very key existing definition and we have not had implementation problems because of it, we are not in support of making revisions to it at this point in time.</p> <p>We suggest that the BMP definition (page 2) be modified as follows: “Best management practices (BMPs) means cost-effective and reasonable physical....discharges.” (Olympia) RESPONSE: See above response.</p>

“Best Management Practices” - We concur with the definition but note that a BMP is not a BMP, according to this definition, unless the Department has approved it. It is not clear to us in what context the Department approves any or all BMPs (it is not evident from the remainder of the standards proposed), although we agree that if the rule creates a shield because an entity is using BMPs, those BMPs warrant prior approval by the Department. (NEA)

RESPONSE: *In this context, approval of BMPs by the department may be written or approved in the field (there is not a formal list maintained by the department). All actions must incorporate BMPs to an extent that meets the water quality standards even when Ecology has no active oversight program.*

The BMP definition is a worthy goal, but in the past has not been achieved in practice for the aquatic use of carbaryl. I hope Ecology will show more determination in achieving the intent of this definition of BMPs in the future. (Warnberg)

RESPONSE: *It is sometimes difficult to establish in advance all of the appropriate BMPs for an activity, so Ecology relies on adaptive management whereby different sets of BMPs are established over time until the necessary combinations are recognized to accomplish compliance with the standards.*

“Created Wetlands” - This definition would be well served if it included the following statement: “These do not include wetlands designed for treatment.” (NEA)

RESPONSE: *We have a definition of “treatment wetlands” already in the standards. We also have not experienced any problems with these existing definitions. Since we expect no problems with these definitions and did not propose changes to them in this rulemaking, we are not making changes at this time.*

“Created Wetlands” needs to include any wetland that is created by the actions of man even though it may not be intentional. Water quality standards should not be applied to wetlands that are unintentionally created. A better definition needs to be drafted in this area. (Jenkins)

RESPONSE: *These are existing definitions that have been serving their intended purpose. See previous response.*

“Drainage Ditch” - This definition should include the following: “Drainage ditches are waters of the State.” (NEA)

RESPONSE: *This is an existing definition that exists in recognition that these are waters of them state and as such the standards must explicitly say what the water quality expectations are. We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.*

“Ground Water Exchange” needs to be rewritten. Groundwater exchange is the discharge and recharge from both groundwater or surface water to either groundwater to surface water. (Jenkins)

RESPONSE: *We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.*

Definition of ground water exchange is confusing – delete the wording “or downstream to a surface water for base flow”. (WDOA).

RESPONSE: *We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.*

“Irrigation Ditch” - This definition should include the following: “Irrigation ditches are waters of the State.” (NEA)

RESPONSE: *This is an existing definition that exists in recognition that these are waters of the state and as such the standards must explicitly say what the water quality expectations are. We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.*

“Irrigation Ditch” needs a better definition. The area adjacent to a watercourse or channel

is as important to the function of a properly functioning irrigation ditch or system as the actual ditch itself. (Jenkins)

RESPONSE: We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.

This definition of a Lake is extremely restricting. There are numbers of reasons why water is being retained by some means both natural and artificial that are not lakes. (Jenkins)

RESPONSE: We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.

A more practical and actionable definition of Natural conditions needs to be developed. “Before any human-caused pollution” is a non-starter. Which “humans?” How would the changing landscape due to natural events be addressed? How much information is sufficient? We suggest: “‘Natural conditions’ means the water quality of a water body segment arising solely due to natural climatic or landscape attributes. A best professional judgment to define natural conditions will utilize available information or assessment techniques including, but not limited to, monitoring data from a neighboring or similar undisturbed watershed, historic monitoring data, watershed modeling, etc.” (Weyerhaeuser)

RESPONSE: We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.

Definition of “Natural conditions” or “natural background levels”: Ecology should select one of these terms and eliminate the other. “Natural conditions” seems to be more embedded in regulation and should probably be chosen. (Weyerhaeuser)

RESPONSE: The different phrases, while meaning the same thing, do not appear to create any confusion and allow for less cumbersome sentence structure within the regulation.

Need to acknowledge irreversible changes to the landscape from permanent infrastructure and major developments (for example: cities, dams, highway systems, airports) and treat these in the same manner as natural conditions or background levels. Site-specific criteria should be established based on the temperatures attainable with the permanent infrastructure in place. One approach is simply to establish irreversible human development in the definition of natural or background conditions in 020 subject to an approved management plan, permit, or order. Alternatively the department could establish guidelines for adopting criteria based on the physical capabilities of the water body in 260. The ultimate location for these site-specific criteria could be in the Criteria Notes in Table 602. (MC-PUDs).

RESPONSE: Building recognition into water quality standards and the goals therein set for waters must follow the federal regulations on that subject. We are including references for the tools that are provided by the EPA for making such changes in the sections on site-specific criteria, UAAs, and Variances. We have and will likely continue to use the criteria notes to document these these decisions where they are on a site-basis.

“Pollution” - While covered by this definition, we suggest that the inclusion of some examples that involve changes in the flow of waters, such as dams and dewatering of streams, be included (NEA)

RESPONSE: We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.

“Pollution” would make every action taken by a human to divert water under a water right as pollution. I would suggest that you reframe from trying to write new law in this proposed rule. (Jenkins)

RESPONSE: This definition is consistent with the states water quality laws. We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.

Regulations too narrowly define physical, chemical pollution. Should be broad enough to

	<p>cover any type of pollution that would impact water quality, public health, or fish habitat. (Lindholdt). RESPONSE: <i>Ecology finds this definition and the supporting state laws sufficient to cover all foreseen sources of water quality degradation. We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.</i></p> <p>“Stormwater” should be renamed to something like “storm water discharges” and the term “storm water” should be the same as the storm water definition as in state Industrial Storm Water General Permit for Industry / MSGP. (Boeing) RESPONSE: <i>We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.</i></p> <p>“Surface Waters of the State” - This definition should include drainage and irrigation ditches. (NEA) RESPONSE: <i>We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.</i></p> <p>“Treatment Wetlands” - The definition should clarify that treatment wetlands require a discharge permit. (NEA) RESPONSE: <i>Ecology tries to minimize the crossover between the permitting regulations and the water quality standards. We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time.</i></p> <p>Thermal refugia: this definition should be deleted. The science basis for the 2°C temperature difference as an ecologically-meaningful regulatory increment has not been presented. This definition is too vague. (Weyerhaeuser) RESPONSE: <i>We agree that more work needs to be done before including a definition of refugia in the water quality standards and so we are removing it at this time.</i></p> <p>“Wetlands” - This definition requires the clarifying phrase “for conveyance, holding, and treatment of water or wastes” following: “Wetlands do not include those artificial wetlands intentionally created from non-wetland sites...” Without this addition, the definition states that wetlands do not include any intentionally created wetlands, including mitigation wetlands. The next sentence, concerning the intentional creation of wetlands for mitigation purposes, should not read “may” include but “do” include. What purpose can a mitigation wetland have if it is not to be protected as a wetland? At the very least, the department should clarify in what instances an artificial wetland is not a wetland for purposes of this definition. In addition, it would be helpful to the reader for the department to explain the implications of the parenthetical language regarding wetlands not included in the definition nonetheless being waters of the state. (NEA) RESPONSE: <i>We did not propose changes to this issue during this rulemaking, and in the absence of any foreseeable problems are not making changes at this time. We believe we have adequately defined these terms and their relationships to prevent misuse.</i></p>
<p>(2c) 201A-020</p> <p>Definitions</p> <ul style="list-style-type: none"> • Suggestions for new definitions 	<p>Please define “designated uses.” (Avista) RESPONSE: <i>We have added a definition of designated uses that is consistent with the definition used in the federal regulations.</i></p> <p>“In the public interest” and “severe economic hardship to the public” must be defined. (WGCA) RESPONSE: <i>In the antidegradation policy we have built in the process for which public interest will be determined and given the site- and issue-specific nature of this consideration, we do not believe that including a general definition would be helpful, and in fact may risk creating confusion. We recognize that further guidance will be necessary to assist in the implementation of this unique element of the regulation.</i></p> <p>Ecology needs to define “in the public interest”. (WSPC)</p>

	<p>RESPONSE: <i>See previous response.</i></p> <p>We recommend definitions for “irreversible human changes” and “irreversible impact”. Understanding these terms will be important during the section 7 consultation under the ESA. (NMFS)</p> <p>RESPONSE: <i>They are defined procedurally in the federal regulations that govern changes in use protection at 40 CFR 131.10.</i></p> <p>Definitions missing for “reasonable”, “irreversible”, and “point source”. (USACE)</p> <p>RESPONSE: <i>The term reasonable in contextual and appears to defy static definition in broad regulations, irreversible is defined procedurally in the federal regulations that govern changes in use protection at 40 CFR 131.10, and point sources do not seem to require definition and so we are not developing one at this point in time.</i></p> <p>The proposal lacks a definition of science. (SCCA)</p> <p>RESPONSE: <i>We would rely on the common definition of “science” found in the dictionary.</i></p> <p>The terms “Ultra-oligotrophic,” “Oligotrophic,” “Lower mesotrophic,” “Upper mesotrophic” and “Ecoregions” should be defined. (Boeing)</p> <p>RESPONSE: <i>We did not propose changes to the lake nutrient criteria during this rulemaking and in the absence of any foreseeable problems are not making changes at this time.</i></p> <p>Please clarify “Waters of the State”. Do not mix ground and surface water together, as the standards should be different when applying heating wastewater the lands vs. a lake or stream. (FMHP)</p> <p>RESPONSE: <i>Waters of the State are described at WAC 173-201A-101(2).</i></p>
--	--

201A-200 Freshwater Criteria

<p>(3a) 201A-200</p> <p>Freshwater criteria</p> <ul style="list-style-type: none"> General comments 	<p>This proposal does nothing to maintain existing cold waters. (CRITFC)</p> <p>RESPONSE: <i>The antidegradation program, as well as the incremental controls on allowable warming, do get at the issue of protecting cold waters, but we understand that these do not preserve cold water to the extent that you would prefer. We continue to primarily rely on setting healthy water quality criteria as the main tool for protecting uses, including those that prefer cold waters.</i></p> <p>Characteristic uses should be listed clearly in the proposed standards using the following language: “Waters that were formerly listed as Class AA, A, B, C, and Lake Class will have the following beneficial uses under the proposed WAC”. This information could also be clearly conveyed in a table format. (Bellingham City)</p> <p>RESPONSE: <i>Ecology believes that referencing classes after the class system has been eliminated would be unnecessarily confusing.</i></p>
<p>(3b) 201A-200</p> <p>Freshwater criteria</p> <ul style="list-style-type: none"> Narrative criteria <p>[These comments also apply to 173-201A-260(1)]</p>	<p>Two items are needed to be added to narrative criteria to protect all freshwater aquatic life uses (200(1)(b)). These are protection of instream flow and protection against sediment delivery. Instream flow protection could be added to narrative criteria in 260. Oregon uses intergravel oxygen criteria as a way to protect against sedimentation. (Kalispel Tribe)</p> <p>RESPONSE: <i>These issues are too technically complex and controversial to directly address at this late date in this rulemaking.</i></p> <p>Part II Designated Uses and Criteria (173-201A parts 200-260): the absence of general narrative statements and numeric criterion for important categories of beneficial use are troubling and defeat the purpose of moving to this use-based system. (Bellingham City)</p> <p>RESPONSE: <i>We are again making it explicitly clear that recreational uses such as boating and aesthetic enjoyment and fish migration are specific uses that must remain protected.</i></p>

	<p>Other narrative standards include all of the criteria that the NMFS and USFW have called properly functioning condition. These include things like large woody debris, in-stream pools, bank stability, and sediment. It's scientifically established and yet you're taking a pass on it. This is inexcusable. (Espenhorst) RESPONSE: These issues are too technically complex and controversial to directly address at this late date in this rulemaking.</p> <p>The narrative criteria stating that water quality shall markedly and uniformly exceed the requirements for all or substantially all uses should be reinstated. (NSBK). RESPONSE: We do not believe that the statement would make sense with the new use-based system where uses are individually assigned to water bodies.</p> <p>We are concerned that the new standards have dropped the narrative protections needed to cover water quality problems that are not captured by the narrow set of numeric criteria. Reinstate the narrative criteria. (CRC) (CELP) (Sierra Club) (Suter) (Cronin) (Edwards) (Engle) RESPONSE: We are again making it explicitly clear that recreational uses such as boating, harvesting, aesthetic enjoyment, and fish migration are specific uses that must remain protected.</p> <p>Protect all uses by reinstating the narrative criteria for migration, aesthetics, sport fishing, and recreation. (Mason) (Herdsman) (Lindholdt) (Kiver) (Kelly) (Hughes) (Gaither) (Woodmansee) (Patterson-J) (Morgan) (Rimbos) (Frisk) (McLaughlin) (McCluskey) (Mielke) (George) (Kraus) (Herman) (Ianniello) (KRCG) (Mazzetti) (Luster). RESPONSE: See previous response.</p> <p>Qualitative protections for different kinds of uses of water bodies (for example fish and wildlife, water supply) not just narrower quantitative factors (for example, temperature requirements or toxic metals criteria) must remain in place. (Mazzetti) (KRCG). RESPONSE: See previous response.</p>
<p>(3c) 201A-200</p> <p>Freshwater criteria</p> <ul style="list-style-type: none"> retain uses from previous rule 	<p>The salmonid and other fish migration use is no longer listed specifically under aquatic life uses being protected (provision WAC 173-201A-200) and use designations for waters of the state (provision WAC 173-201A-600). We recommend reinserting this use. (EPA) RESPONSE: We are again making it explicitly clear that recreational uses such as boating, harvesting, aesthetic enjoyment, and fish migration are specific uses that must remain protected.</p> <p>Fish migration use appears to have been dropped. Pre-spawning mortality has been observed in ESA spring Chinook in the Nooksack. (Lummi Tribe) RESPONSE: See previous response.</p> <p>All beneficial uses of a water body such as salmon migration should be explicit in the final rule. How do people know what the beneficial uses of a particular water body are if they are not exclusively stated in the rule? (758 commenters, see Appendix 1) (Miller-B) (Suter) (Cronin) (Edwards) (Engle) (Tulalip Tribe) (Audubon Washington) (CELP) (CRC) (Clifford) (Hensley) (Maxwell) (CRK) (Sierra Club) (American Rivers) (American Whitewater). RESPONSE: See previous response.</p> <p>Concerns over the omission of fish migration in the Use criteria can be overcome simply by expanding the rearing only criteria to apply to both rearing and migration. (Spokane County) RESPONSE: We are again making it explicitly clear that fish migration is a specific use that must remain protected.</p> <p>May we suggest the state of Washington follow the example of other state standards which maintain beneficial use of public and private water supply and of fish consumption, such as that found in Title 252 of Oklahoma's Water Quality Standards (June 2002) (DEQ)</p>

	<p>252:690-3-64). (Bellingham City) RESPONSE: We are maintaining the uses of water supply and fish harvesting.</p> <p>By not including numeric criterion for public and private water supply beneficial use, fish consumption beneficial use, and stock watering beneficial use, human health considerations are not being addressed. Failure to assess numeric criterion to water being directly consumed or being consumed by part of the food supply removes basic safeguards to the citizens of Washington State. (Bellingham City) RESPONSE: We believe that numeric criteria represented in the rule for the more sensitive uses, coupled with narrative criteria, adequately protect uses.</p>
<p>(3d) 201A-200 Freshwater criteria</p> <ul style="list-style-type: none"> Lakes & reservoirs 	<p>The switch from class-based to use-based standards suddenly brings lakes out of the “Lake Class” and into the various fish related uses which do have numeric criteria for both temperature and dissolved oxygen. The switch means that WDOE will soon have to directly confront the issue of how to apply numeric criteria in thermally stratified lakes. Neither the temperature nor the dissolved oxygen standards were developed with the properties of lakes in mind. (PNC) (GAC) RESPONSE: We are specifying that for temperature and dissolved oxygen the criteria is the natural condition plus a small incremental allowance for further human degradation. This combines the existing regulatory requirement of maintaining lakes at natural levels with the general allowance for an insignificant level of human degradation above a target condition. This helps address the issue of dealing with stratified conditions, but we still believe that additional guidance would be useful in applying the entire package of water quality standards including the Use Attainability Analysis and Antidegradation provisions to lakes and reservoirs. This will need to occur at some future date, and depending upon the nature of the resolution may or may not be appropriate for adopting into the standards’ regulation.</p> <p>Ecology should clearly describe how measurements are to be obtained in lakes and reservoirs. (Seattle City) RESPONSE: We have included as much guidance on monitoring as we believe is appropriate at this time in the regulation. We would agree that more specific guidance, however, should be developed on applying the standards to lakes and reservoirs.</p> <p>For lakes and reservoirs, there is no single, representative temperature. (PacifiCorp) RESPONSE: See previous response.</p> <p>A specific provision addressing temperature measurements in thermally stratified lakes and reservoirs is warranted: “For purposes of evaluating compliance with numeric temperature criteria, temperature measurements in thermally stratified lakes or reservoirs shall be taken from depths and locations that are biologically relevant to the species and life stages for which the applicable criterion was established.” (PacifiCorp) RESPONSE: See previous response.</p> <p>The Department of Ecology has an opportunity to provide some guidance now in this regulation on how to deal with thermally stratified lakes. Specifically, some wording can be added to the proposed WAC 173-201A-200(1)(c)(i), similar to the following: “Surface waters in lakes will naturally exceed numeric temperature criteria in the summer due to warming from solar incidence and a warmer atmosphere. The heat will be concentrated in surface waters due to thermal stratification. Similarly, outlet streams and rivers that are derived from the surface waters Of such lakes will be naturally elevated in temperature.” (Ponderay Newsprint) RESPONSE: See previous response.</p> <p>Recommend that Ecology consider the addition of language in the standards addressing the issue of stratification in lakes and impoundments, and provide appropriate exemptions for some criteria in the deeper layers. (Spokane City) RESPONSE: See previous response.</p> <p>While not having a lake class may not have practical effects it is better than numerical criteria. It’s easier to understand that they cannot pollute a water body than to have them</p>

	<p>ascertain from its current status that any additional pollutant load will exceed the numerical water quality standards. (NCAS) (- NSBK). RESPONSE: See previous response.</p> <p>The deletion of a lake class does away with protection specific to lakes which states that dissolved oxygen, temperature and pH should not change from natural conditions. This has implications for Lake Whatcom that I would like to be considered. (Steffensen) RESPONSE: See previous response.</p>
<p>(3e) 201A-200</p> <p>Freshwater criteria</p> <ul style="list-style-type: none"> Natural conditions of water bodies 	<p>The proposed standards within this rule cannot be met under natural occurring conditions. More streams will violate the criteria. (Farm Bureau) (Jenkins) RESPONSE: The standards are set to ensure that where waters are capable of providing full protection for uses such as fish and wildlife habitat and recreation in and on the water that quality will be maintained and protected. In some cases our proposed criteria are slightly less restrictive than the existing state standards, in other cases the proposed criteria are only slightly more stringent. We have worked hard to ensure that more stringent criteria would be applied where and when necessary to protect the uses of our state's waters.</p> <p>Why aren't we setting temperature standards based on watershed reaches, since we know a lot about the watershed? What does Mother Nature offer at any given point in the watershed or portion of a watershed? (KCWP) RESPONSE: The temperature criteria are designed to reflect what the biota need. Standards can be adjusted to better match the temperatures which are attainable at either a watershed or a reach level, but we use the science as the basis for setting the statewide benchmark for determining whether such site-specific investigations are warranted. In time we expect that increasing temperature standards to be set at the watershed level (such as through TMDL projects).</p> <p>Are less stringent criteria to be assigned to streams with such natural conditions? If natural conditions are mixed in with nonpoint human causes, how are they to be separated out? (JCCD) RESPONSE: It is often necessary to separate out human contributions when implementing the water quality standards. This can be done using less disturbed reference sites, but is most commonly done using computer models that are calibrated for the watershed and which are designed for this purpose.</p> <p>It is important to be clear that the natural conditions of a water body will constitute the applicable water quality criteria, and that Ecology provides sufficient guidance on how natural temperature regimes can be determined. The process for determining natural conditions and human structural changes needs to be better defined. (Seattle City) RESPONSE: We have enhanced the existing language that clarifies this important facet of the criteria and how it is intended that natural conditions be used. The science of modeling natural conditions is advancing at a rapid pace and Ecology believes being too specific in a rule would be detrimental overall since it would likely require models and modeling techniques that could become outdated quickly. Setting a clear narrative target is very effective for governing such advancing science.</p> <p>Should regulations be applied to water bodies that are naturally unsuitable for fish? (Farm Bureau) RESPONSE: Standards are established for other beneficial uses besides fish and aquatic life, such as recreation, boating, and water supplies. If a water body does not have an existing or attainable use (such as fish), a use attainability analysis can be conducted to remove the use. However, it is important to note that the standards must be set to protect uses that occur downstream, therefore even where a use is naturally not present, standards may be needed to ensure these downstream uses are protected.</p> <p>As addition to the proposed criteria, we are concerned over the implementation of the proposed application of a deviation from the criteria when they cannot be met under natural conditions. Our concern is that these deviations for natural background are too</p>

	<p>small to accurately measure in a heterogeneous environment of a stream and are well within the error margin of the best water quality models in existence. Due to these concerns we would like to suggest a meeting between Ecology, EPA, and the Idaho DEQ to discuss these concerns. (Idaho DEQ)</p> <p>RESPONSE: <i>These incremental allowances generally reflect the current water quality standards regulation. We have found them to be very useful in accommodating necessary human activities without compromising the protection for instream uses. Modeling and dilution calculations, as opposed to field studies, are the approaches commonly used to implement the increments. We would be happy to meet with you and EPA to further discuss the standards.</i></p>
--	---

201A-200(1) Aquatic Life

<p>(4a) 201A-200(1)</p> <p>Aquatic Life</p> <ul style="list-style-type: none"> Clarification 	<p>Ecology purposefully excluded the consideration of microhabitats. Therefore, the standards, as they are measured, disregard behavior in which fish seek favorable microhabitats during periods of sub-optimal water quality. (Farm Bureau)</p> <p>RESPONSE: <i>Pockets of cold water are only capable of protecting marginal fish habitat. The goal for the standards is to protect healthy habitats where attainable. Inter- and intra-species competition for habitat further limits the value of cold water pockets to maintaining healthy fish populations and a balanced indigenous biota. Further, the language that is being commented on is used for also not allowing an otherwise healthy water body from being declared unhealthy just because measurements near the surface or in shallow stagnant backwaters are too warm or de-oxygenated.</i></p> <p>Fish thrive in environments in which growth does not achieve the laboratory derived optimum. Using laboratory optimum growth as criteria for the standards represents is not supported by scientific evidence related to stock extinction probabilities or productivity. (Farm Bureau)</p> <p>RESPONSE: <i>The standards were recommended on the basis of field, control stream, hatchery, and laboratory studies, all finding very similar conclusions. Laboratory studies need to be recognized for limitations that work in sometimes opposing directions. In laboratories fish are treated prophylactically for diseases, fed to excess on specially formulated fish foods, excluded from the physiological stress of swimming against currents, and not forced to compete for either food or rearing habitat. These factors tend to give laboratory fish advantages that allow for greater health than would occur to a population at similar temperatures. There are factors that work in the opposite direction as well. Prominent among these are that natural environments have cycling temperatures that allow fish to adjust their metabolic requirements. All of these factors were considered in deriving the technical recommendations for temperature criteria.</i></p> <p>The aquatic life categories are based on fish categories and life history. It is unclear how Ecology will determine where these apply. Fish experts often do not know exact location. Aquatic life use categories should capture the most sensitive life history state or species across its historic and potential range. (Yakama Nation).</p> <p>RESPONSE: <i>Almost all of the state's waters are now to be protected for salmonid spawning, rearing, migration and harvesting along with other non-salmonid uses. The new standards will retain these uses for all the waters until formally changed through future rulemakings. We are adding specific protection for native char that are based upon the patterns of use that are documented for char in the SASSI database. Implementation of future changes will involve the expertise of fisheries professionals in local, state, federal and tribal governments in addition to private biologists. Evaluations will include what we know about the habitat as well as historic uses.</i></p> <p>When multiple species of salmonids are present the assigned use and temperature criteria should reflect a balance of the needs of all the species and not automatically default to the species that needs the coldest water. (LFC)</p> <p>RESPONSE: <i>Except where a use is essentially anomalous or uncharacteristic of the habitat the water quality standards through the federal regulations to states demands</i></p>
---	--

	<p><i>that the most sensitive used be protected. Particularly given habitat degradation that has allowed warmer water loving competitors to gain an edge, if we were striking a balance then we would really not be protecting the native fishery appropriately.</i></p> <p>200(1)(b)(iii): A period is needed at the end of the sentence. (NEA) RESPONSE: <i>We have added one.</i></p>
<p>(4b) 201A-200(1) Aquatic life</p> <ul style="list-style-type: none"> Concern about non-fish bearing waters 	<p>We support the new language in this draft of the WQS that other non-specified fish and non-fish species must also be protected within the use categories that are primarily named after various fish species. (EPA) RESPONSE: <i>We have enhanced the language to make it more reflective of the intent to protect all aquatic life.</i></p> <p>The uses are entirely fish based and leave non-fish bearing waters without specific numeric criteria. These headwater streams are important for amphibians, invertebrates etc. which demonstrate some temperature sensitivity. Under the current proposal, temperature in these streams would only be protected from increases that would adversely affect fish use in downstream waters. This may or may not be enough to protect headwater stream biota. Specific aquatic life uses and criteria are needed for these waters. (WDFW) RESPONSE: <i>We have added language that makes it clear that the water quality criteria while focused on key fish uses are supposed to be fully protective of non fish species as well as other non-mentioned fish. We will set up formally the default that would have generally occurred anyway, which is to apply the criteria to the headwaters. This recognizes the scientific literature on non-fish demonstrating that many of the headwater non-fish species are as sensitive (if not more sensitive) than the fish that occur in the upper watersheds. Lessening these requirements would be allowed only when accompanied by appropriate scientific information and through a rule change for that water body. We see a need to focus more on the requirements of these other less-charismatic species in future guidance and rulemaking to make the standards even more adaptable and appropriate to specific watershed characteristics.</i></p> <p>The sentence, “It is intended that non-specified fish and non-fish aquatic species must also be protected” requires some clarification. First, “intended...must” is a somewhat confusing structure for this sentence. It is true that such species must be protected if the water quality standards are to comply with the Clean Water Act. Such a statement should be included. What is unclear is the department’s intent. Is this sentence intended to mean that the proposed use designations, and related criteria, adequately provide that protection? Or, is it intended to mean that although some species are not included in the use designations, the department requires their protection. If it is the former, the Department must demonstrate 1) which use categories are intended to provide that protection, and 2) the criteria developed for those use categories are adequate. If it is the latter, the department must provide a method for ensuring that when water quality standards are applied (e.g., NPDES permits, TMDLs), the non-specified species are identified and provided with protection. We also suggest that the department specifically mention amphibians and how it intends for them to be treated. (NEA) RESPONSE: <i>We have redesigned this sentence to clarify that it is a requirement to protect all uses, whether listed or not and whether fish or not.</i></p> <p>Everything in the rule suggests there is no limit for non-fish bearing waters. (CRITFC). RESPONSE: <i>We have redesigned the language to make the need to protect non-fish bearing waters more explicit and conclusive. See previous four responses.</i></p>
<p>(4c) 201A-200(1) Aquatic Life</p> <ul style="list-style-type: none"> WA salmon strategy & protection of 	<p>Ecology’s management choice to apply the standards generally to salmonids versus by species and population, does not seem to be compatible with the Washington State’s Salmon Strategy. Ecology should consider whether the proposed standards support locally directed salmonid recovery in the watersheds. (NMFS) RESPONSE: <i>We do not see any conflict with the salmonid recovery efforts and the way the standards are set up. Our analysis shows very little differences exist between species of salmonids once the entire wealth of the scientific literature is considered rather than focusing on the one or two researchers that found any meaningful</i></p>

<p>endangered species</p>	<p><i>difference.</i></p> <p>How will Ecology work with the Regional Recovery Planning efforts to test the effectiveness and validity of this proposed action, in concert with past and future recovery actions? Given the current lack of data on the relationships between the standards and population response, a monitoring and adaptive management strategy to test of effectiveness and validity of the standards seems warranted. (NMFS)</p> <p>RESPONSE: <i>The standards are adaptable to new scientific information as well as changes in federal and state laws. Trying to link statewide standards to changes in population would seem to us to be almost too problematic to test. Perhaps individual restoration efforts could be tracked with potential for success, but such follow-up monitoring would need to be planned and budgeted separate from the current rulemaking effort.</i></p> <p>Standards should include stricter temperature and oxygen standards that fully protect endangered salmon and other fish and wildlife species. (Raisler).</p> <p>RESPONSE: <i>We believe we are mandated to protect endangered fish and all other species and uses fully, but with the least amount of excess economic burden. We believe that we have struck the proper balance between certainty and financial costs as required by state laws here in Washington.</i></p> <p>The proposed changes do not support recovery of Endangered Species Act (ESA) listed stocks. (Bellingham City)</p> <p>RESPONSE: <i>We do not find that the standards will form an impediment to recovery, and had such information been available we would not have moved forward with the changes.</i></p> <p>We have a number of endangered species which will take a huge amount of tribal resource and we're looking to Ecology and federal government to help us. (Jamestown Tribe)</p> <p>RESPONSE: <i>Finishing the debate around which criterion to adopt will hopefully help return the focus on what needs to be done. The parameters that we have been working on are very important, but are still just part of the equation that defines salmonid recovery and health.</i></p> <p>Of the five significant units for the Puget Sound Chinook, two of them reside in the Nooksack Basin.. Essentially, they are required to recover as part of the successful ESA recovery of the Puget Sound Chinook. The maximum water temperature of 16 °C that's proposed will not provide adequate protection for recovery of these Chinook spawning. (Nooksack Tribe)</p> <p>RESPONSE: <i>We recognized that the proposal was weak on protection for summer spawning stocks and have since added language that requires that temperatures be maintained at 13°C where and when needed to protect spawning and incubation. We have chosen to use a narrative standard rather than using a default incubation season to minimize any unnecessary economic or administrative burden caused by assuming default dates for incubation.</i></p>
<p>(4d) 201A-200(1)</p> <p>Aquatic life</p> <ul style="list-style-type: none"> Sub-categories of aquatic life 	<p>We support Ecology's approach to establish various sub-categories of salmonid use for which specific temperature criteria apply. (EPA)</p> <p>RESPONSE: <i>Ecology appreciates the support.</i></p> <p>The DO and temperature standards are based on salmonids, and that will jeopardize the existence of warm water fish and aquatic life. These criteria must balance the needs of both cold and warm water fish. Salmon can survive a broad range of temperatures and oxygen conditions that are less stringent than the proposed standards. Do not update the standards until this has been addressed. (WGCA)</p> <p>RESPONSE: <i>Salmon and trout cannot compete adequately with warm water species, nor can they remain healthy in the absence of these species, in waters that are optimal for such warm water competitors. We have provisions in the standards that recognize that some waters cannot attain fully protective criteria for cold water fish. Setting statewide criteria based on allowing conditions which are more beneficial to warm</i></p>

	<p><i>water fish would allow for the degradation of potentially healthy salmonid habitat.</i></p> <p>The latest draft dropped the cutthroat trout category, yet it is well documented that they are more sensitive to water quality conditions than other salmonids except char. (Yakama Nation).</p> <p><i>RESPONSE: We had for some time proposed separate criteria for cutthroat trout, but after more critical analysis are unable to agree that it is well documented that they have greater thermal requirements. It may just be that they have physical habitat niches that put them in the uppermost reaches of fish-bearing streams which would typically also be commonly dominated by cold source waters. It was predominately their presence in cold water that generated the initial concern that they may require such colder waters. Objective field and laboratory studies, however, were not found which bear out that assumption.</i></p>
--	--

201A-200(1)(a)(i) Sub-Category of Char

<p>(5) 201A-200(1)(a)(i)</p> <p>Sub-category of char</p> <ul style="list-style-type: none"> Clarification 	<p>(a)(i) Char - It is unclear what the rule language “for the first years of life” is intended to mean. (NEA)</p> <p><i>RESPONSE: We have clarified that we are referring to waters used by juvenile in the first year after emergence.</i></p> <p>Recommended changes: i) Native Char – This category applies to water bodies used or naturally suitable as habitat for spawning or rearing of native char (bull trout and Dolly Varden). Native char spawning and rearing areas include their current and historical extent. ii) Cutthroat Trout - This . . . iii) Salmon Steelhead and other trout spawning or rearing. This category . . . iv) Salmonid and Char Migration only. This category applies to water bodies used exclusively as a migration corridor under natural conditions for anadromous salmon, trout, and char. v) Indigenous warm water species. This category applies to water bodies where under natural conditions the habitat would be heavily used by temperature tolerant indigenous non-salmonid species such as dace, redbside shiner, chiselmouth, sucker, and northern pikeminnow. Where multiple aquatic life uses are encountered, the most sensitive aquatic life use category will be applied (Yakama Nation).</p> <p><i>RESPONSE: Our state standards are set very broadly, and to reduce that coverage would require a science-based evaluation that the use is neither existing nor attainable. This is consistent with the federal regulations on use support provided to states. We have also already included language that specifies that the most sensitive uses are the focus for protection. Thus we believe your concerns are substantially covered in the rule. We do not want to end up speculating about what historic uses are, particularly given changes in climate and physical habitat that occurs even without human intervention. We do not believe there is any meaningful gap in protection caused by the omission of the concept of protecting historic uses.</i></p> <p>Substantive evidence points to billions of tax dollars spent for naught and a few salmon were saved. The result in loss of civil rights and property is stagnating economy, loss of rural culture, and a very real fear and loathing for the Washington State Department of Ecology. Now you have decided to save bull trout using the same failed methods with more stringent parameters. This is taking money under false pretenses. It's a crime. It's called fraud. (WRCRL)</p> <p><i>RESPONSE: There are indeed many factors which combine to harm native species and other beneficial uses of the state's waters. Temperature is only one of them. But without a healthy thermal environment, improvements in the other factors that effect health and recovery will be less successful.</i></p> <p>While clean water is important if not vital for survival of both man and animal, Bull Trout in particular are predators. The "wolf packs of the rivers," as they are referred to by romantic environmentalists, need food to prosper. Without a healthy and stable natural salmon population, the bull trout will never make a comeback. In view of this it seems the Bull Trout plan is doomed to failure. The EPA has been directed to measure programs</p>
---	--

	<p>not base on the amount of habitat but on the number of fish in the river. WA State Dept. of Ecology is strictly basing this habitat improvement. Nothing in the rules is talking about using fish counts to monitor success of the program. What parameters are in place besides water quality to measure success of the program? (WRCRL)</p> <p>RESPONSE: <i>Fish and other aquatic life all co-exist and have done so over time with great success in maintaining healthy populations of all five pacific salmon, cutthroat and rainbow trout, and bull trout and Dolly Varden when watersheds are not heavily impacted by human activities. Bull trout have been identified as needing extra protection by the federal fish and wildlife services, and Washington is complying with the more sensitive needs of this fish.</i></p>
<p>201A-200(1)(c) Temperature – General</p>	
<p>(6a) 201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Support criteria 	<p>We support the proposed temperature criteria. (WFPA) (Plum Creek) (Campbell Group) (Healea) (Susan) (Simpson Timber) (Lynn) (Harrison-Ben) (Jensen) (Middleton) (Shedd) (Green Crow) (NOTAC) (Verlander) (Knepper) (Anderson-P) (Anderson-R) (Odendahl) (Ploeg) (Weyerhaeuser) (Hanan) (Hurley) (Kauffman)</p> <p>RESPONSE: <i>Your support is appreciated. We are making changes to the proposed criteria, and it is our hope you will also find these changes acceptable and well reasoned. The key changes include a narrative criteria that will ensure that summer spawning stocks are protected from adverse thermal warming and the reduction of the criteria in char spawning waters by 1°C.</i></p> <p>The temperature criteria are supported by scientific knowledge. (Campbell Group) (Harper) (Raschko) (Jackson) (Blinks) (Longview Fibre) (Huston) (Ogden) (Ploeg) (Childs) (Nelson) (U.S. Timberlands) (Merritt) (Bjorklund) (Bryan) (Dunn) (Bieker) (Williamson)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The simplified criteria are an improvement. One summer criteria makes sense. (Rodgers) (Sundt) (Schwartz) (Totten) (Schroeder) (Davis) (Fisher) (Reese) (Snare) (Peterson) (Hulse) (Cota) (Masterson) (Remmers) (Blair) (Verlander) (Woodhurst) (Huston) (Olson) (Britt) (Baker-D) (Pierson) (Anderson-O) (Mann) (Barrett) (Lumsteden) (Goelzer) (U.S. Timberlands) (Robbins) (Gee) (Gates) (Merritt) (Steiger) (Reinhard) (Bjorklund) (Bryan) (Hawkins) (Bakke) (Garratt) (Folsom) (Reed) (Emmerton) (Nelson) (Bye) (Crisp) (Buchanan)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>We also support the revisions, including the new criteria for temperature, which will provide data that more accurately reflect stream conditions needed to protect salmonids. (Olympia)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>I'm in general support of some of the new proposed temperature standards and criteria, mainly because they have been based on some new science that was used to derive these standards and the use of both literature and research. (VanderPloeg)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The department's proposed temperature criteria afford full protection for char salmon, steelhead trout, spawning and rearing. We believe that the proposed temperature criteria are scientifically based, objectively derived, and protective of the assigned uses. (Boyd)</p> <p>RESPONSE: <i>See previous response.</i></p>
<p>(6b) 200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Not stringent enough 	<p>The impact to early spawning runs is not incorporated in the criteria. (NSBK).</p> <p>RESPONSE: <i>We are making changes to the proposed criteria,. The key changes include a narrative criteria that will ensure that summer spawning stocks are protected from adverse thermal warming and the reduction of the criteria in char spawning waters by 1°C.</i></p> <p>Criteria are substantially weaker than previous drafts. We recommend (7DADMax):</p>

	<p>Native char: 8C August 20-Oct 14 with no single greater than 10°C. 6C October 15-April 14 with no single greater than 8C. 11°C from April 15 to August 15 with no single maximum greater than 13°C. Cutthroat Trout: 12°C year-round with no single daily maximum greater than 14°C. Salmon, Steelhead and other trout spawning and rearing: 14C from May 1 to September 30 with no single day over 16°C. 11C October 1 to April 30 with no single daily maximum over 13°C. Salmon and Char Migration only: 15°C year-round with no single day over 18°C. Indigenous warm water species: 18°C year-round with no single day over 21°C. (Yakama Nation). RESPONSE: See previous response.</p> <p>Miller Creek is roasting and these changes make it worse. The Port has deforested acres and acres of cooling canopy. (Brett). RESPONSE: See previous response.</p> <p>Because the standards had to be generally attainable in most water bodies during hot summer months, temperature and oxygen standards could not be low enough protect salmon during their most vulnerable stages, spawning. This is not scientifically defensible. (PAS) RESPONSE: See previous response.</p> <p>We oppose the new temperature standards, which Ecology admits are not protective enough for the spawning of char and threatened salmon. (PAS) RESPONSE: See previous response.</p>
<p>(6c) 201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Cannot be met under natural conditions 	<p>I suggest the data used to establish temperature criteria should be representative with respect to something. What better science is there than years of hatchery history in the state of Washington? North Toutle Hatchery temperatures from 1991 to 1998 ran as high as 78.4°F and they raise salmon and trout and have a good return rate for all species raised. Other SW Washington hatchery 7DADMax temperatures between 1994-1998 were: Beaver Creek (73.7°F), Elochman Creek (71.43°F), Fallert Creek (68°F), and Kalama Falls (69.43°F). The proposed changes lowered the criteria instead of raising it to the proven allowable level shown by hatchery history. (Hedglin) RESPONSE: Hatchery conditions are not similar to the “real world”. The fish are fed special foods in excess, treated for disease, removed from the need to compete or to physically exert themselves. Over 500 technical fisheries studies were used in deriving the recommended criteria, and we strongly suggest that the criteria are more representative of what is needed to protect natural fish populations.</p> <p>The proposed new temperature standards are naturally unattainable. (SCCA) (Bentham) (CCLA) (Island County) RESPONSE: The standards are attainable in many water bodies throughout their lengths and in the headwater reaches of most watersheds. The standards are supposed to be used to maintain protection for these existing healthy areas. Setting standards to achieve broad compliance is contrary to the purpose of the standards and would allow the many very healthy streams and stream reaches to be degraded.</p> <p>The temperature standards would be at level that even Mother Nature cannot meet in some circumstances. (MBarr5) (Stemilt Management) (McCart) RESPONSE: There are many areas where coldwater fish cannot exist because of natural conditions. There are many more where coldwater fish are very healthy and the standards are met.</p> <p>These ideal water quality thresholds also to the perception that exceedances are caused by regulated parties when river conditions frequently exceed these unrealistic standards. (USACE) RESPONSE: Thermal degradation is the result of both human and natural circumstances, but the purpose of the standards is to control human actions to minimize excess degradation and the consequent harm to fish populations and other uses.</p>

The proposed temperature standard may be lower than necessary for healthy salmonid populations. (Merrill & Ring)

RESPONSE: *We believe the temperature criteria are the best estimate of the warmest temperature condition that will fully protect aquatic life populations. The populations may still be reasonably healthy above these thresholds, but they will be on a downgradient of health.*

The temperature standard looks to be daunting. Some of our lowland streams have very little gradient and therefore stagnant flows extremely susceptible to ambient temperatures. Will drainage districts be able to continue to operate? Do the standards allow us to craft drainage based performance standards that reflect the realities of the natural system and allow for progressive actions that lead us closer to water quality standards? (WCAPC)

RESPONSE: *The standards are set up so that natural limitations can be incorporated in the criteria for a watershed once such relationships are understood. The criteria also provide for protection of naturally healthy thermal habitat. We have increased the temperature criteria that are applied as a default to much of the larger lower elevation rivers in the state above what is currently allowed in the standards. We have also established criteria for warm water fish habitats that are warmer than what would be protective for salmonids. This use may be applied where appropriate in the future.*

The temperature criterion for salmon spawning and rearing in the Little Klickitat River is not attainable. A recent temperature TMDL analysis shows, by scientific modeling, that even theoretically the best the Little Klickitat River could realize is a temperature of 18°C in the summer months. Ecology is considering 18°C as the standard for the only point source discharge on the Little Klickitat River within the next 10 years. This is unfair and far too costly to the residents of the city of Goldendale. (Goldendale)

RESPONSE: *See previous response. Existing Class A waters must meet a daily summer maximum of 18°C but the criteria that Ecology is adopting would allow most of these waters to increase to approximately 18.5-19°C. Thus some relief may occur in response to the change in the criteria. Further, the standard for a naturally warm water body is the natural condition plus a 0.3°C increase for human sources after dilution. Other tools that can mitigate against economic effects also may apply depending upon the specific situation.*

Some of the temperature standards are not attainable under natural conditions. Farmers cannot improve streams to conditions that cannot be met naturally. (Rose-R) (Stueckle)

RESPONSE: *See previous response.*

The Coastal Rivers are the warmest. The Coastal have no ESA listing. The Coastal Rivers have the most fish. Will you Wackos ever stop? (Camenzind)

RESPONSE: *Many of the coastal streams have summer maximum temperatures well below the proposed criteria.*

The criteria, however, do not reflect natural conditions for most water bodies in the summer. (WDOT)

RESPONSE: *A great many streams and portions thereof meet the various proposed criteria to keep the healthy habitat from being degraded.*

The proposal does not adequately address natural background thermal conditions for individual streams. (SCCA)

RESPONSE: *We believe that it does by both focusing on key species and by incorporating narrative criteria that allows naturally warm waters to be considered in compliance.*

Both Salmon Creek and Snow Creek would have failed these criteria. So I'm thinking that 16 °C may be a bit stringent. (Gately)

RESPONSE: *Both of these creeks have been altered through farming and clear cutting in their watersheds so their temperatures may reflect these activities to some extent. However, the purpose of the standards is not to meet ambient temperatures but to describe the temperature above which further significant human warming should not*

	<p><i>be permitted.</i></p> <p>On some of our properties the stream temperature barely met the standard that is being recommended even though there has been not harvesting up the stream from the monitoring sites. In those areas we have very healthy and very strong populations of native Coho – the Coho do not seem to be limited by the stream temperatures that we have. So I do believe that the temperature requirements may be somewhat more stringent than necessary. (Schaaf)</p> <p>RESPONSE: <i>A balanced salmonid population consists of more than Coho, and it may well be that cooler temperatures would provide an even stronger population all other habitat factors being equal.</i></p> <p>Monitor natural conditions of at least a sampling of the local waters to determine what realistic goals are for the watershed. (Storey)</p> <p>RESPONSE: <i>The criteria are set based upon what the biology needs not based on what is readily attainable based upon existing conditions. They are set at the upper threshold for what would be considered fully supportive, however, to address in an appropriate manner the concern over unnecessary non-compliance rates.</i></p>
<p>(6d) 173-201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Effects of air temperature and shading 	<p>The proposed standards did not consider the Sherman Creek Temperature Study where Ecology was one of the advisors on the study. This study verified that air temperature is the major determining factor for that system. Other studies in Skagit County replicate this conclusion. (SCCA) (Good) (Simmons)</p> <p>RESPONSE: <i>Time and again shade is demonstrated to be the major variable that controls stream temperatures, generally followed by the related factor of stream width. Climate via elevational gradient is also an important factor as it influences the ground water temperatures and thus the refreshment rates from such source waters.</i></p> <p>Vegetation alone will not cool water temperature. (Bordsen)</p> <p>RESPONSE: <i>Shade slows down the rate of warming which allows cold source waters to remain cold for more miles of downstream travel thus maintaining healthy cold water fish habitat for a greater proportion of the stream. We would agree, however, that there are other considerations as well and that proper thermal protection may need to examine factors other than just shade. But shade remains the key component that is within the control of humans.</i></p> <p>The forest practices rules as they are now provide for 100 percent of shade requirements on forest streams that have fish in them and I don't think that there needs to be any additional requirements imposed in order to achieve stream temperature. Shade is basically going to provide the ambient conditions that will result in water temperature that is suitable for fish. (Schaaf)</p> <p>RESPONSE: <i>The standards do not require streams be cooler than they are naturally capable of.</i></p>
<p>(6e) 201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Cannot be met in Eastern WA 	<p>While many eastside streams will violate the temperature standards in the summer, westside stream will seldom be in violation due to the different temperature patterns. Developing a blanket set of rules is ineffective. (Kittitas Co CDS) (Meenach) (WSPC) (KCWP)</p> <p>RESPONSE: <i>Noncompliance rates appear to be very similar on both the east and west sides of the mountains. The standards can be met in many of the streams that serve as important habitat for salmonids. Ecology seriously considered attempting to set two different standards to accommodate for the east and west sides of the state, but found little, if any, differences in the temperature requirements of the salmon and trout populations to justify different standards. It is important to note that natural conditions can be used as the basis for compliance when the water is naturally warmer than the statewide criteria.</i></p> <p>The proposed temperature criteria do not take into account natural conditions and shading potential in eastern Washington. (WGCA)</p> <p>RESPONSE: <i>See the previous response.</i></p>

<p>(6f) 201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> Criteria designed on optimal laboratory conditions 	<p>The temperature standards are based on modeling of optimum laboratory conditions, and are unrealistic. Fish live in a variable environment, and the standards do not take that into account. (WBWRCC)</p> <p>RESPONSE: The criteria are based on a review of many types of scientific studies, not just laboratory studies. Further, the recommendations are not set above expected optimum temperatures.</p> <p>Ecology has patterned the proposed standards around optimum protection for salmon and other aquatic life based upon theoretical science while ignoring natural conditions and trends in the State’s water bodies. (QCBID)</p> <p>RESPONSE: The standards are not proposed at optimum levels, but are fully protective of the uses. The changes are based on real science and the standards recognize as an integral element the role of natural conditions. The changes proposed should only serve to benefit the district compared with the current water quality standards regulation in our estimation.</p> <p>A lot of your testing was done in fish tanks. The temperature was designed to see where the stresses were. Fish swim. They go from one area to another area. They seek cold. They don’t just sit in a pocket of hot water to be stressed. (Pacific County BOD)</p> <p>RESPONSE: See previous response. Fish distribute based upon available habitat and competitive pressures. The more habitat is unsuitable the lower the quality of aquatic life support will exist.</p> <p>Ecology will effectively require farmers to improve natural streams to laboratory defined optimal conditions. They are not based on best available science. (Farm Bureau) (American Gardens) (Bentham) (CCLA) (Stemilt Management),(Potter) (MBarr5)</p> <p>RESPONSE: See previous two responses.</p> <p>The use-based regulation uses optimum growth to set standards, whereas the class-based regulations set standards to prevent impaired fish growth. This change in endpoints is new and represents a significant departure from previous regulatory approaches. (Meenach) (WSPC)</p> <p>RESPONSE: Ecology did not use a different basis to set use-based regulations compared with the class system. Uses that apply under both systems will be transparent in the new rule. The new criteria are being set to be fully protective not to be optimal.</p> <p>The threshold criteria were based on biologically optimal conditions that are often not provided by seasonally varying natural conditions. Why were ideal numerical water quality criterion selected when these conditions cannot be met by most waterways even those unaffected by human development? (USACE)</p> <p>RESPONSE: The criteria are not “ideal” but are believed to be fully protective. Levels of harm will be infrequent and minor. The criteria are intended to protect healthy habitat where they exist and where such support is attainable. Allowing all waters to warm to temperatures that occur in large rivers and rivers heavily influenced by dams, cities, farms, and industries would not protect the uses of Washington’s waters the standards are intended to protect.</p> <p>First, the preponderance of the available literature indicates that water temperature above ‘optimal’ conditions, if such conditions are for a short duration, do not adversely affect salmonid populations. Secondly, the proposed ‘optimal’ temperature amendments do not consider, or allow consideration of, current broad trends in hydro climatology that indicate warming temperature regimes. Under predicted warming scenarios that appear substantiated by recent water years, the difference between observed and ‘optimal’ conditions will only increase. (PSE)</p> <p>RESPONSE: See previous response. Further, the argument on global warming could and has been used to suggest that we should not be allowing any warming of waters since climate alone is going to eliminate much of the healthy habitat over the next decades. To fully protect the uses with the least unnecessary burden on industry and others suggests that we focus on criteria that are biologically meaningful and continue to make adjustments based on what is attainable as the future unravels.</p>
--	---

	<p>Criteria for oxygen and temperature should provide for optimal conditions for salmonid species and their life stages. (Nooksack Tribe) RESPONSE: We are incorporating special protection for spawning and incubation that will be used where and when needed. It is intended to allow for excellent support where applied.</p> <p>Instream flow and water temperature bother me considerably, because it appears to me that we're trying to set a standard based on theory rather than actual. And have these temperatures that are being arrived at a history of being achieved at some point in time? (Reisland) RESPONSE: All of the criteria are met in many of the state's waters year in and year out.</p> <p>We had the helicopter fly over and take water temperatures. But the water temperature they reflected is only like a very minimum portion of the top of the water and they are not reflecting the cooler areas that are in the bottom. (Pacific County BOD) RESPONSE: Thermal infrared imagery from aerial camera mounts has been shown to be very effective in tracking temperatures, but does have limitations, as you noted. It is very suitable for use in streams with good mixing, but we agree that it would miss areas of deep water refuge.</p> <p>The proposed standards are not field tested. A creek in Skagit County fails the criteria but produces many fish. Failure to consider and use replicated field tested science that meets the criteria in the WAC which is readily available, will only cause harm to our environment. (SCCA) RESPONSE: The criteria are based upon controlled field and laboratory research of many types. We acknowledge that some waters in the state may not meet the statewide criteria, and have included in the rule the allowance for considering natural conditions to comply with the standards.</p> <p>Ecology has not made a persuasive case that "optimal" temperatures are essential to the protection and recovery of these populations. In the alternative, if "optimal" conditions are to be retained, Ecology should pursue practical mechanisms for addressing inappropriate numeric criteria written into the state water quality standards. (MC-PUD) RESPONSE: While Ecology believes the criteria will assist in recovery, the goal is a healthy environment where human temperature increases are not allowed to degrade the health of the streams. The criteria proposed are not "optimal" and allow for negative effects, but these effects will be infrequent and minor.</p>
<p>(6g) 201A-200(1)(c) Temperature-general <ul style="list-style-type: none"> Effects of criteria on stormwater </p>	<p>Compliance with the stated criteria is impossible to accurately predict when dealing with stormwater discharges. Stormwater dischargers can't be held responsible for a temperature increase that they did not cause. Take the following hypothetical: a lake is 55°F, rain falling directly onto lake is 75°F, and the stormwater from the road is routed to a shaded pond and is discharged into the lake at 70°F. The lake warms to 55.40°F near the road. Is the road owner in violation? (WDOT) RESPONSE: Stormwater is managed in permits through currently accepted stormwater practices, and compliance is based on those practices. Natural conditions are also factored into lakes when determining compliance with a standard. Further, it seems improbable that a seven-day average of the daily maximum temperatures would be exceeded by stormwater discharges at all, let alone from managed BMP systems.</p> <p>We have already commented on the use of the Western Washington storm water manual, I have some serious reservations about the ecological impact that it has on this county and on the City of Port Angeles. (Williams-L) (Port Angeles) RESPONSE: Comment noted. This rule does not require the use of the western Washington Stormwater Manual. The manual is one way to comply with the rule. There are others.</p> <p>No model can defensibly predict stormwater impacts on dissolved oxygen levels to the level of accuracy designated in the standards. Natural variation is too great. (WDOT)</p>

	<p>RESPONSE: <i>The standards are based upon what the biology requires not upon the limitations of engineering or modeling. What cannot be modeled can be representatively monitored and summarized. We built into the standards language that explains how the uncertainty of management programs such as stormwater and the use of adaptive management is to be viewed in the context of the standards. We do not expect a 100% guaranteed that the BMPs will not allow an exceedance in all cases.</i></p>
<p>(6h) 201A-200(1)(c)</p> <p>Temperature—general</p> <p>Scientific support for criteria</p>	<p>The laws of physics, the air mass that surrounds rivers and creeks determine that waters temperatures, reaffirming that shade does not cool water. (Forde)</p> <p>RESPONSE: <i>Shade slows down the rate of warming which allows cold source waters to remain cold for more miles of downstream travel thus maintaining healthy cold water fish habitat for a greater proportion of the stream. We would agree, however, that there are other considerations as well and that proper thermal protection may need to examine factors other than just shade. But shade remains the key component that is within the control of humans.</i></p> <p>The new rules using a use-based maximum temperature limit is largely without scientific report. (Forde)</p> <p>RESPONSE: <i>In developing the proposal, we have worked hard to document the strong scientific as well as ecological basis supporting the changes.</i></p> <p>Is the new rule based on up-to-date scientific criterion? No, I don't believe it is. Water temperature data is not scientifically valid and stakeholder statements back it up. (WRCRL)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Ecology is urged to reconsider the temperature criteria and replace them with criteria that are protective and take into consideration impacts on all other beneficial uses of State waters. (MC-PUDs)</p> <p>RESPONSE: <i>The temperature criteria come as a package with multiple components. It is not just a maximum temperature. There are restrictions on incremental warming when background conditions are colder than the maximum temperature criterion. There are allowances for further human warming when the temperature criterion cannot be naturally met. We have even clarified that where human changes are effectively irreversible that we can allow further human warming above and beyond those irreversibly warmed conditions. There are also special provisions to ensure that spawning and incubation are protected where and when it occurs. We believe this temperature package is the best combination or provisions to protect the resource with the least unintended impact to industry.</i></p>
<p>(6i) 201A-200(1)(c)</p> <p>Temperature-general</p> <ul style="list-style-type: none"> • Presence of fish 	<p>If no fish are in the stream in the summer, then the summer temperature is irrelevant. (WSPC)</p> <p>RESPONSE: <i>The standards must protect all the native fish and wildlife that rely on waters, the absence of fish does not mean that temperature is unimportant and has no ecological impact. Impacts to non-fish species also affects the availability of food that supports fish downstream and in the non-summer when fish return.</i></p> <p>Salmon emigrate from the habitat when the temperature is high. Thus, whether or not a stream meets a summer temperature criteria is irrelevant if fish, as a result of their life history strategy, are absent. (Farm Bureau)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Temperature criteria should only apply where it is reasonable obtainable and not expected everywhere regardless of fish presence. (Campbell Group)</p> <p>RESPONSE: <i>Temperature criteria are intended to protect non-fish species as well as fish. There is an ability to establish seasonal criteria where fish really would not be present in some systems seasonally. The new standards focus on key fish uses which allow greater flexibility to tailor standards to the capabilities of the streams. Where waters cannot naturally meet the criteria Ecology can establish alternative criteria that better reflect what the stream can provide.</i></p>

	<p>Temperature standards are to be representative of the main water body. Excluding thermal refuges ignores an important way that fish avoid high temperature. (Meenach) RESPONSE: Scientific evaluation shows that refuges are indeed important but isolated coldwater pockets are not capable of supporting healthy fish populations. Many of these areas while cold are also lower in oxygen than the surrounding water so fish face a trade-off on what impact is more detrimental.</p> <p>Ecology should apply the criteria both where salmonids currently are found and where they could be found were water temperatures corrected. (WPIRG) RESPONSE: The standards are established based upon both the existing patterns of use and the attainable uses that would be expected given habitat improvements. Since most of the state is covered by the use of salmonid spawning that use is currently almost universal. It can only be removed by a determination that it is not existing or attainable and only after a change to the regulation.</p> <p>The standards assume that fish would still be in the vicinity and spawning when high temperatures are most likely. Cold adapted fish usually migrate out of areas that experience warm temperatures in the summer. (WDOT) RESPONSE: Fish leaving otherwise healthy habitat is a not commonly cited by any researchers known to Ecology. Fish leave when the habitat becomes unbearable, but significant impacts are observed long before temperatures or other conditions reach such dire levels.</p>
<p>(6j) 201A-200(1)(c) Temperature-general <ul style="list-style-type: none"> • Need for additional guidance </p>	<p>We need some guidance on what we do when we have a stream that is not mixed. For example, if we have a river in which there is an island in the center. On one channel there is coverage with shade; on the other channel, which is of an equal volume, there is no shading, and it is shallow, and it's a fairly wide stream, but of equal flow, and we have measured as much as a two-degree increase. What is measurable? What is representative, then, of that river? What do we report to Ecology in that situation? (McKenzie) RESPONSE: Great question. We do not have answers to all possible scenarios prepared in advance. If they are identical in all other respects than the warm water half should be used since there is likely some human cause impairing the ability of shade to develop on that half. But if this is not true and perhaps it is at the inside bend of a hydrologically active river and is just a bed of river rock in the summer, then this would be better representing a naturally warm area and it would be more appropriate to sample the other side of the island. The key is that the standards are not trying to determine what is naturally warm, only where human activities can be controlled such that healthy conditions can be maintained or restored.</p> <p>We strongly suggest that Ecology, perhaps with assistance from EPA, pursue the development of risk assessment tools to validate the temperature criteria. (Plum Creek) RESPONSE: That is essentially what Ecology did with the multiple lines of evidence approach used to recommend the temperature criteria. The goal was to ensure that temperature would not be an impairment to the health of aquatic life. The approach that we used focused on what is known rather than using uncertainty to set the boundaries for protection.</p> <p>These criteria are too complex. An entity needs to be able to measure compliance themselves. The regulated community will possibly (if not probably) interpret the many gray areas in the wording differently. (USACE) RESPONSE: We have provided more guidance than is in the existing standards, so should be improving this situation. We do not find the gray areas problematic or the criteria complex. We will be developing more guidance as issues arise that point to the need for general resolution.</p> <p>Use your temperature and water quality standards as a guideline not as an absolute. Come up with an allowable tolerance each way. (Gilda) RESPONSE: The upper end would always be used anyway. So a range for criteria does not function in the regulatory context of the water quality standards. We have</p>

	<p><i>many alternative pathways that can be used to alter the criteria for individual water bodies, but we start with a default criterion that we believe is protective of the uses.</i></p>
<p>(6k) 201A-200(1)(c) Temperature-general</p> <ul style="list-style-type: none"> Other concerns 	<p>We believe Ecology’s demonstration that their criteria support steelhead smoltification that occurs in the spring is insufficient. We recommend that Ecology either show their summer maximum criteria support this sensitive use or adopt a 12°C criterion to protect steelhead smoltification. (EPA)</p> <p>RESPONSE: <i>We have well described our technical concerns with the EPA position on this issue and continue to believe having a spring out-migration criteria is not appropriate. Even one of the key authors (Dr. Zuagg) who was kind enough to speak with the EPA regional temperature criteria technical panel expressed the opinion that it may be unwise to apply the laboratory results as ambient water criteria – which is what the EPA guidance is doing. All we can do y at this point is provide more information on migration patterns in Washington to assist EPA's final review and decision.</i></p> <p>We encourage Ecology to adopt the draft EPA temperature guidelines which recommend setting temperature standards to protect steelhead smoltification. The EPA guidelines suggest a 14°C 7DADMax to protect this phase of steelhead development. (NMFS)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Ecology should provide temperature criteria that are fully protective for steelhead during smoltification. USEPA recommends 14°C and we support that recommendation. (WPIRG)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The salmon/steelhead/trout spawning and rearing criterion is also too warm; EPA recommends 13°C and allowances must be made for steelhead which need a maximum of 12°C for smoltification. (NEA)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Based on our consultants report (attached to the comment letter) the temperature proposal is based on a subjective analysis, and it is highly questionable that it will be administered in an unbiased manner. (YRBCC)</p> <p>RESPONSE: <i>Some subjectivity is necessary to evaluate over 500 technical reports, but the purpose of developing the information into a multiple lines of evidence evaluation system was to minimize that subjectivity through compartmentalization of study types and life-history threats. We believe that we have well demonstrated that the results of laboratory, field, and controlled stream studies (to name a few) on the wide range of life stages and physiological processes converge to the same recommendations.</i></p> <p>What happens when it's a failure? What happens to the guy that loses his farm because you have to cool his irrigation and mandate a buffer? (WRCRL)</p> <p>RESPONSE: <i>Cooling irrigation water is a confusing premise. It is unlikely that a farm’s irrigation would cause a violation of a 7-day average of daily maximum temperatures. This rule changes the existing temperature criteria, and in most cases results in a rise in allowable temperatures in the areas of the state that are used by farms. The rule does not create new legal obligations for farmers.</i></p>
<p>(6l) 201A-200(1)(c) Temperature-general</p> <ul style="list-style-type: none"> EPA regional temperature guidance 	<p>EPA’s guidance document may be used by Ecology to assist in development and adoption of water quality standards for temperature that will protect coldwater salmonid species, and meet the requirements of the Clean Water Act (CWA) and the Endangered Species Act. (ESA) (USFWS)</p> <p>RESPONSE: <i>Ecology actively participated in the development of the EPA regional guidance and that work was instrumental, along with all the other available information, in producing the temperature criteria in the final rule.</i></p> <p>The state should postpone any action until the EPA finishes its Pacific Northwest temperature standards. (WSHA)</p> <p>RESPONSE: <i>The EPA guidance has been completed.</i></p> <p>EPA’s draft guidance is probably far more powerful a source upon which to base</p>

	<p>temperature standard than the sources you used. (Squaxin Tribe) (Puyallup Tribe). RESPONSE: <i>We participated in the development of the regional guidance and attended all technical and policy meetings over the past three years. This work was instrumental in our final decisions on the temperature criteria proposed in this rule .</i></p> <p>EPA’s guidance focuses on the summer maximum conditions to protect coldwater salmonid uses. EPA’s temperature guidance criterion is for the warmest time of the year. This differs under Ecology’s temperature water quality standard. No time frame is identified. (USFWS) RESPONSE: <i>We have never found it necessary to specify that temperature criteria are summer values where a single number is presented. The concept of summer is itself subject to interpretation and in a single river annual maximum criteria can occur anytime from June through September depending upon the climatic conditions. We have added language, however, that should get at what your concern must be. We are explaining that the criteria are considered protective only where normal fall through spring cooling and warming trends are protected.</i></p> <p>Incorporate EPA’s Regional Guidance into the proposed rule. (Squaxin Tribe) (WGCA) (SSC). RESPONSE: <i>We have considered it along with all the other comments received and in the context of our review of the science presented supporting all the various positions. We have modified portions of our criteria to better conform to some parts of the final EPA guidance where we can concur that the changes make sense for Washington.</i></p> <p>Ecology should address naturally warm waters by (a) incorporating concepts from the pending EPA Regional Temperature Guidance; and (b) ensuring that the overall regulatory approach addresses these waters at the outset, rather than relying on after-the-fact corrections such as site-specific criteria, UAAs, variances, etc. (NWPPA) RESPONSE: <i>We are not aware of any provisions in the EPA guidance that would minimize the need for UAAs, site-specific criteria, etc. beyond the levels that would be needed under the Ecology criteria package.</i></p> <p>Current proposed standards do not conform to the generally accepted science or the EPA draft regional temperature guidance. At a minimum the proposed criteria from the December 2001 draft should be retained and applied both to where salmonids currently and historically have existed. (American Rivers) (Fish) (Aagaard) RESPONSE: <i>We have made some changes to the criteria that do in effect move the package closer to EPA’s final regional guidance. These changes recognize and mitigate the risks to summer spawners directly and lower the summer criteria for char spawning areas.</i></p> <p>Dwayne Knightsel (ph), Butell Northwest -- that's one of your most prestigious research institutions in the nation -- observed the document did not observe the scientific methods of hypothesis testing. John Palmer said people should be careful about applying national temperature guidance too strictly since that guidance is based on outdated information. (WRCRL) RESPONSE: <i>Comment noted. We believe your quote for Mr. Palmer refers to the existing national guidance that was developed in the 70’s, as opposed to the current regional guidance that was recently finalized and EPA is encouraging states to adopt.</i></p>
<p>(6m) 201A-200(1)(c) Temperature-general <ul style="list-style-type: none"> Use of multiple lines of evidence </p>	<p>MLE is nothing less than judgment based on circumstantial evidence. (WSHA) RESPONSE: <i>Multiple lines of evidence (MLE) is a system that relies on over 500 technical studies that demonstrates that regardless of the type of study, if the exposure metrics are standardized the results are all in close conformance. It demonstrates using the weight of the available technical evidence what thermal environment can best be relied upon to provide full protection for our native aquatic life.</i></p> <p>The WCA questions the objectivity of a new mechanism used to define “uses” – Multiple Lines of Evidence (MLE). (WCA) RESPONSE: <i>Ecology held numerous public workshops and special presentation</i></p>

	<p><i>opportunities around the state. We have not had any issues presented that indicate we have made an error in judgment by using the MLE approach.</i></p> <p>Consistent use and objective interpretation of MLE strengthens the validity of Ecology’s approach by making it more quantitative and reproducible. We are confident the proposed criteria will withstand scientific scrutiny. (Plum Creek) RESPONSE: The note of support is appreciated.</p> <p>The multiple lines of evidence approach is based on judgments, not peer reviewed science. Insufficient information about MLE is provided and findings cannot be duplicated or evaluated. This approach reduces incentive to fund quantitative science. Developing science is in the public interest. (WGCA) RESPONSE: Most of the research that was used had been peer reviewed and published. Much of the remainder was done by professional researchers in governmental institutions or done as dissertations that had to undergo significant scrutiny by qualified fisheries specialists in their defense.</p> <p>DOE uses the multiple lines of evidence to qualitatively justify the temperature, oxygen and turbidity standards. The approach is not quantitative, which means they have not estimated what effect deviations from the optimum criteria will have on fish health. (Farm Bureau) RESPONSE: Where the research provided a basis, quantitative estimates on the impact to fish health were indeed included and used as the basis for the recommendations in the MLE method. We should also note that turbidity was not changed in this rule revision.</p>
<p>201A-200(1)(c) Temperature Measure</p>	
<p>(7a) 201A-200(1)(c) Temperature-measure Support use of 7DADMax</p>	<p>We support the use of the temperature metric 7-DADMax (7-day average of the daily maximum temperatures) for maximum temperatures for each of the aquatic life use categories. (USFWS) (EPA) (WFPA) (Plum Creek) (Campbell Group) (Weyerhaeuser) (USACE) (VanderPloog) (Seattle Port) (WCAPC) (Spokane City) (WDOA) RESPONSE: We appreciate your voicing support.</p> <p>I want to applaud Ecology for trying to average temperature rather than look at single point temperatures, although compliance will be difficult now that we have to do temperature logging, data logging. (KCWP) RESPONSE: We agree that it does create more of a need to use data loggers if the data is to be used to compare with the state criteria.</p>
<p>(7b) 201A-200(1)(c) Temperature-measure Concerns about use of 7DADMax</p>	<p>The 7DADMax needs to be coupled with a 1DMax temperature. (McKenzie) (Puyallup Tribe). RESPONSE: We cannot find a reason to include a 1-Day Maximum criteria beyond those criteria included to guard against lethality and blockages to migration that are included to guide the mixing zone and short-term modification provisions of the standards.</p> <p>Since marine waters are still at a 1-day maximum, it appears this is a way to discount all of the streams out of compliance in the past. For this reason we think both metrics should be included. (Yakama Nation). RESPONSE: Marine waters were not changed because we did not evaluate the needs of marine species and therefore are not willing to use the general statewide statistical relationships between 7DADMax temperature and 1DADMax temperature to modify the existing marine criteria that are based on a 1DADMax. Such a review may occur at some future date.</p> <p>The 7DADMax makes monitoring more complicated and excludes the public from any role in monitoring. There also needs to be protection from temperatures occurring during a shorter time period. (American Rivers) (Fish). RESPONSE: Citizens willing to conduct intensive monitoring using standard</p>

registered thermometers would not be excluded, but we view it as appropriate that grab samples become a historic practices as it tends to misrepresent even the daily maximum temperature. We may provide guidance at some point that would allow grab samples to be used where the value is outside statistical uncertainty for representing the daily or 7-day average maximum temperatures.

We need to have clarification on how the seven-day average and the 90-day average works. If you have seven consecutive days in which you have a maximum water temperature is it then three days preceding, three days after, and the day of, so it would be like the fourth day of a seven-day period? Likewise with the 90 days for dissolved oxygen. (McKenzie)

RESPONSE: We are not including a 90-day average in the final standards that will be adopted. As to the 7-day average, we have included a procedural definition in the definitions section at the front of the regulation. Yes it is the three days preceding and the three days after. We believe this creates the least biased approach in recognition that seasonal limits may be established in some water and that temperatures can be on significant daily declining trends at the point where a spawning criteria may be invoked.

Does this centered moving 7-DADMax approach cause a lag between application of remediation measures and identifying an exceedance? (USACE)

RESPONSE: It is difficult to know what measures are being envisioned, however, actions that have such control over temperatures must start whenever it would result in compliance. If this means they don't have to start on the 3-day prior to an effective date that would be considered acceptable.

How does the 7-DADMax relate to grab samples? (USACE)

RESPONSE: It doesn't. Grab sample could be taken at any time of the day so a relationship does not exist. A close approximation could probably be developed for individual water bodies and seasons, but this seems unworthy of the resources needed for its development given the relatively low cost of thermisters.

Ecology might want to consider a minimum of every two hours for frequency if they truly want to get some estimate of what the maximum is. For a small stream that is open to sunlight you may need to have 30-minute spacing. (McKenzie)

RESPONSE: We agree that a 30-minute interval is probably a better overall minimum sampling frequency and so have modified the language in the definition accordingly.

Historical data, as to whether temperature and dissolved oxygen data would be valid or not that has been collected historically, because it may not be frequent enough to provide a seven-day average or a 90-day average. I think that needs to be covered in the guidance (McKenzie)

RESPONSE: We agree that we will need to be selective in our use of historic data.

I am concerned about the minimal frequency that data would have to be collected. If we collected one value a day for temperature and we averaged those, is that considered a maximum? Does that represent what Ecology wants as a maximum? (McKenzie)

RESPONSE: We want the daily maximum, not just the result from the day's sampling.

It's not clear exactly how at this point you would determine a violation of temperature or dissolved oxygen if you're having to measure an average on either a 7 day or 90-day period. (Osborn)

RESPONSE: When a 7-day period passes where the 7-day average is exceeded it would be a violation.

A parcel of warm water created during the travel time of 7 days creates a large parcel to manage as it passed downstream. For instance, once a non-compliance parcel is created in the Snake River, there will not be many management actions, if any, that can be taken to try to cool the water as it passes downstream to the lower Columbia River. (USACE)

RESPONSE: There may indeed be challenges created from hot water moving

	<p><i>downstream, but this should be true of a one day maximum as well as a 7-day average of the daily maximums. Heat is not a conservative pollutant and so would not be expected to behave as if it were a large non-compliant parcel of water that travels for over a hundred miles unaffected by evening cooling and other sources of heat change.</i></p>
<p>201A-200(1)(c) Temperature-Char</p>	
<p>(8a) 201A-200(1)(c) Temperature-char</p> <ul style="list-style-type: none"> • Support char criteria 	<p>We are happy to see a temperature standard that improves the streams inhabited by bull trout. (Normandy Park) RESPONSE: <i>Your support is appreciated.</i></p> <p>We support the char revisions. (NSBK). RESPONSE: <i>Your support is appreciated.</i></p> <p>We strongly support the use of a single, year-round spawning and rearing criteria for char and salmon, steelhead, and trout use categories. (LFC) RESPONSE: <i>Your support is appreciated. However, we are adding a narrative criteria to maintain temperature where and when needed (where the single summer criteria is not sufficient) to protect spawning and incubation. We are also lowering the summer number to 12°C to reflect the EPA regional temperature guidance and concerns over allowing any temperature-induced risks to already healthy bull trout waters. We are also adding a narrative to support the spawning and incubation of other salmonids as well, and are establishing two levels of rearing protection for application across the state.</i></p> <p>I think the 13 °C for bull trout is an improvement over past numbers, though I'm also concerned about seasonal differences and east/west concerns, concerns between East and Western Washington. (Berry) RESPONSE: <i>See previous response.</i></p> <p>The new temperature criteria for char-bearing waters are more protective and it should be instituted regardless of whether a class- or a use-based system is promulgated. (Steffensen) RESPONSE: <i>See previous response.</i></p>
<p>(8b) 201A-200(1)(c) Temperature-char</p> <ul style="list-style-type: none"> • Char criteria not stringent enough 	<p>We are concerned that a 13°C criterion may not fully protect bull trout spawning and rearing. We recommend a 12°C criterion to minimize the risk to juvenile bull trout rearing from competition with other salmonids and to provide better protection for summer-early fall bull trout spawning. (EPA) RESPONSE: <i>We are adding a narrative criteria to maintain temperature where and when needed (where the single summer criteria is not sufficient) to protect spawning and incubation. We are also lowering the summer number to 12°C to reflect the EPA regional temperature guidance and concerns over allowing any temperature-induced risks to already healthy bull trout waters. We are also adding a narrative to support the spawning and incubation of other salmonids as well, and are establishing two levels of rearing protection for application across the state.</i></p> <p>Ecology's proposed temperature criterion and use designations to protect char spawning and juvenile rearing may not be sufficiently protective. (EPA) RESPONSE: <i>See previous response.</i></p> <p>The temperature criterion proposed for spawning and tributary-rearing char, 13° C 7-DADMax, is significantly higher than the Service's recommended 11° C. We continue to support the 11° C 7-DADMax for adequate protection of bull trout juvenile rearing. (USFWS) RESPONSE: <i>See previous response.</i></p> <p>The proposed revised temperature criteria provide greater protection to bull trout than the current temperature criteria, but we do not believe they will meet the conservation and</p>

	<p>recovery needs of the species. (USFWS) RESPONSE: See previous response.</p> <p>We recommend a bull trout spawning criterion of 9° C to protect water bodies used or potentially used by bull trout to spawn. (USFWS, EPA) RESPONSE: See previous response.</p> <p>Table 200(1)(c) - We do not support the 13°C criterion for Char. The U.S. Fish and Wildlife Service (USF&WS) recommends an 11°C criterion and the department should defer to their expertise. Likewise, this criterion does not include protection of Char spawning, which is recommended by both USF&WS and the Environmental Protection Agency. (NEA) RESPONSE: See previous response.</p> <p>We support Ecology establishing standards that are fully protective of bull trout and spawning in rearing areas; however the threshold of 13°C is really too high to be fully protective of these fish. Additionally, the DOE model based native char distribution is not inclusive of all the known char spawning areas. (Nooksack Tribe) RESPONSE: See previous response.</p> <p>The bull trout criteria assumes food will not be limited and competition will not be an issue. This places this species at risk.. When 7DADMax of 13°C is used it allows for even higher daily maxima thus representing a poor index of upper end for optimal field conditions. (CRITFC). RESPONSE: See previous response. And for clarification, the proposed criteria considered that food would not be at satiation levels.</p> <p>We do not support the temperature criteria of 13 °C for char. The USFWS recommends 11°C as adequate protection for adequate protection of bull trout juvenile rearing. We support the recommendation of the USFWS. (WPIRG) RESPONSE: See previous response.</p> <p>Ecology’s designated use of “Char” includes bull trout and Dolly Varden; the temperature requirements for Dolly Varden are approximately 1° C colder than those for bull trout (Hass 2001). (USFWS) RESPONSE: See previous response. Further, we have not found any scientific support in the published literature for the assertion that Dolly Varden have colder temperature requirements than bull trout. The Hass 2001 citation was given in a presentation at a professional conference and does not appear to be fully substantiated.</p> <p>The char criteria may be more appropriate for eastside bull trout. Western bull trout are often associated with steeper, more turbid, and cooler streams. In the Lewis River, known bull trout spawning occurs only in Rush and Pine creeks, with 80% of that in Rush Creek. Rush Creek has only 1.75 miles of spawning habitat , has a high gradient (10%), has little large woody debris, and minimal available spawning gravel. The one feature it does have is cold water, with a maximum 7DADMax of 9.2°C in late summer of 2002. Water temperatures at the time of spawning ranged from 3.9-4.4°C. While we do not have enough data to be sure 13°C is too high for these fish throughout the state, we urge you to take a conservative approach. (WDFW) RESPONSE: See previous response.</p>
<p>(8c) 201A-200(1)(c) Temperature-char • Char criteria too stringent</p>	<p>The 13°C for char seems low according to the evidence reported by DOE in which the mean bull trout rearing temperature was 14°C with fish observed at temperatures between 12° and 16°C. (Farm Bureau) RESPONSE: Ecology’s analysis used a weight of evidence approach, rather than relying on the results of a single study or even a single line of evidence. We also do not know how you came up with the statement, however, that we found 14°C to be the mean bull trout rearing temperature.</p>

	<p>13 °C is unrealistic in many of the "char" designated streams of WRIA 62. (CNF) RESPONSE: We agree that some char streams will not meet the criteria. But we also know that many will and these streams will be maintained at that fully protective temperature.</p> <p>Most AA waters that were re-categorized as Char do not meet the proposed standards (i.e., Chehalis River) and will not cool down if the standard is adopted. (WDOT) RESPONSE: We do not know if most waters do or can meet the proposed standard, since most of them are not sampled to our knowledge. Please note that only some upper tributaries in the Chehalis River watershed have received the char designation.</p> <p>Ed Conner, Seattle City Life, described certain misconceptions and unexpected findings regarding the diverse bull trout populations based on field experience in the Skagit River. He emphasized the lack of knowledge about temperatures needed for bull trout and he described his efforts to collect additional data. (WRCRL) RESPONSE: Comment noted. We would also note that Ed Connor stated that the bull trout strongholds he could think of were about 1°C above the criteria that we were proposing at that time, which is almost exactly what we are now adopting.</p>
<p>(8d) 201A-200(1)(c) Temperature-char Application of char criteria</p>	<p>Char spawning and rearing should not be assigned to streams or major parts of streams that are not known to have an existing population of char that meet these standards. (LFC) RESPONSE: We appreciate the desire to have the criteria only where documented uses occur, but the purpose of the standards is to protect the other species that occur concurrently in these cold water communities, and with so little known statewide for this endangered species time is not available to take a more methodical approach. Further, given the strength of the associations found between known spawning areas and their stream size and altitude characteristics and the use of this default overlay only where spawning populations are suspected to exist, the mismatches should be minimized significantly.</p> <p>DOE wrongly assumes temperature is a primary habitat-limiting factor. (Farm Bureau) RESPONSE: The available information and wide consensus among char researchers is that temperature is a key habitat factor that determines the presence and health of char.</p> <p>Char are only in the river in the winter. (Camenzind) RESPONSE: In some rivers char move to lower rivers to escape harsh winter flows and scouring ice. In other systems, or portions thereof, the char remain essentially in the same place that they were born their entire lives. Our overlay for char protection focuses on the spawning and early rearing streams, thus would not extend to rivers where that are only used in the winter. We have found no basis for the assertion otherwise.</p> <p>For char protection (p. 60-90) it is not clear that the “and all tributaries” rule includes non fish bearing tributaries that contribute to char waters. (CRITFC). RESPONSE: We have added language to make this clear.</p> <p>To fully support bull trout recovery, temperature standard criteria must be developed through the additional life stages which include adult migration, and older juvenile rearing. And they should be applied to the geographical areas where these occur in acceptable habitat and mainstream reaches downstream of the migrating population. (Nooksack Tribe) RESPONSE: We are not satisfied that enough is known on the migratory requirements and how to set proper temperature criteria for its protection. For some of these populations, perhaps most, it has always been their trait to exploit the lower rivers during the fall through spring and migrate upstream as temperatures warm. These lower streams serve as excellent habitat for the other native fish and aquatic life that have higher temperature requirements.</p>
<p>(8e) 201A-200(1)(c)</p>	<p>The Service does not support the use of the maximum 7-DADMax values of 16° C and</p>

<p>Temperature-char Migratory char</p>	<p>17.5° C for migratory bull trout. We recommend that if the 16° C value is adopted, it should be interim criteria, and be revisited and revised if necessary, within 5 years of Ecology’s final rule on the water quality standards. We don’t support 17.5° C for any bull trout waters. We believe that the best available science supports 15° C as more protective temperature criteria for migratory bull trout. (USFWS)</p> <p>RESPONSE: <i>As noted previously, Ecology believes that the state of the science is not sufficient to establish a separate migratory temperature requirement at this time. Where a biological use is seasonal by nature, we must use great care in applying criteria that appear designed to protect year-round residence. Ecology will reconsider its position as more information is developed on the ecology of streams used by migratory char.</i></p> <p>We urge the department to provide protection for migratory bull trout. (NEA)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>It seems prudent to protect bull trout rearing and migration areas in addition to protecting their spawning areas. The map does not appear to protect all areas where bull trout are documented in the Yakima Basin, for example. (Bob Tuck)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>EPA’s guidance protects coldwater refugia areas in the 20° C criterion for migrating salmon and trout. Ecology does not have this protection of coldwater refugia. The Service recommends protection of coldwater refugia for all migratory bull trout waters. (USFWS)</p> <p>RESPONSE: <i>We do not know how to practically identify and protect refugia at this time and so are not adding specific mandates to the standards.</i></p>
--	--

201A-200(1)(c) Temperature-Salmon & Other

<p>(9a) 201A-200(1)(c) Temperature-salmon & other Support one criteria</p>	<p>We support the 16°C criteria to protect salmon, steelhead, and trout spawning and rearing (except for some situations where this criteria may not protect spawning). (EPA)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>We recognize Ecology’s concern for minimizing the complexity of its WQS. Therefore, we think it would be acceptable to only designate this use for waters where there is concern that the 16°C criterion will not fully support this use. We recommend Ecology work with other State agencies, Tribes, and NOAA Fisheries to locate and designate these waters. (EPA) (NMFS)</p> <p>RESPONSE: <i>We are including a narrative criteria that applies spawning criteria only where and when needed – where the summer only number is not effective in protecting spawning.</i></p> <p>We strongly support the use of a single, year-round spawning and rearing criteria for char and salmon, steelhead, and trout use categories. (LFC)</p> <p>RESPONSE: <i>We are including a narrative criteria that applies spawning criteria only where and when needed – where the summer only number is not effective in protecting spawning. While more complex than our proposed one-number approach, it still does not apply default seasonal criteria to all rivers and also allows minor changes to the summer criteria as a further alternative to establishing seasonal criteria. This seems to be the best position for protecting the resource with a minimum of excess complexity. Also, see previous response.</i></p> <p>The temperature criteria are built on methods that are scientifically based, objectively derived, repeatable and protective of the proposed uses. And we believe that they afford full protection for native salmonids. We also support the use of a single year-round spawning and rearing criterion; we believe that’s very important. (Gabriel) (Opp)</p> <p>RESPONSE: <i>Thank you, but please see pervious response regarding changes to the proposed one-number approach.</i></p>
---	--

	<p>We found that our streams would pass if we had 18 °C during the summer temperatures and then 14 °C later on around October 1st or September 1st, that would hopefully protect the spawning salmon. (Gately)</p> <p>RESPONSE: It should provide pretty good protection, but some decrease in health would be expected to occur.</p> <p>We strongly support the proposed stream temperature criteria. (Crow)</p> <p>RESPONSE: Thank you for your support, but please note that some changes were made to the proposal.</p>
<p>(9b) 201A-200(1)(c)</p> <p>Temperature-salmon & other</p> <ul style="list-style-type: none"> Do not support one criteria 	<p>Ecology’s approach to protect salmon, steelhead, and trout spawning and rearing with a single criterion may not be sufficiently protective, particularly for early spawning stocks (spring Chinook, chum) and late developing steelhead embryos. We recommend Ecology establish a specific salmon and trout spawning and steelhead embryo use with a criterion of 13°C 7DADM. (EPA) (NMFS)</p> <p>RESPONSE: We have included a narrative criteria that directs the application of a 13C criteria where and when necessary to protect spawning – where the summer-only criteria would not be protective.</p> <p>The single criterion approach is flawed. The single temperature criteria do not connect management actions to ecological functions. There is no basis for claiming that managing summer temperature will improve fish health during their temperature sensitive life stages. Human activities affect temperature differently than natural temperature cycles. For example, while summer irrigation may have an impact on summer stream temperatures, it will have no effect in the fall when the fish spawn, or in the spring, when the fry emerge. (Farm Bureau)</p> <p>RESPONSE: We are adopting two levels of summer rearing protection, instead of the single criterion proposed. This is similar to our current standards and better matches the pattern of waters in the lower watershed being naturally warmer than the upper watershed. We are also adopting a narrative criteria that applies spawning protection only where and when the summer maximum criteria is by itself not effective in protecting the thermal requirements for reproduction.</p> <p>How will it be decided where to apply the 16°C standard, and will it consider historic spawning use. (CRITFC)?</p> <p>RESPONSE: We are adopting two summer criteria. The 16C criterion would apply to non-char waters that are currently Class AA and the 17.5C criterion would apply to those currently Class A. To eliminate a spawning use requires a change to the regulations and a demonstration that spawning is neither existing nor attainable.</p> <p>The proposed 7-DADMax criteria of 16 °C for salmon spawning and rearing waters may be unrealistically low. These criteria may be applicable to higher elevation pristine streams but is not realistic for the rest of the watershed. (JCCD)</p> <p>RESPONSE: See previous response.</p> <p>In 200(1)(c) we recognize a single number approach is more workable for Ecology’s management needs, but we have concerns about impacts inherent in the numbers themselves. Significant amount of literature (copies of studies attached) show reduced reproductive and developing success for salmonids where pre-spawning adults, eggs, and alevins have been held at temperatures that are higher than optimal, but still lower than the criteria for char and salmon spawning. The risk of impact would appear to be even greater for migrating char in waters where the temperature criterion is the salmon criterion. Lowering these criteria by even a single degree would be more protective of the resource. Where the positive effect would be seen would be among the early spawning portion of salmon and char populations. (WDFW).</p> <p>RESPONSE: We have added specific provisions to protect reproduction where and when reliance on a single summer criterion would not be effective.</p> <p>We do not support the temperature criteria of 16°C for salmon, steelhead, and trout spawning and rearing. USEPA recommends 13°C which is much more protective of</p>

	<p>salmonids. Ecology should adopt the 13°C criteria. (WPIRG) RESPONSE: <i>We have included a narrative criteria that directs the application of a 13°C criteria where and when necessary to protect spawning – where the summer-only criteria would not be protective.</i></p> <p>Ecology should not classify streams according to one maximum temperature reading. This approach does not connect management actions to ecological functions. There is no basis for claiming that lower summer water temperatures will improve fish health during other temperature sensitive life stages. (WSPC) RESPONSE: <i>See previous response.</i></p> <p>Warm water is a stressor which reduces the resistance to pathogens, parasites and infections, as does low oxygen levels. Recent studies including Welsh et al. (2000) and Hines and Ambrose (1998) found low Coho abundance in streams with weekly average temps above 16.8°C, and temperature stress thresholds are discussed in detail in Armor (1990). (Puyallup Tribe) RESPONSE: <i>We identified 16°C as being the best estimate of the maximum summer 7DADMax temperature that fully protects salmon and trout. This is based on a large number of studies.</i></p> <p>We do not support the proposed temperature criteria set out in Table 200(1)(c). The proposed criteria are less stringent than those recommended by Ecology in December 2001 and less stringent than those recommended in the USEPA technical review or the USEPA Draft Regional Guidance. (WPIRG) RESPONSE: <i>We do not believe being more stringent is a sign that a proposal is more technically accurate or an appropriate state standard. So while we recognize your desire for more stringent criteria, we are adopting effective and defensible criteria.</i></p> <p>The proposed temperature standards have now gotten hotter and hotter and they're about equivalent to those proposed by the pulp and paper industry. (American Rivers) RESPONSE: <i>The values are also very similar to those in the EPA regional temperature guidance, similar to those adopted by the state of Oregon, and similar to the recommendations for criteria by many researchers and review panels.</i></p>
<p>(9c) 201A-200(1)(c) Temperature—salmon & other Criteria does not protect spawning</p>	<p>The proposed standards will not effectively protect our salmon resources. In the Dungeness River we have four early spawning stocks with two federal listed under the ESA and two more that are listed as depressed in SASSI. The proposed standards will not protect spawning at these times and places. The December 2001 proposal was more protective and should be the alternative pursued. Simplifying the rules at the expense of protection should not occur, such streamlining can be done in program implementation rather than altering criteria and standards. (Jamestown Tribe). RESPONSE: <i>We have added narrative criteria to be used to protect spawning where needed.</i></p> <p>Previous recommendations for spawning criteria <12°C and rearing <15°C were technically defensible biologically. (CRITFC). RESPONSE: <i>There is a range of criteria values that are defensible. We are adopting 12°C for bull trout spawning tributaries, 16°C for core salmon and trout rearing habitat, and 17.5°C for non-core salmon and trout rearing habitat. Rather than adopting default seasonal criteria to protect spawning, we are adopting a narrative that directs that spawning be protected where the summer criterion does not do so alone.</i></p> <p>We are concerned with whether the proposed temperature standards are adequate to protect unique spawning cycles of salmon (i.e., Spring Chinook). (Chehalis Tribe). RESPONSE: <i>See previous response.</i></p> <p>Ecology disregards the spawning temperature requirements and assumes they will be controlled by summer rearing temperatures. This ignores what we know of spawning times and locations. (CRITFC) RESPONSE: <i>See previous response.</i></p>

	<p>Ecology appears to have unilaterally determined that salmon spawning does not occur during periods of elevated water temperatures are a problem. For example, WRIA 1 is a set river basin and certainly contains drainages. Spring Chinook, regardless, start spawning in late July and August when water temperatures are elevated. In WRIA 1 the co-managers have identified fish distributions that should be used. This information has been completed and provided to Ecology, but apparently to no avail. A spawning and rearing criterion absolutely needs to protect the spawning and rearing. (Lummi Tribe) RESPONSE: See previous response.</p> <p>A spawning and rearing criterion absolutely has to protect spawning, but the current single number system does not do this. The December 2001 proposal for salmon and trout and the December 2000 proposal for char should be adopted. (Lummi Tribe). RESPONSE: See previous response.</p>
<p>(9d) 201A-200(1)(c) Temperature-Salmon & other</p> <ul style="list-style-type: none"> • Salmon rearing-only criteria 	<p>We support the 17.5°C criteria to protect salmon, steelhead, and trout rearing-only. (EPA) RESPONSE: Your support is appreciated.</p> <p>We would suggest 7-DADMax criteria of: 17.5 °C for the period from May 15 through Sept. 15 and 14°C the rest of the year. (JCCD) RESPONSE: We are adopting 17.5°C for non-core rearing areas and 16°C for core rearing areas to protect salmon and trout, and we are including narrative criteria that direct special protection of spawning and incubation where and when needed.</p> <p>Ecology indicated criteria for smolt migration should be below 12-13°C. More than half of the Columbia River smolts migrate at higher temperatures. This suggests smolt migration temperatures should be higher than those proposed. (WSPC) RESPONSE: It may indicate that smolts are being harmed. Given the very low smolt to adult survival rates, this may be the more correct assessment for the Columbia. In order to more accurately assess smolt migration needs, one would need to examine steelhead emigration patterns in order to make a better comparison since they are the species the recommendation was primarily based on.</p>
<p>(9e) 201A-200(1)(c) Temperature-salmon & other</p> <ul style="list-style-type: none"> • Redband trout criteria 	<p>We support the 18°C criteria to protect redband trout. (EPA) RESPONSE: Your support is appreciated.</p> <p>We believe too little information exists to set definitive temperature criteria for redband trout and indigenous warm water species. However, given the initial classification of water bodies, this is a minor issue that can be resolved over time with an adaptive management program. (WDFW). RESPONSE: We believe the information is sufficient, but would also like to see more directed research on redband trout.</p> <p>Studies suggest the proposed criterion for Interior Redband Trout to be flawed. (NEA) RESPONSE: We do not concur that the criterion is flawed. There is uncertainty as to how common it will be for all or most redband trout populations to show higher temperature requirements and preferences, but the range for full protection noted appears sound.</p>
<p>(9f) 201A-200(1)(c) Temperature-salmon & other</p> <ul style="list-style-type: none"> • Indigenous warm water species criteria 	<p>We support the 20°C criteria to protect indigenous warm water species. (EPA) RESPONSE: Your support is appreciated.</p> <p>The temperature criteria for “Indigenous Warm Water Species” should not be set at 20°C. Ecology’s own temperature discussion document acknowledges that “Washington’s indigenous warm water fish communities can sometimes thrive in waters that have summer maximum temperatures as high as 25-27°C...” (Weyerhaeuser) RESPONSE: There was not an adequate technical basis to set higher temperature criteria. Occasional observations did not override the few well conducted studies on species such as redband shiner. This is an area that more directed research would be</p>

	<i>particularly welcome to help reduce the uncertainty.</i>
201A-200(1)(c) Temperature-Application	
<p>(10a) 173-201A-200(1)(c)</p> <p>Temperature-application</p> <p>cold water refugia</p>	<p>We are concerned that temperature increases allowed under the proposed rules, whether occurring in the larger stream or perhaps non-fish bearing waters, may decrease the size and/or persistence of coldwater refuges even if the overall temperature increases may not appear significant in well mixed portions of the stream. Assessing this risk should be part of an adaptive management program. (WDFW).</p> <p>RESPONSE: <i>There is still much to learn about identifying and protecting refugia, as well as to its relative contribution fish ecology. We have added language to better address the needs to provide comparable protection to upstream non-fish bearing waters.</i></p> <p>The exclusion of thermal refugia where fish avoid high temperatures is not sound science. (Forde)</p> <p>RESPONSE: <i>Relying on isolated pockets of cold water to protect our aquatic resources would not be sound science. Populations respond to the amount and quality of the available habitat. Refugia while shown important to aid in fish colonizing and surviving in otherwise inhospitable waters, has not been show to be as good as having uniformly or broadly occurring healthy conditions.</i></p>
<p>(10b) 173-201A-200(1)(c)</p> <p>Temperature-application</p> <p>Seasonality of fish</p>	<p>We strongly endorse a return to seasonal temperature standards which are protective enough for salmon and char during the spawning season. Ecology should propose a system to carefully adjust its ‘arbitrary’ season to account for differences in spawning times in different rivers, with plenty of room for year-to-year variability. While not perfect, this approach would be scientifically defensible, would directly address the complaint that the season is ‘arbitrary, and would be consistent with the spirit of the Clean Water Act. (PAS)</p> <p>RESPONSE: <i>We have added provisions for protecting spawning where and when needed. This is less burdensome than a statewide default application of spawning seasons and criteria and can be tailored to the uses of specific watersheds.</i></p> <p>The state of Washington should consider having seasonal temperature standards that vary throughout the year. The single “healthy stream” criterion may avoid the costly and complex task of identifying the spawning seasons for all of the stat’s streams and rivers, but what it will do is shift the cost from the state to the local community to undertake a Use Attainability Analysis (UAA). (Kimball)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Focusing on the salmonid standard (spawning and rearing), many streams will exceed 16°C during certain parts of the year naturally, regardless of any human impact. The State of Idaho has introduced a “Seasonal Cold Water” water quality standard that allows a higher temperature standard during the summer period (up to 23°C, June 21 – September 21). (Kimball)</p> <p>RESPONSE: <i>We have the option of developing site-specific criteria that reflect what the watershed is capable of providing. We oppose adopting non-biologically based criteria just to have a warmer category within which to place waters in. This approach results in criteria that are biologically irrelevant and that still do not reflect what individual watersheds are capable of providing. We would have a difficult time defending where to use such a criteria and in many waters we would still end up going through a UAA to set a warmer criterion based upon the natural capability of the watershed. We can also adopt seasonal criteria without having to create a seasonal cold water use.</i></p> <p>For those fall spawning stocks that spawn in September-October but have juveniles that emigrate as late as August (e.g., Snake River fall Chinook), it is likely that exemptions will be provided that would excuse summer exceedances and shifts in temperature peaks and duration. This would not provide spawning protection either. (CRITFC).</p>

	<p>RESPONSE: <i>State standards cannot ensure that every individual, of every species, of every tributary will be covered by fully healthy criteria. Most stocks we are aware of do not emigrate in August and the temperature criteria are designed to ensure healthy populations statewide. If special needs exist they can be dealt with independently rather than creating overly stringent statewide standards.</i></p> <p>Listed Spring Chinooks have been observed spawning in July in the N. Fork of the Nooksack.. The proposed maximum water temperature of 16C does not provide appropriate habitat conditions, and the fish cannot safely just wait until fall cools the temperatures to acceptable conditions. Standards must be protective of all life stages of all ESA species. As currently proposed, these standards threaten the recovery of the two Chinook ESUs in the Nooksack watershed. (Nooksack Tribe).</p> <p>RESPONSE: <i>We have added provisions to protect such spawning populations where and when necessary – when the summer maximum criterion is not sufficient.</i></p> <p>Please provide a temporal aspect to this measurement. Oregon Office of Energy)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>There is no taking into account that some activities take place only at certain times of the year. For example, the only salmon spawning that takes place in the Lower Snake is in November/December for fall Chinook. (USACE)</p> <p>RESPONSE: <i>See previous response. We separate out rearing and spawning uses in the criterion being adopted. This allows better consideration of the where and when.</i></p> <p>The DOE has isolated the optimal single value for each criterion, most notably for temperature, and has established that as the regulatory target, ignoring the reality of variable conditions as well as the fact that salmonids do not require 13 °C year-round. (WCA)</p> <p>RESPONSE: <i>Standards are designed to maintain healthy conditions not just survivable conditions. We have numerous criteria in the package, not just a 13°C criterion. We also allow for one year in ten to be warmer than the target criterion.</i></p> <p>Since DO and temperature vary naturally in a system, the standards should be equally variable (not applied in a blanket approach). (WBWRCC)</p> <p>RESPONSE: <i>Providing a range for a criterion is in effect the same as providing the uppermost end of the range as a single value for state criteria. It is not clear how the lower part of the range would ever be used as the basis for a regulatory requirement if there is a range above that considered acceptable.</i></p>
<p>(10c) 201A-200(1)(c)</p> <p>Temperature-application</p> <ul style="list-style-type: none"> • Use of fixed dates for criteria 	<p>Ecology is attempting to regulate nature to comply with temperature and oxygen standards set for fixed dates of Sept. 15 to May 31. This is inappropriate and ludicrous. Studies show that fish will wait and spawn after temperature and oxygen levels are appropriate. (Meenach)</p> <p>RESPONSE: <i>The proposal did not contain fixed dates for applying spawning criteria. Further there are well documented detrimental effects to fish that must hold, and fish will begin spawning at temperatures that are harmful if that is all that is available.</i></p> <p>The seasonal shifts in the standards used fixed dates, resulting in lower temperature after September 15. The basis of the shift was to lower temperature during egg development. However, fish typically spawn after the temperature drops, so using a fixed date for the shift results in unduly restrictive temperature requirements. (Farm Bureau)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Farm Bureau challenges the fixed dates in seasonal standards. Identifying actual spawning dates and adjusting the standards accordingly would produce more realistic fish protection. (Farm Bureau)</p> <p>RESPONSE: <i>The proposal did not contain fixed dates for applying spawning criteria.</i></p> <p>Not all of the proposed regulations have credible data to support changes in the standards. For example, use-based maximum temperature limits are largely without scientific support. The Ecology review of temperature cautioned on this problem stating “Thus</p>

	<p>while serving as good general guidelines, the spawning dates use in this analysis should not be relied upon too heavily to set a state-wide criteria for incubation”. Yet the standards for both temperature and oxygen were set with fixed dates. (Meenach) RESPONSE: See previous response.</p>
201A-200(1)(c)(i)-(vii) Temperature Notes	
<p>(11) 201A-200(1)(c)(i)-(vii)</p> <p>Temperature notes</p> <ul style="list-style-type: none"> Clarification 	<p>This section should be stricken or only include allowances for small increases. (Yakama Nation). RESPONSE: We find the remainder to also be useful and are keeping it with only minor revisions.</p> <p>A useful addition to the temperature standard would be an acknowledgement that in some situations where a discharger would be in violation of the new standard, there are no realistic short-term remedies that could be applied in order to bring the discharge into compliance. A municipal wastewater treatment plant does not have any realistic options for reducing the temperature of its treated wastewater discharge. In these situations, Ecology is encouraged to add language allowing for the development of a temperature management plan. The temperature management plan would describe the best management practices, measures, and/or control technologies used to eventually reverse a warming trend. For point sources, the temperature management plan would be part of the National Pollutant Discharge Elimination System (NPDES) permit. Compliance with the requirements of the temperature management plan would constitute compliance with the temperature water quality standards. (Spokane City) RESPONSE: We did not propose the concept of “temperature management plans” to control temperature in the draft rule, and do not believe it would be appropriate to add it to the rule at this time without allowing for further public dialogue on what would constitute a plan and how it would be used. Further, we believe one can accomplish the same thing by using a compliance schedule, which is currently authorized in the water quality standards.</p> <p>Oregon’s water quality standard language for temperature includes provisions for an “off ramp” under certain conditions. A source can petition for an exception to the rules provided that I) It is implementing all reasonable management practices; (II) Its activity will not significantly affect the beneficial uses; and (III) the environmental cost of treating the parameter to the level necessary to assure full protection would outweigh the risk to the resource. Language such as the above would be a useful addition to Washington’s proposed standard. (Spokane City) RESPONSE: Oregon’s provisions do not appear to meet the federal regulation based on the recent court decision, and based on our discussion with EPA and the state, the same basic provisions would be accomplished, or need to be compliant with, existing tools such as site-specific criteria and use attainability analyses. Thus the language would appear to allow some alternative pathway that does not in fact exist and is not approvable by EPA. We can call a site-specific criteria or a variance a temperature management plan, but it will still need to meet the actual federal requirements.</p> <p>Two important mechanisms that are included in the currently approved temperature standards for other Northwest states are the concepts of non measurable temperature effects and long-term temperature management plans. The provision for non-measurable effects allows insignificant anthropogenic warming (e.g., 0.3°C) even when the stream exceeds the numeric criterion. This is appropriate because insignificant warming by definition does not pose a threat to salmonid populations (MC-PUDs). The first sentence in 200 should be revised to read: “These aquatic life uses and temperature criteria are intended to apply except where there is an approved management plan or other site specific standard...” Additionally add new section 460: “Temperature Management Plans (suggested rule language enclosed in comment letter – basic concept is to require all feasible steps be taken to reverse any warming in sections of rivers that contain sources expected to cause significant contributions”. (MC-PUDs) RESPONSE: Washington’s standards allows for de minimus increases to temperature.</p>

	<p><i>See previous response on temperature management plans.</i></p> <p>Numeric criteria alone are not sufficient to protect salmonids. USEPA recommends the following two additional actions to fully protect salmonids from high temperature waters: (1) Adopt regulatory provisions to prevent the degradation of waters already meeting or colder than water quality standards for temperature, and (2) Ensure mixing zone parameters adequately protect salmonids. (WPIRG)</p> <p>RESPONSE: <i>We have provisions in the standards to provide adequate protection when authorizing mixing zones and have added specific precautions for temperature during this rule revision. We also have provisions for reducing the rate of warming of existing cold waters in addition to the antidegradation policy requirements. These do not provide non-degradation protection to cold water as EPA guidance suggests, but do not find the basis for that level of protection – statewide non-degradation for temperature – is warranted.</i></p>
<p>201A-200(1)(c)(i) Natural Condition</p>	
<p>(12a) 173-201A-200(1)(c)(i)</p> <p>Natural condition</p> <ul style="list-style-type: none"> • Support for 0.3° C. increase 	<p>PacifiCorp strongly supports Ecology’s 0.3° C and 0.2 mg/l allowances. (PacifiCorp)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>We support Ecology’s proposal to allow for alternative criteria such as for naturally occurring conditions. (WFPA) (Schwartz) (Bailey) (Baker-D) (Pierson) (Anderson-O) (Ploeg) (Anonymous) (Bryan) (Dunn) (Reed) (Emmerton) (Dahl) (Bieker)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>The 0.3°C limit should apply to all streams rather than the numeric criteria (16°C). This would also then protect summer spawning. (CRITFC).</p> <p>RESPONSE: <i>It would indeed, but Ecology views this level of protection as unwarranted and uncharacteristic of water quality standards. We have included specific protection mechanisms for spawning.</i></p> <p>I think the new standards also recognize that there are cases where natural conditions can and do result in warmer temperatures than what are being proposed in the standards, so working around those natural conditions in the manner that you proposed is good. (VanderPloog)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p>
<p>(12b) 173-201A-200(1)(c)(i)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • Clarification of 0.3° C. increase 	<p>The 0.3°C ignores the real issue on whether or not the activity is detrimental to the survival of the fish population. (Farm Bureau)</p> <p>RESPONSE: <i>State standards are not intended just keep uses such as fish habitat from vanishing entirely, but to maintain them at healthy levels.</i></p> <p>The 0.3°C will have negligible impacts on when a stream reaches a temperature suitable for spawning. (Farm Bureau)</p> <p>RESPONSE: <i>We do not suggest otherwise. It is not intended as a mechanism to protect spawning.</i></p> <p>The incremental temperature increase allowed for individual point sources should not be greater than the increment allowed for dams. Recommend in 200(c)(ii)“...the numeric criteria <u>by more than 0.3°C</u> from human actions are restricted as follows: . . . from individual point source activities <u>or hydroelectric dams</u> must not, . . .” (MC-PUDs).</p> <p>RESPONSE: <i>It is unclear how the language can be read so as to appear to require dams to face tighter restrictions than individual point sources. Perhaps this is a concern that the dams will be part of the cumulative nonpoint allocation. We generally treat the dams as point sources not subject to NPDES permits (although there may be specific situations where dams are required to get an NPDES permit).</i></p> <p>(c)(i) - The clarifying phrase “any of” should be inserted after the first sentence “When a water body’s temperature is warmer than...” The proposed language, “and that condition is due to natural conditions of human structural changes that cannot be effectively</p>

	<p>remedied (as determined consistent with the federal regulations at 40 CFR 131.10)” leaves open the possibility that the department believes it can make such findings regarding human structural changes without undergoing a Use Attainability Analysis (UAA). In doing so, it will in effect be altering the use designations so that they no longer meet the requirements of section 101(a)(2) of the Clean Water Act. As such, the State is required to re-examine these use designations every three years. The remainder of that same sentence also contains an ambiguity that requires clarification. (NEA)</p> <p>RESPONSE: We have made changes that should make it clear that the irreversible human effects condition is one that must be demonstrated via a UAA.</p> <p>“Human actions considered cumulatively” does not state the geographic range of the actions that are being considered. While we support the idea behind this suggested rule language, namely that a cap be placed on temperature increases where water quality violates numeric criteria, it is essential that both the area and the methodology that will be used are specified. We do not support the addition of 0.3°C (0.54°F) to the temperature criteria for human actions; there should be no addition because any measurable addition is too great. The result of no measurable addition will merely be that sources will require offsets or reductions and new sources of warming will not be allowed. The language is also unclear about to what the 0.3°C (0.54°F) is being added. Is it to the numeric criteria in Table 200(1)(c) or to the temperature of the water body At the very least, revise the rule language to state that an addition of up to but not more than 0.3°C (0.54°F) can be considered during the UAA process. (NEA)</p> <p>RESPONSE: The geographic coverage is “a water body”. We believe the 0.3°C allowance on top of major structural alterations is a critical factor that mitigates unreasonable economic costs. We believe you have understated the challenge of finding offsets in this type of situation and the costs of providing non-degradation protection. We also do not agree that a cap should be placed on changes in the UAA process. This does not fit with the purpose of the UAA.</p>
<p>(12c) 173-201A-200(1)(c)(i)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • 0.3° C. increase too stringent and unworkable 	<p>In Clallam County, some portions of our lakes and our creeks that may naturally exceed the current standards and they're limited to only a 3/10 °C change in temperature. How did they arrive at that figure and what is the impact from that particular change. (Grover)</p> <p>RESPONSE: Based upon our departmental files, the 0.3°C allowance appears to use the reliable field detection level as an indication of de minimus change which would be acceptable. This has proved to be a valuable allowance that can be supported as being safe for the biota at all but the hottest stream temperatures, where even a 0.3C increase could cause significant increased harm.</p> <p>Ecology’s provisions for human effects on temperature are inadequate. The old standard was applied to temperature criteria more in accordance with levels of lethality, while the proposed criteria are based on optimum growth. A 0.3°C increase near a lethal temperature is more important than the same increase near a criterion based on optimum growth. (WSPC)</p> <p>RESPONSE: See previous response. The existing water quality criteria are well below lethality levels and also seek healthy temperatures to support aquatic species, not just non-lethal temperatures.</p> <p>We don’t understand the basis for 200(1)(c)(i) prohibiting all activities from having more than cumulative increase of 0.3°C. This appears to mean that an undetectable increment is to be regulated and the mechanism for doing so is unclear. We also thing 0.3C is too stringent for a large river like the Columbia. The increment allowed should be large enough to distinguish between natural and human causes. (MC-PUDs).</p> <p>RESPONSE: See previous response. Further, we do not believe that the allowance which is implemented based typically on modeling should be large enough that it could be identified as occurring in the field and clearly differentiated from all human and natural sources. This would allow variability to be used as a tool to permit very significant human increases in temperature above levels that are naturally poor.</p> <p>The minor variance from the existing natural condition (0.2 mg/L for dissolved oxygen</p>

	<p>and 0.3 °C for temp.) is, statistically, zero tolerance. This will not work in the real world. (WCA) (Jenkins) (Farm Bureau)</p> <p>RESPONSE: <i>Since the 0.3°C allows dilution, in many rivers multiple large hot discharges of water can still be allowed without violating this provision. It is not a no-tolerance condition. We agree, however, that it is stringent, but it is an allowance for degradation beyond already less than healthy levels.</i></p> <p>The maximum allowable additional increase at any period of time does not fit into the single criteria approach that characterizes a single value for the entire year. (Farm Bureau)</p> <p>RESPONSE: <i>There is not a single allowance year-round. There are separate allowances for when the temperature is above the criteria from when the temperature is below the criteria. Human warming when temperatures are below the criteria is much larger than the 0.3C allowance for when temperatures are above the criteria.</i></p>
<p>(12d) 201A-200(1)(c)(i)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • 0.3° C and modeling 	<p>The 0.3°C allowance will likely be measured with models, which are highly uncertain. DOE should not spend time developing these models that cannot even account for natural variability. (WSPC)</p> <p>RESPONSE: <i>The temperature limits and load allocations that occur are based on the relative effect of human actions on ambient temperatures. This calculation does not need to account for all forms of natural variability. While no models are perfect, they have been demonstrated to be highly reliable and are improving every year.</i></p> <p>The 0.3°C will be determined with models, and if DOE is the sole arbiter of the model, decisions based on the model are essentially arbitrary. (Farm Bureau)</p> <p>RESPONSE: <i>The decisions that are based on modeling are subject to public review and legal challenge. Mistakes can happen which create long-term animosity and distrust with certain stakeholder groups, but the decisions based on modeling are not arbitrary.</i></p>
<p>(12e) 201A-200(1)(c)(i)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • Application of 0.3° C. increase 	<p>This provision may allow for several increases in temperature, as long as each increase is less than 0.3°C. There is no accounting for cumulative effects. The Service recommends that Ecology develop a plan to establish baseline conditions and track cumulative effects. (USFWS)</p> <p>RESPONSE: <i>The rule says that it is a cumulative allowance for all sources when the natural conditions are warmer than the established standards.</i></p> <p>Some of Lakewood’s waters often exceed the proposed limits, perhaps naturally. The proposed regulations are not clear how this situation would be addressed. (Lakewood)</p> <p>RESPONSE: <i>Human activities considered together are allowed to raise the water body temperature 0.3C above natural levels that are warmer than the established numeric criteria.</i></p> <p>There is inconsistency and thus confusion on the use of the terms “water body” and “water body segment.” The assessment of temperature, protection of beneficial uses, and allowed incremental increases if natural conditions or irreversible human structures exist, should be focused on water body segments. We suggest that the term “water body segment” replace “water body’s” or “water body” in –200(1)(c)(i) and (ii). (Weyerhaeuser)</p> <p>RESPONSE: <i>Segments is the more confusing term from our standpoint, as it can be based upon a variety of management factors and is not necessarily related to the uses that are assigned to the waters. We use the term water body when a provision would apply to an entire water body, and we use the term water body segment when a provision can be applied to a portion of the water body. If we were to standardize, we would make the opposite change that you suggest and use only” water body”. One example of why would be that taking the other course (using water body segment everywhere) would allow temperature increases in each segment that accumulate to unacceptable levels in the water body as a whole.</i></p> <p>For the river users, compliance to artificial, computed criteria based on natural conditions is not acceptable. (USACE)</p> <p>RESPONSE: <i>The alternative (intensive monitoring and testing of alternative</i></p>

	<p><i>structural designs and operational changes) would likely be incredibly expensive and more subject to uncertainty and the necessary use of safety factors.</i></p> <p>It is questionable whether a 0.3°C temperature change can be reliably measured. One suggestion would be to phrase the 0.3°C increase in a statistical context (e.g., 95% confidence limits, binomial distribution function, or control limits) rather than as a set quantity. The same principle could be applied to pH and dissolved oxygen. (USACE) RESPONSE: <i>The incremental allowance for warming is no more complicated to measure or estimate use than just determining compliance with the criteria itself. It is not intended that the change be reliably detected and correlated to human actions in the field. This would be impossible for large rivers, and the costs of trying to do so would likely be problematic for all entities involved. We would certainly take an approach that would prohibit using variability to mask greater warming, so the statistics would not be used in a manner that sets the burden of uncertainty on the aquatic life. These factors suggest that the use of modeling is the least burdensome approach for implementing this provision in controlling human actions.</i></p> <p>Standards shouldn't have cushions like "or within 0.3°C of the criteria". This is like telling people that they will get speeding tickets for going 67 mph in a 70 mph zone. (WDOT) RESPONSE: <i>It is more like saying they won't get tickets for going 73 in a 70 mph zone, as it allows the 0.3°C increase in all cases as a minimum. The way the standards are worded currently if a water body is naturally 15.8°C and the criteria is 16°C, human actions would only get 0.2°C increase allowance. Under the new language they would get the full 0.3°C.</i></p> <p>The description of thermal barrier can result from natural conditions at river confluences or from temperature management policy of cool water releases from storage reservoirs conducted for the benefit of the aquatic community. (USACE) RESPONSE: <i>Natural conditions are not in violation of the water quality standard even when they cause barriers to migration. As with the gas abatement plan that allows harmful gas levels in exchange for the greater net survival of smolts passed over the dams rather than run through turbines or via barging, Ecology will make exceptions where it is better for the use the criteria is intended to protect on a site-specific basis. However, since the provision applies to the use of mixing zones and short-term modifications it is not apparent how the release of cold water from a dam to help fish creates a violation of the provision.</i></p> <p>The details describing the determination of thermal site potential and its application needs to be addressed in the current proposed standards documentation. (USACE) RESPONSE: <i>The determination of natural conditions is an evolving science and one that must consider many site-specific factors. It does not appear to us to be appropriate or beneficial to either the resource or our human stakeholders to lock down the options and conditions in the rule.</i></p> <p>The term "cumulatively" should be defined. It is not clear whether cumulative should be interpreted as a series of dams or to one impoundment. A more precise approach would be to define a specific reach of a river and apply the criteria to that segment. (USACE) RESPONSE: <i>It is applied to the combined effect of all human actions on the water body as described in the language. Changing the meaning by application to a segment would allow greater warming than intended.</i></p>
200(c)(ii) Point Sources	
<p>(13a) 201A-200(1)(c)(ii) Point sources</p>	<p>We recommend replacing both the point source formula and the 2.8°C non-point temperature increase allowance. We recommend that the maximum cumulative allowable temperature increase be 25% of the difference between the natural background temperature and the criterion, which would apply to both point and non-point sources.</p>

<ul style="list-style-type: none"> Concerns about temperature increases for point sources 	<p>(EPA) RESPONSE: We have decided to stay with the approach that was proposed. It is consistent with our existing standards and would not require a natural conditions calculation to use.</p> <p>We do not believe that the allowance for an increase of up to $28/(T+5)$ [where T is background temperature] for point source activities, or the 2.8° C for non-point source activities is protective of bull trout, when the natural condition of the water is cooler than the criteria in Table 200(1)(c) on page 16. (USFWS) RESPONSE: We appreciate your concern but are not making a change to this existing allowance at this point in time. Antidegradation protection will help mitigate the impacts to these existing cold water areas.</p> <p>A stream with spawning and rearing that should naturally be at 11°C can be raised to at least 13.8°C by nonpoint sources and then to 15.6°C by the point sources. In addition the 15.6°C could be exceeded once every ten years. Add to this most of the monitoring occurs in the early part of the day and misses the daily maximum temperatures. If a violation is discovered what is the requirement that monitoring be continued for the next 10 years to determine whether the compliance frequency criteria is violated? (CRITFC) RESPONSE: Monitoring is changing over so that most of the data we collect will have the actual daily maximum values. We have not yet decided how we will implement the 1 in 10 year exemption in developing the 303(d) list, but we will not be waiting for ten years of monitoring. Given that the allowance is statistically based, exceedances may occur in several years in a row and then not again for 15 years or more.</p> <p>We are concerned that this provision will allow a watershed to warm when the watershed is currently at a cooler temperature more supportive for anadromous fish and their prey resources. (NMFS) RESPONSE: We appreciate your concern but are not making change this existing allowance at this point in time. Antidegradation protection will help mitigate the impacts to these existing cold water areas.</p> <p>(c)(ii)(B) - The proposed allowances outside mixing zones are too great. Sources must be required to reduce thermal inputs and/or obtain offsets. Under no circumstances can mixing zones be authorized in water quality limited streams. (NEA) RESPONSE: See the previous response. Further, Ecology only authorizes mixing zones where the standards can be met after dilution.</p> <p>200(1)(c)(ii). It should be “rate of warming up to...human actions is restricted...” NEA) RESPONSE: Thanks, we will make the grammatical correction.</p>
<p>(13b) 201A-200(1)(c)(ii)</p> <p>Point sources</p> <ul style="list-style-type: none"> Application of temperature increases for point sources 	<p>Compliance with the 2.8°C is impossible to verify or predict until TMDLs are completed for water bodies and all non-point sources are thoroughly inventoried. Could a tool be developed that can predict stormwater impacts on temperature to the level of accuracy designated in the standards. (WDOT) RESPONSE: Perhaps a tool can be developed to assist in assessing the impact to temperature and compliance with the incremental allowance. But we do not have such a tool available today. A first step may just be to examine whether stormwater drainages of a given size pose a reasonable potential of causing exceedances to receiving streams of various size categories.</p> <p>Is it ever possible to conclusively determine if a river violates standards: exceed the site potential by a measurable amount? How will the site potential be determined? What statistics will be used? How will the cumulative impacts from all non-point sources be determined? Is the 2.8 °C increase determined from the site potential temperature? A comparison with site potential must be addressed each day of the year and at every compliance point in the river. (USACE) RESPONSE: The 2.8°C allowance is based on the background temperature, not the site potential. It would be most effectively used in conjunction with modeling for large rivers. It is difficult to say what is conclusive in this context. In a remediation context,</p>

	<p><i>the compliance with the modeled expectations would be considered adequate demonstration.</i></p> <p>The ecological basis of the 2.8°C limit is unclear. It allows the water temperature during spawning to be above the level that DOE considers is needed for full protection. (Farm Bureau)</p> <p>RESPONSE: <i>We have added some language to clarify the need to maintain normal cooling patterns in the Fall through Spring to protect spawning. Your are correct that the increment would be too large if it actually occurs during spawning periods. We believe the nature of non-point source contributions would not allow significant impacts such as 2.8C to commonly occur during the incubation period to natural climatic influences.</i></p>
<p>(13c) 201A-200(1)(c)(ii)</p> <p>Point sources</p> <ul style="list-style-type: none"> • Temperature increases & Tier II antidegradation 	<p>Cold headwater streams and coldwater refugia need to be protected. Recommend this section be modified to clarify that these temperature increases reflect a maximum allowable increase and that any temperature increase above 0.3°C is subject to the Tier II antidegradation process. (EPA) (USFWS)</p> <p>RESPONSE: <i>Tier II is applied based on the level of warming for qualified actions being more than 0.3°C in a water body that meets the established temperature criteria. The incremental allowance is part of the temperature criteria.</i></p> <p>This section does not comport with the “overriding public interest” test required in 173-201A-300(4). Cumulative temperature increases could adversely affect listed salmon if indiscriminately applied. (NMFS)</p> <p>RESPONSE: <i>All measurable degradation from covered activities must go through the Tier II tests. They are not given the incremental allowances first and then evaluated for Tier II.</i></p> <p>Are the incremental temperature and oxygen allowances subject to Tier 2 analysis under antidegradation. (Kalispel Tribe)?</p> <p>RESPONSE: <i>Yes, they are part of the criteria. Further, Tier II says directly that it applies to lowering water quality in waters that are meeting the criteria so no other interpretation seems salient.</i></p> <p>It does not appear that antidegradation applies to the 2.8 degrees centigrade accumulative increase in water temperature analysis. Under proposed WAC 133-201A-200, paragraph 1B-2, the 2.8 °C rise in temperature needs to be subject to antidegradation review. (Lummi Tribe)</p> <p>RESPONSE: <i>It does apply where the activities involved are captured in the Tier II requirements.</i></p>
<p>201A-200(1)(c)(iii) Warm Weather Exemption</p>	
<p>(14) 201A-200(1)(c)(iii)</p> <p>Warm weather exemption</p> <ul style="list-style-type: none"> • Clarification 	<p>We support the statement that the temperatures are not to exceed the criteria at a probability frequency of more than once every ten years on average. (EPA)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>DOE proposes to allow a warm weather exemption. (Farm Bureau)</p> <p>RESPONSE: <i>We are allowing a reoccurrence interval that would typically apply during warm weather when temperatures are high and flows are low.</i></p> <p>We remain uncertain that a simple “once in ten years” allowance for unusually warm weather is reasonable or biologically relevant. (Plum Creek)</p> <p>RESPONSE: <i>This provision helps avoid the application of very stringent statistics in developing effluent limits and load allocations in TMDLs. It can be defended as being protective of the biology, but it is not a biologically-based exception.</i></p> <p>The water temperature criteria should use some of the specific language used in the federal water criteria standards that describes exemptions caused by warmer than normal</p>

	<p>temperature that exist above a project. The frequency of exceedance seems to be very restrictive when considering the criteria are ideal conditions and not lethal thresholds. (Lewis County PUD)</p> <p>RESPONSE: <i>We explored the climatic exemption earlier in this rulemaking and found that it was too complicated, and technically flawed in that the warmest water temperatures did not overlap the period that had the warmest air temperatures. The one in ten year reoccurrence interval integrates into existing practices for setting permit limits and thus is well understood and will produce consistent requirements.</i></p>
201A-200(1)(c)(iii) Measurements	
<p>(15) 201A - 200(1)(c)(iv)</p> <p>Measurements</p> <ul style="list-style-type: none"> Clarification 	<p>We support the “well mixed portion” change. (USACE)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>(1)(c)(iv). This should be “...at the waters’ edge.”. (NEA)</p> <p>RESPONSE: <i>A correction has been made.</i></p> <p>(c)(iv) - This description of temperature measurements being representative of the water body segment as a whole does not account for where the uses are. (NEA)</p> <p>RESPONSE: <i>We have made some minor modifications to the language to direct this clause to the dominant habitat at the monitoring site. This should partly address your concern, and is what we really were trying to get at.</i></p> <p>Section (iv): Backwaters and thermal refuges are often key habitats of significance. Backwater areas separated by human actions (dam peaking power) should be treated similar to contiguous waters. (CRITFC)</p> <p>RESPONSE: <i>We cannot write into the standards a provision for every unique human action. But we have made some modifications to this language that will help ensure that valuable habitat cannot be ignored.</i></p>
201A-20F0(1)(c)(iv) Downstream Criteria	
<p>(16) 201A - 200(1)(c)(v)</p> <p>Downstream criteria</p> <ul style="list-style-type: none"> Clarification 	<p>The rule should require that the downstream criterion be backed up to the upstream water to assure compliance with downstream standards rather than allowing for a mixing zone. If the department declines to change this rule, the last sentence should be clarified to include impairment of migration in aquatic life of the downstream waters. (NEA)</p> <p>RESPONSE: <i>We have removed the language on mixing to meet downstream standards, but continue to support this concept. We will leave it out of the rule until we can create more clear guidance on how such localized mixing should be evaluated for compliance.</i></p> <p>Section (v) seems to be designed to permit unlimited temperature increases in non fish bearing waters. If the volume of the non bearing stream is small, it could then be assumed that the temperature increase in the bearing stream would be small. If this stream is designated as salmon spawning/rearing, a 16°C standards would give allowance for its temperature to be increase by 2.8°C outside the mixing zone. (CRITFC)</p> <p>RESPONSE: <i>No, it was intended to recognize that the state sometimes sets less restrictive criteria and less sensitive uses in upstream waters, and that these waters when in full compliance with their assigned criteria would not meet downstream criteria right at the boundary. See previous response.</i></p>
201A-200(1)(c)(v) Lethality	
<p>(17a) 201A - 200(1)(c)(vi)</p> <p>Lethality</p>	<p>200(1)(c)(vi)(A-D) should be deleted from the proposed rule. The temperature and time exposure criteria in these subparts are not technically valid and provide no added environmental protection. (Weyerhaeuser) (NWPPA)</p> <p>RESPONSE: <i>We believe having an acute lethality provision is important. We have,</i></p>

- Acute lethality provision not necessary

however, redesigned the language so that its intended application is clearer.

Ecology needs to delete the criteria regarding prevention of acute lethality (WAC 173-201A-200(1)(c)(vi). NCASI has provided detailed comments concerning several fatal flaws in Ecology's analysis of acute lethality in mixing zones. We concur with those comments and believe the existing NPDES permitting rules adequately address concerns with lethality within individual mixing zones, whether it is from heat or from something else. (GPC)

RESPONSE: See previous response.

Criteria designed to protect against the presence of lethal temperature conditions are inappropriately applied and their derivation flawed. Fish do not reside in mixing zones for a time sufficient to cause mortality at 22°C or 23°C. Restrictions on the size and configuration of mixing zones are designed to allow fish passage and thus point source discharges would not cause barriers to migration. (NCASI)

RESPONSE: See previous response. Additionally, fish do reside in mixing zones and some temperatures are instantaneously lethal to fish passing through the plume, and the size and siting considerations in the existing regulation are not adequate.

The derivation of the lethality temperature criteria relies on complex mathematical manipulation of what are largely laboratory study data to estimate the biological responses of fish in natural environments. Key references supporting the mathematical derivation of the lethality standards are absent. (NCASI)

RESPONSE: The 7-day average value was based on a simple trend analysis of the available 7-day duration laboratory studies, the instantaneous value was based on an extrapolation from studies that examined very short durations of exposure. The entire basis is described in detail in the supporting temperature discussion document.

Too little consideration is given to field studies of fish at elevated temperatures. (NCASI)

RESPONSE: Field studies were considered along with laboratory studies. The results are presented in a format that recognizes where site-specific factors may be used to make alternative determinations.

The lethality criterion at WC 173-201A-200(1)(c)(vi)(D) is designed to protect against circumstances which could lead to near-instantaneously lethal conditions for fish. This criterion is inappropriate because, unlike other water quality standards, it is designed to apply at the end of point source discharge pipes and does not allow consideration of local habitat and discharge configurations that may also act to mitigate the potential for a heated discharge to harm aquatic life. (NCASI)

RESPONSE: We cannot find a basis for this assertion. The language is very specific about the time fish would be entrained and is not an end of pipe limit.

Development of a water quality standard applicable at the discharge point (regardless of whether a mixing zone is allocated) is unnecessarily redundant to NPDES permitting requirements and could needlessly constrain dischargers, for example by creating a disincentive to reduce effluent flow. (NCASI)

RESPONSE: It is more likely to cause temperature reductions that protect fish from acutely lethal effects. If unique situations arise, Ecology has sufficient means to consider exemptions that produce greater protection for aquatic species.

Ecology needs to delete the criteria regarding prevention of acute lethality (WAC 173-201A-200(1)(c)(vi). NCASI has provided detailed comments concerning several fatal flaws in Ecology's analysis of acute lethality in mixing zones. We concur with those comments and believe the existing NPDES permitting rules adequately address concerns with lethality within individual mixing zones, whether it is from heat or from something else. (GPC)

RESPONSE: We did not find fatal flaws upon reviewing the information presented in the NCASI evaluation. While the existing mixing zone regulation can be used to prevent lethality, the inclusion of guidance on lethal temperatures is believed to be important to ensuring the narrative requirements to protect uses is implemented for

	<i>temperature.</i>
<p>(17b) 201A 200(1)(c)(vi)</p> <p>Lethality</p> <ul style="list-style-type: none"> Acute lethality provision not protective enough 	<p>We support Ecology’s inclusion of specific criteria that apply to thermal plumes in order to protect salmonids. We believe 33°C for instantaneous lethality leaves little margin for error, so we recommend 32°C. We recommend a 13°C 7DADM value to protect fish embryos. We recommend that thermal shock to salmonids be prevented by limiting the maximum cross-sectional area of the river that exceeds 25EC to less than 5-10 percent of the river. We recommend that adult migration blockage be prevented by limiting the maximum cross-sectional area of the river that exceeds 21°C to less than 25% of the river or if upstream temperature exceeds 21EC, the thermal plume be limited such that 75% of the cross-sectional area of the river has no temperature increase. (EPA)</p> <p>RESPONSE: <i>We agree that it leaves little margin for error, but also recognize that the limited areal extent of water and the few discharges that will be effected help mitigate any risk.</i></p> <p>The 22°C migration blockage standard is 2°C higher than EPA’s recommendation. The effect may be amplified by allowing low (5-6) mg/l dissolved oxygen. A standard should prevent not describe the point where adverse effects occur. (CRITFC)</p> <p>RESPONSE: <i>Our analysis did not support a more stringent value, and oxygen is likely to be the contributing cause in why one study showed blockage at low temperatures.</i></p> <p>To protect embryos a 1-Dmax of 17.5°C is considered lethal. It is difficult to see how a lethal level will be protective. Temperatures greater than 14°C can easily be demonstrated to initiate significant mortality. (CRITFC)</p> <p>RESPONSE: <i>They have not been demonstrated to be lethal on a short-term basis to our knowledge. This provision is used in approving special activities with limited potential to disrupt spawning.</i></p> <p>The limitation of 2 seconds at 32°C (not 33°C) may be protective, but this depends upon the prior acclimation and no additional temperature exposure beyond the 2 seconds. The rules need a limit on the magnitude of temperature change so the total change is not greater than 8°C to avoid heat shock. If streamflow is reduced in the summer and discharge is held constant, the length of the mixing zone would increase. These thermal mixing areas should also not be allowed in the preferred pathways for fish. (CRITFC)</p> <p>RESPONSE: <i>We have not seen adequate research on the absolute difference in temperatures creating heat shock to warrant adopting such a limit at this time. We would of course reconsider in some future rulemaking if such data becomes known to us.</i></p> <p>The proposed lethal temperature standards for salmonids and temperatures related to the proposed mixing zone standards will not ensure protection of salmonids. (CRK)</p> <p>RESPONSE: <i>They are used only in very limited circumstances and the bulk of all water bodies will be protected to the base criteria (such as 16C for core rearing waters and 17.5°C for non-core rearing waters).</i></p> <p>Temperature criteria to “prevent acute lethality and barriers to fish migrations” are to be applied when complying with provisions established in the mixing zone provision. They are derived from literature for salmon species and cannot be assumed to be protective for bull trout; particularly (B), lethal temperatures for developing fish embryos (a 1-DMax temperature of 17.5° C), (C), discharge plume temperatures (plume entrainment of fish can not exceed 2 seconds at temperatures above 33° C), and (D), thermal barriers to adult salmon migration (a 1-DMax temperature greater than 22° C and adjacent downstream water temperatures are 3° C or more cooler). (USFWS)</p> <p>RESPONSE: <i>We believe they will be protective in the limited context to which they will be applied. If information is developed that shows they are not, we will likely use the narrative provisions to protect the use while we pursue a formal change to regulations.</i></p>
<p>(17c) 200(1)(c)(vi)</p> <p>Lethality</p>	<p>It is unclear where, when, how, and for which species the 33°C lethality criterion would apply. Will all discharges have to model their plumes? Replace this section with a narrative standard or apply it only to continuous discharges. (Boeing)</p>

<ul style="list-style-type: none"> Application of acute lethality provision 	<p>RESPONSE: It would apply to all discharges that can create such lethal plumes to protect all species.</p> <p>Where does the provision referring to acute lethality and barriers to fish migration apply? (USACE)</p> <p>RESPONSE: They are used to guide the evaluation that uses would not be harmed by establishing mixing zones and in applying the similar narrative provision when authorizing short term modifications to the standards.</p> <p>The derivation of lethality temperature criteria by converting LT50 values from constant or variable temperature laboratory studies to approximations of LT1 values for 7-DADMax and 1-DMax temperatures, while creative, is not transparent, and in some cases the mathematical manipulations of data are not justified. Further, the method does not provide appropriate consideration for habitat conditions and biological responses that allow fish to be much more resilient to stream temperature fluctuations than laboratory data alone would suggest. (NCASI)</p> <p>RESPONSE: It remains the best method we could devise to establish lethality values, is consistent with similar EPA guidance, and site specific factors are not well enough understood to establish a regulatory process that can reliably and effectively used.</p>
201A-200(1)(c)(vii) CWA Section 316	
<p>(18) 201A-200(1)(c)(vii)</p> <p>CWA Section 316</p> <ul style="list-style-type: none"> Clarification 	<p>Section 316 authorizes less stringent thermal discharge limits than would otherwise be required. If employed in establishing thermal TMDLs, it would allow numeric temperature criteria to be tailored to the needs and circumstances of particular watersheds. Language should be revised to read: “Notwithstanding any provision of this chapter, effluent limitations, TMDL wasteload or load allocations, or other controls on thermal discharges or loadings to surface waters may be established in accordance with subsections 303(d) or 316(a) of the federal Clean Water Act, 33 U.S.C. §§ 1313(d), 1326(a).” (PacifiCorp)</p> <p>RESPONSE: We have language in the rule that points out the special allowances provided in Section 316.</p>
201A-200(1)(d) Dissolved Oxygen	
<p>(19a) 201A-200(1)(d)</p> <p>Dissolved Oxygen</p> <p>Not stringent enough</p>	<p>Dissolved oxygen criteria should be modified to ensure the protection of char and salmonid, steelhead, and trout spawning and rearing. (EPA)</p> <p>RESPONSE: Because of the significant and almost universal concerns on our proposed D.O. criteria that were based on average concentrations and the concern over the values chosen, Ecology has decided to withdraw the portion of the rule which changes the dissolved oxygen criteria. There is no way to rectify all of the concerns that have been raised with the proposed criteria at this time (e.g., the use of averaging, the level of protection targeted, the method to protect spawning and incubation). Ecology also believes that the existing criteria are protective of the state’s aquatic resources. We will, therefore, continue to use the dissolved oxygen criteria that are in the existing regulation. The existing criteria will continue to be applied much as it is today. Char spawning waters will be a single daily minimum of 9.5 mg/l, salmon spawning streams that are currently Class AA (extraordinary quality) will also be at 9.5 mg/l but be attached to the use “Core Rearing, Spawning, and Migration”. Waters currently Class A (excellent quality) will continue to receive the single daily minimum of 8.0 mg/l, but the use will be Non-Core Rearing, Spawning, and Migration”. The redband trout use will receive the existing Class A 8.0 mg/l criteria as well. Class B waters will receive 6.5 mg/l and assigned to the comparable use of “Salmon and Trout Rearing-Only”, and the new warm water habitat use will also be assigned this 6.5 mg/l daily minimum criteria. Portions of the proposed implementation guidance that remain applicable to the existing single daily minimum criteria will be retained.</p> <p>We are concerned that DO levels that may be marginal for protection are further</p>

	<p>exacerbated by other stresses that may already exist in aquatic environments affected by human activities. Ecology’s final selection of DO criteria to protect salmonid spawning, egg incubation, and fry emergence needs to specifically address these issues and explain how the DO levels selected are protective. (EPA) RESPONSE: See previous response.</p> <p>I strongly feel that targeting more stringent standards statewide would be a great ease on future regulatory dislocations. (Swartz) RESPONSE: See previous response.</p> <p>The proposed dissolved oxygen standards are not protective of aquatic life. (WPIRG) RESPONSE: See previous response.</p> <p>The dissolved oxygen standards do not adequately protect salmon. If DO levels were dropped to lower levels during part of the day or night then this life threatening problem would be masked by the standard. (SSC) RESPONSE: See previous response.</p> <p>This is less protective than previous versions and is not supported by our own technical information and expertise. We are concerned with both the lower criteria and the 90-day average. Salmon spawning and incubation should be a 1-day minimum of 10 mg/l, Rearing and migration should exceed 8.5 mg/l, and Warm Water species 7 mg/l. (Yakama Nation) RESPONSE: See previous response.</p> <p>Washington should at least adopt a standard that is at least as protective as that of Oregon which does not allow oxygen to be less than 90% of saturation in seasonal low flow and not less than 95% during incubation. At 12C and sea level the DO saturation would be 11 mg/l. A standard of 7 mg/l is not at all protective of incubation, despite the requirement for average oxygen over 90-day periods to be above 9.5 mg/l. (CRITFC) RESPONSE: See previous response.</p> <p>We strongly oppose Ecology’s proposal to keep the same minimum standard of 9.5 mg/L oxygen, even though recent studies have shown that oxygen levels of 10.5 or even 11 mg/L provide the best protection for salmon and trout eggs. (PAS) RESPONSE: See previous response.</p> <p>Ecology’s own analysis suggests the proposed standard is not fully protective. If nothing else, maintain the current standard in the proposed rule (Squaxin Tribe) RESPONSE: See previous response.</p> <p>More depression of oxygen between the water column and the gravels should be expected (see Ringler and Hall, 1975; and Hall and Lantz, 1969). Even one day spent at low DO (7 mg/l) can be damaging. (CRITFC) RESPONSE: See previous response.</p> <p>We urge Ecology to maintain the current dissolved oxygen criteria. (WPIRG) RESPONSE: See previous response.</p>
<p>(19b) 201A-200(1)(d) Dissolved Oxygen</p> <ul style="list-style-type: none"> • Too stringent 	<p>This standard is overly restrictive and does not provide meaningful improvement in fish protection. (Farm Bureau, Schauer) RESPONSE: See previous response in (19a).</p> <p>Clearly, the salmon have more sense than the regulators since studies show that fish do not spawn every year on September 15th, but when necessary, will wait until the temperatures get lower. The oxygen standard is overly restrictive and does not provide meaningful improvement in fish protection. (Meenach) RESPONSE: See previous response in (19a).</p> <p>The oxygen standard would result in more frequent water quality violations during summer high temperatures because warm water does not absorb as much oxygen as cold</p>

	<p>water does. This standard is overly restrictive and does not provide meaningful improvement in fish protection. (Meenach) RESPONSE: See previous response in (19a).</p> <p>Natural conditions (low gradient streams having minimal aeration and decaying vegetation) are going to make meeting the D.O. standard even more difficult. (JCCD) RESPONSE: See previous response in (19a).</p> <p>Based on our consultants report (attached to the comment letter) the DO standard in the water column is elevated to levels 1.5 mg/L higher than needed by the spawning fish in order to assure an intergravel standard of 8.0. (YRBCC) RESPONSE: See previous response in (19a).</p> <p>Although the dissolved oxygen criteria revisions look to be scientifically valid, the implementation of the standard (i.e., data collection equipment and effort) will be difficult may be unreasonable. (Olympia) RESPONSE: See previous response in (19a).</p> <p>Manser Creek in Skagit County is one of the largest fish producing creeks in Washington State, but fails to meet the DO criteria. This document is not based on field-tested science. Many comments and references were previously entered into the EIS process that met the criteria for best available science in WAC 365.195.900-925. These references were not considered in the propose rule. (Good) RESPONSE: See previous response in (19a).</p> <p>Manser Creek in Skagit County is one of the largest fish-producing creeks in Washington, but the creek fails DOE dissolved oxygen standards miserably. Apparently we failed to tell -- or DOE failed to tell the fish what was best for them in Manser Creek. (Good) RESPONSE: See previous response in (19a).</p> <p>This may be realistic for char, but the same standard is also used for the trout and salmon and I wondered if it isn't too stringent that we are just going to be bumping this criteria even on our best conditions in Salmon and Snow creek. (Gately) RESPONSE: See previous response in (19a).</p> <p>Manser Creek in Skagit County is one of the largest fish producing creeks in Washington State, but fails to meet the DO criteria. This document is not based on field-tested science. Many comments and references were previously entered into the EIS process that met the criteria for best available science in WAC 365.195.900-925. These references were not considered in the propose rule. (Good) RESPONSE: See previous response in (19a).</p> <p>The DO standards are overly restrictive and do not provide meaningful improvements for aquatic life. The proposed standards also surpass federal requirements for DO. (WBWRCC) (Island County) (MBarr5) (Stemilt Management) RESPONSE: See previous response in (19a).</p> <p>Where the new standard would go to right now in those areas that are above six we can -- as long as we're not creating any real major impact, we are allowed to expand our businesses, recruit new businesses to come into the community, and locate along the river a discharge or sewer treatment plant. But with the higher standard we would not be able to do that unless there is an analysis of whether that impact might in the cumulative, along with all the other impacts, add up to more than a 0.2 parts per million dissolved oxygen impact. (Harrison-Bryan) RESPONSE: See previous response in (19a).</p>
<p>(19c) 201A-200(1)(d) Dissolved Oxygen</p>	<p>It is not possible to meet the dissolved oxygen criteria at elevations higher than 1,000 feet except at water temperatures that are substantially cooler than the proposed temperature standards. (Seattle City) RESPONSE: See previous response. Further, the perceived problem would have</p>

<p>Application of D.O. with temperature criteria</p>	<p><i>been mitigated by the fact that the proposed oxygen criteria were a 90-day average but the proposed temperature criteria only applied to the warmest 7-day period of the summer. Temperatures during most of the 90-day period, particularly, in high altitude waters, would be much less than the allowable maximum. While the numeric criteria being adopted also cannot be met at high altitude when the water body is at its maximum temperature allowance, the criteria include a narrative statement that allows the natural condition plus a 0.2 mg/l depression in oxygen to replace the numeric base-criteria. Thus the dissolved oxygen criteria can be read to maintain 9.5 mg/l where naturally attainable, and to remain within 0.2 mg/l of the naturally attainable oxygen level where it is not.</i></p> <p>The proposed 90-DADMin of 9.5 mg/L is going to be difficult to meet during the summer months even when the proposed temperature criterion of 16 °C is being met. At 16 °C, the 100% saturation level is only 9.9 mg/L at 760 mm Hg and 9.5 mg/L at 735 mm Hg. (JCCD) RESPONSE: <i>See previous response in (19a).</i></p> <p>At altitudes above 1000 feet above mean sea level, meeting 9.5 mg/L D.O criteria at 16 °C requires supersaturation. It may be that the DO criteria set de facto temperature criteria that call for lower temperatures at higher elevations. Ecology should account for differences in DO saturation as a function of elevation in the regulations or adjust the criteria values for temperature and/or DO so they apply over the range of elevations likely to be encountered. (Spokane County) RESPONSE: <i>See previous response in (19a). Additionally, you are correct in that if the dissolved oxygen criteria cannot be attained, during the TMDL process Ecology would need to look not only for sources of biological oxygen demand that can be controlled but also sources of temperature warming by human actions. This concern, however, is more appropriate to the existing criteria than the proposed criteria due to the proposed criteria using a long-term average that would have also been based on the long-term average of temperature.</i></p> <p>There is no reason why if a stream had a natural background temperature of 10°C it should be permitted to have a DO level of 6 instead of 11.5 mg/l. (CRITFC) RESPONSE: <i>See previous response in (19a).</i></p> <p>The city of Spokane is also concerned about the physical relationships between dissolved oxygen, temperature and altitude. Is it physically possible to have a dissolved oxygen level of 9.5 mg/L when the water temperature is 20 °C and the altitude is 2000 feet above sea level? The City also recommends the addition of language in the dissolved oxygen standard allowing for substitution of concentration criteria with percent saturation criteria when conditions of altitude or temperature (not exceeding applicable temperature criteria) preclude achievement of the concentration criteria. (Spokane City) RESPONSE: <i>See previous response in (19a).</i></p> <p>I feel that you'd have to be virtually getting a hundred percent saturation in order to meet the criteria which is unlikely. (Gately) RESPONSE: <i>See previous response in (19a).</i></p> <p>The solubility of oxygen at 20 °C is about 9.1 mg/l which is less than the 90-DADmin of 9.5. The oxygen criteria should be consistent with the temperature criteria in any given river reach. (USACE) RESPONSE: <i>See previous response in (19a).</i></p>
<p>(19d) 201A-200(1)(d) Dissolved Oxygen</p> <ul style="list-style-type: none"> Single criterion to protect spawning 	<p>We recommend that Ecology include an explicit spawning/egg incubation/fry emergence DO criterion in the WQS and apply this criterion particularly to those streams where summer spawning occurs. (EPA) (NMFS) RESPONSE: <i>See previous response in (19a).</i></p> <p>We believe a 11.0 mg/l DO for the 90 DADMin coupled with a 8.0 mg/l 1DMin will protect salmonid spawning beneficial uses. (NMFS) RESPONSE: <i>See previous response in (19a).</i></p>

<p>and rearing</p>	<p>Most potential violations of oxygen standards could likely occur near September 15, when the oxygen standard increases to adjust to fish spawning. (Farm Bureau) RESPONSE: See previous response in (19a).</p> <p>9.5 mg/L may be appropriate for char, but seems to be too stringent for other salmonids. (JCCD) RESPONSE: See previous response in (19a).</p> <p>We believe the proposed dissolved oxygen revision adequately protect existing and potential uses and because there are more categories of standards, provide for more specific application of criteria and uses that actually exist within a water body. (Spokane City) RESPONSE: See previous response in (19a).</p>
<p>(19e) 173-201A-200(1)(d)</p> <p>Dissolved Oxygen</p> <ul style="list-style-type: none"> Concerns with 90 day Averaging period 	<p>We are concerned that a 90-day averaging period is too long to protect the sensitive life stages of spawning, incubation, and fry emergence and that a 90-day averaging period can obscure substantial periods when protective criteria would not be met. EPA recommends a shorter averaging period. However, if Ecology intends to use a 90-day metric, Ecology needs to provide additional information on how the longer averaging period will protect the early life stages of salmonids (spawning through fry emergence), and how measurement of this metric will be accomplished to assure protection of these earliest life stages. (EPA) RESPONSE: See previous response in (19a).</p> <p>The three month average criteria for oxygen is not protective and we suggest going back to the December 2001 draft criteria. (American Rivers) RESPONSE: See previous response in (19a).</p> <p>It would be possible to produce a 90 DAD minimum DO that meets the criteria that would not meet the temperature criteria for one or more 7 day periods. This problem is most likely to occur when the saturation DO at the criteria temperature is significantly higher than the criteria DO. Ecology should use comparable averaging periods for Temperature and DO. (Spokane County) RESPONSE: See previous response in (19a).</p> <p>The 90-Day Average of the Daily Minimum (DADM) is too long to accurately measure dissolved oxygen levels in waterways. We are concerned that a 90-day time frame allows large fluctuations in dissolved oxygen levels detrimental to aquatic species that would then be averaged to meet the criteria. (WPIRG) RESPONSE: See previous response in (19a).</p> <p>At a public meeting a couple of weeks ago in Seattle, Ecology said that the dissolved oxygen 90-days criteria was based on the need to look at long-term averages in terms of dissolved oxygen and that the technology just wasn't there to measure DO consistently. Well, that's not true. We've spent a lot of time with your agency and USGS in continuously monitoring the lower Puyallup, very successfully. (Tulalip Tribe) RESPONSE: See previous response in (19a). Further, we recognize that hydro labs can be used to conduct continuous monitoring for oxygen, but these systems require cleaning or replacement on about a weekly basis and are relatively large and very expensive. Thus they are not suitable for long-term remote deployment; although, they remain useful for short-term intensive studies where staff remain available to watch over and maintain the systems. We also recently had favorable results field testing a new sampling probe that is relatively small and can take reliable long-term continuous temperature and dissolved oxygen readings. At about \$4,000 per unit, however, this unit is still too expensive for deployment across the state and would also primarily be practical for staff supported intensive studies.</p> <p>Does the change to a 90-DADMin criterion imply continuously monitored must be used?</p>

	<p>What about grab samples? (USACE) RESPONSE: See previous response in (19a).</p> <p>The 90-day average is unacceptable and should be replaced with a 30-day metric which is more justifiable. (NSBK) RESPONSE: See previous response in (19a).</p> <p>Average DO over 90 days will not necessarily be protective or prevent month-long exposure to DO just above 5-6 mg/l. (CRITFC) RESPONSE: See previous response in (19a).</p>
<p>(19f) 201A-200(1)(d)</p> <p>Dissolved Oxygen</p> <ul style="list-style-type: none"> • Single daily minimum 	<p>Not knowing how the two metrics are intended to be implemented, and absent another specified daily minimum criterion in the WQS, it appears feasible that at times the operative criterion could be the daily minimum of 7.0 mg/l for salmonid spawning, egg incubation, and fry emergence (particularly for those stocks that commence spawning in mid-to-late summer.) If this is used as a stand-alone criterion, it appears to be a significant decrease in the dissolved oxygen criterion from the currently applicable criteria in Class AA and Class A fresh waters (9.5 mg/l and 8.0 mg/l, respectively, as a minimum). (EPA) RESPONSE: See previous response in (19a).</p> <p>We suggest a minimum of 8.0 mg/l DO for protection of rearing beneficial uses as a single daily maximum. We do not have time to evaluate the 90 DADMin of 8.5 for rearing only, but if retained in the rule we will evaluate during section 7 consultation under the ESA. (NMFS) RESPONSE: See previous response in (19a).</p> <p>Is the “1-day minimum” criteria intended to apply to the average of all the dissolved oxygen values that might be taken in a water body segment during a single day, or to the single instantaneous low value? We assume Ecology intends the former. (Weyerhaeuser) RESPONSE: See previous response in (19a).</p>
<p>(19g) 201A-200(1)(d)</p> <p>Dissolved Oxygen</p> <ul style="list-style-type: none"> • Protection of intergravel DO levels 	<p>In addition, we urge the department to include an intergravel dissolved oxygen. (NEA) RESPONSE: See previous response in (19a). Ecology considered including intergravel oxygen criteria in this rulemaking, but determined the high variability in reach-scale readings and the high staff and laboratory costs did not support having this form of criteria. We believe that having healthy water column criteria that take into account typical depression rates is more practical and protective. We recognize, however, that our current standards could be strengthened by some form of clean sediment criteria or guidelines. Intergravel oxygen as a numeric threshold criteria just did not seem appropriate at this point in time.</p> <p>Waters with beneficial uses for salmonid spawning and rearing at a minimum need intergravel DO concentrations of 8mg/l to protect salmon. (NMFS) RESPONSE: See previous response.</p> <p>If criteria are based on assumptions about intergravel DO levels we suggest Ecology develop some provision in the standards that ensures intergravel levels are 8 to 8.5 mg/l. (NMFS) RESPONSE: See previous response.</p> <p>Ecology applied an oxygen depression factor for the gravel that is greater than the observed levels, while for gravel temperature, which is lower than the water column temperature, they applied no adjustment. (Farm Bureau) RESPONSE: See previous response.</p> <p>The D.O. standard is elevated to levels 1.5 mg/l higher than needed for spawning fish in order to assure an inter-gravel standard of 8.0 that is not fully justified by scientific evidence. (Farm Bureau) RESPONSE: See previous response.</p>

<p>(19h) 201A-200(1)(d)</p> <p>Dissolved Oxygen</p> <ul style="list-style-type: none"> Compliance with 90DADMin and single daily minimum 	<p>Further clarification is needed in the relationship between the two metrics that are proposed and what will apply under circumstances where there is a limited amount of data. (EPA) (NMFS) RESPONSE: See previous response in (19a).</p> <p>The 90-day oxygen metric is too difficult to quantify, and relies too much on an otherwise unhealthy single daily minimum value. It also makes 303(d) listings more complicated. We suggest a protective instantaneous minimum. Alternatively, a series of instantaneous minima could be averaged as coliforms are under current standards. (Kalispel Tribe) RESPONSE: See previous response in (19a).</p> <p>How will Ecology determine compliance with the standards if both the 90 DADM and 1 DMin are needed to determine if the standards are met? How will compliance be determined if the 1 DMin is violated but the 90DADM is reached? (NMFS) RESPONSE: See previous response in (19a).</p> <p>Nowhere is it mentioned that daily minimum oxygen levels need to be targeted or even addressed . The 90-day average will be useless. Until a 90-day minimum can be measured, the 1-day minimum needs to be raised to the 90-day level. Guidance is also needed for monitoring to obtain the daily minimum. The 2001 proposal should be adopted except that the 1-day minimum should be raised until the seasonal average can be reliably measured. Also, an averaging period of 30-days is more appropriate than 90 days. If a default IGDO depression is assumed it should be 3 mg/l not 1-1.5 mg/l. (Lummi Tribe) RESPONSE: See previous response in (19a).</p> <p>There is no indication that monitoring will catch those single days violating 7 mg/l. If one day in August is 5 mg/l, the next two months with cool water could average it away, and with the 1 in 10 year average even this violation would not be counted. (CRITFC) RESPONSE: See previous response in (19a).</p> <p>The 90-day period appears to be far too long, allowing great swings that will simply be averaged. The combination of the metric with the lowered criteria does not provide sufficient protection. (NEA) RESPONSE: See previous response in (19a).</p> <p>I would submit, that the proposed dissolved oxygen standard of 9.5^o mg/l (daily minimum) in salmonid spawning and rearing waters will not be attainable on a year round basis, even if there were no human impacts. It would seem that the 9.5 mg/l is overly conservative when compared to the EPA “Goldbook” criteria of 5.0 mg/l as a one-day minimum 6.5 mg/l as a seven-day mean. (Kimball) RESPONSE: See previous response in (19a).</p>
201A-200(1)(d)(110 Dissolved Oxygen Notes	
<p>(20a) 173-201A-200(1)(d)(ii)</p> <p>Dissolved Oxygen Notes</p> <ul style="list-style-type: none"> Natural conditions provision 	<p>This language treats human structural changes that cannot be effectively remedied like a natural condition. Because a UAA determines an attainable condition and, as necessary, new uses and criteria, we do not see the biological basis for further degrading the condition with an allowance of 0.2 mg/l. Ecology needs to provide further information on how it envisions this provision operating. (EPA) RESPONSE: Clarifying the ability to allow 0.2 degradation beyond irreversible human structural changes would greatly assist in setting the target condition during a UAA. While the UAA broadly addresses attainability, the issue of structural changes not being reversible is a separate issue than what is attainable for point sources discharging to that same water body. We believe that the economic mitigation for the numerous individual sources should not be assumed to be eliminated by perhaps a</p>

	<p><i>single large human project that otherwise uses up the available capacity.</i></p> <p>Neither the temperature nor turbidity criteria sections reference 40 CFR 131.10. We request this reference be removed from the dissolved oxygen section. (Kalispel Tribe)</p> <p>RESPONSE: <i>See previous response. Further, the 0.2 mg/l allowance is a cumulative allowance for the water body. Since it would be used when the water body has been determined to naturally exceed the base-criteria it would be used at times primarily when Ecology has conducted intensive studies and modeling so the cumulative consideration would typically be a part of the calculation for the water body. The 0.2 mg/l allowance was checked against the biological research, and Ecology believes it can be viewed as de minimus if used as directed in the regulation. While Ecology dropped its proposed revisions to the dissolved oxygen base-criteria, it has retained the allowance to allow the 0.2 mg/l depression from human activities when natural conditions cannot meet the oxygen criteria.</i></p> <p>How can Ecology justify the 0.2 mg/l reduction from natural conditions for listed species, if they are present in these waters? How will cumulative impacts be accounted for and tracked? (NMFS)</p> <p>RESPONSE: <i>We have taken the portion of the language dealing with irreversible human structural modifications and placed it in Section 260 where it is better suited.</i></p> <p>How is the baseline determined for natural water bodies that do not meet the standards from which the 0.2 mg/l reduction is allowed? How will achievable DO targets be determined? (NMFS)</p> <p>RESPONSE: <i>It is not always necessary to establish a natural baseline to implement the allowance. We can estimate reasonable potential in some cases using just ambient background quality. However, in most situations, DO problems will need to be reviewed using relatively sophisticated models that examine the impacts of the multiple sources and changing water body characteristics to an entire water body. The use of modeling allows Ecology to back out the effects of the human contributions to come to an estimate on natural conditions. Targets for DO improvement come in different forms, but typically they would be applied through permit limits alone or through a TMDL.</i></p> <p>How does Ecology determine natural levels for Lakes DO in order to compare the effects of any proposed changes? (NMFS)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The 0.2 mg/L may be difficult to accurately measure or distinguish in a river. (USACE)</p> <p>RESPONSE: <i>Ecology uses modeling to typically make the distinction. See previous response.</i></p> <p>PacifiCorp strongly supports Ecology’s 0.3° C and 0.2 mg/l allowances. (PacifiCorp)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p>
<p>(20b) 201A-200 (1)(d)(iii)</p> <p>Dissolved Oxygen Notes</p> <ul style="list-style-type: none"> Exemption clause 	<p>Does this provision mean that standards can be violated once before the water body is listed as 303(d)? How are the ten-year averages determined? (NMFS)</p> <p>RESPONSE: <i>Ecology has not yet established a policy for applying the one in ten year reoccurrence interval to the 303(d) lists. It is standard practice in permitting to build reoccurrence intervals into the effluent limits, however, so in that context Ecology sets up the control program so that the interval would not be violated by permitted actions.</i></p> <p>The “once every ten years” clause is insufficient to make allowances for low gradient and above average natural decomposition. (JCCD)</p> <p>RESPONSE: <i>Then such waters would need to use the natural conditions clause, have site-specific criteria established, variances, or further improvement to be brought into compliance with the standards.</i></p>
<p>(20c) 201A-200 (1)(d)(vi)</p>	<p>Provision (d)(vi) acknowledges the importance of how data is averaged for the 90-day metric so that the results aren’t “unreasonably biased”. How will this be interpreted?</p>

<p>Dissolved Oxygen Notes</p> <ul style="list-style-type: none"> • DO-measurement of averaging 	<p>How will the 90-day periods be framed to insure that critical life stages are protected? (EPA) (NMFS) RESPONSE: <i>Ecology will not be making a change to the dissolved oxygen criteria.</i></p> <p>Ecology needs to develop additional guidance to permittees, staff, and others working with gathering and analyzing DO data to address issues including how many samples are needed to address compliance with the criteria, when (within the day) to sample and where to sample for the daily minimum. (EPA) RESPONSE: <i>We agree that guidance would be valuable to assist people in collecting the best data and will likely proceed to do so after completion of this rulemaking.</i></p> <p>We are concerned that DO measured with 3-4 samples collected over a 90 day period will not accurately capture minimum levels of DO in the system to determine if water quality is protective for fish or is even in compliance with the standards. (NMFS) RESPONSE: <i>Ecology will not be making a change to the dissolved oxygen criteria.</i></p> <p>Provide more detail on how DO measurements are collected by Ecology’s ambient water quality monitoring program. (NMFS) RESPONSE: <i>There are combinations of continuous monitoring stations that are sampled once per month, floating stations that are monitored at more infrequent timescales, and monitoring conducted for special projects and TMDLs development that intensively monitor water conditions and commonly employ hydro labs capable of continuous monitoring of oxygen. Most of our data is from monthly monitoring stations. Since several sites need to be visited in a single day, the measurements are typically taken at different times starting in the morning through early afternoon.</i></p>
---	---

201A-200(1)(e) Turbidity

<p>(21) 201A-200(1)(e)</p> <p>Turbidity</p> <ul style="list-style-type: none"> • Clarification 	<p>Table 200(1)(e) - It is unclear why the department allows a greater increase in turbidity from a source when the background turbidity is higher. This has the effect of not limiting the number of uses that cause turbidity, even if the amounts of turbidity are excessive and threaten the well-being of species. (NEA) RESPONSE: <i>The basis for the existing turbidity criteria was not retained in departmental records. We are not proposing any changes to the turbidity criteria. As a note, the special allowance for inwater construction was just moved from the short-term modification section to the turbidity criteria section to make it more obvious as an application of the turbidity criteria.</i></p> <p>200(1)(e)(iv). The word “feet” should be added at the end of this sentence. (NEA) RESPONSE: <i>We have made the correction.</i></p> <p>(e) - The phrase “necessary in-water construction” is ambiguous. Is all in-water construction necessary? Who determines which are necessary, using what criteria? It also begs the question as to what “temporary” is. It is not clear that sufficient protection exists. For example, restricting the timing of in-water construction might be necessary. This rule language should be rewritten to include only those activities that are essential to public welfare, e.g., fixing broken bridges. Finally, the definition of BMPs states that a BMP is a practice that has been approved by the department. What approval process exists to approve the BMPs cited to in this section?. (NEA)</p> <p>Since we did not propose changes to the existing turbidity criteria as part of this rule revision, we cannot entertain making any such changes at this point in time. Addressing a completely new topic after the hearings would deny other stakeholders an opportunity to weigh in on the issue.</p> <p>The proposal to allow for mixing zone for turbidity in certain circumstances would not ensure protection of uses and should therefore be removed. (CRK) RESPONSE: <i>See previous response.</i></p>
---	--

	<p>We strongly dispute the proposed standards for turbidity since the proposed standards will not ensure protection of critical life-cycle functions for salmonids and more sensitive species that salmonids depend on. (CRK) RESPONSE: See previous response.</p> <p>Temporary mixing zones below permitted activities seem unreasonable. Clay size particles in suspension will travel more than 100 feet downstream in a stream less than 10 cfs regardless of BMPs. This needs more consideration and probably a written waiver by the department. (CNF) RESPONSE: See previous response.</p> <p>It is unclear why the department believes that non-anadromous interior Redband trout require the lesser protection afforded salmon, steelhead, and trout rearing rather than that provided for their spawning. (NEA) RESPONSE: This was an error in formatting that has been corrected.</p>
201A-200(1)(f) Total Dissolved Gas	
<p>(22a) 201A-200(1)(f) Total Dissolved Gas</p> <ul style="list-style-type: none"> • Application 	<p>Natural conditions can result in TDG saturation exceeding 110% without spillway operations at a dam. Spilling water at a dam or trading spill volumes between dams can result in a net decrease in the TDG loading of a waterway. The regulations should be able to recognize these acts as enhancements to water quality and not as violations. (USACE) RESPONSE: Natural conditions exceeding 110% TDG in a forebay would not affect tailrace measurement of pure spill water if the monitor is located in the correct place. For dams that create gas as part of air entrainment during turbine startup or shut down, forebay conditions may add to tailrace measurements. In this case, an analysis of how much a dam is contributing will be needed in order to understand of standards are being exceeded by the dam. During this analysis, forebay temperatures or plant growth conditions that are different because of the presence of still water created by the dam will not be understood to be natural conditions. Ecology supports the concept of trading spill for power production between dams if all reasonable operational and structural improvements are also being pursued.</p> <p>Tailwater data from at least one eastern Washington mainstem dam indicates that TDG levels can approach, and even exceed, 110% in the absence of spill. The argument is not that we should ignore the TDG issue, rather we need to better understand all sources of TDG and incorporate that knowledge into the standards. (USACE) RESPONSE: See above.</p> <p>The designation of point of compliance for the application of the TDG criteria needs to be better defined. The designation of any point of measure is too vague given the heterogeneities in TDG saturation below the spillway of a dam. Currently, monitoring stations are inconsistently sited throughout the basin resulting in an inequitable spill management policy. Is it the intent to select compliance locations in a well mixed river? What about compliance locations where a downstream dam does not exist or an extended river reach is present? (USACE) RESPONSE: The ultimate goal for TDG compliance points in the tailraces is to measure pure spill water, not mixed waters.</p> <p>The forebay standard not to exceed 115% implicitly assumes that the elevated TDG measurements can be attributed to spill at the previous upstream facility. But the quantity of gas in solution is also dependent on natural factors. Since these “natural” factors are beyond the control of the dam operators, a distinction and method of differentiating the causes of the elevated total gas concentrations should be made. (USACE) RESPONSE: Comment noted.</p>
<p>(22b) 201A-200(1)(f) Total Dissolved Gas</p>	<p>We believe that the criterion of 110 percent of saturation is unnecessarily stringent. PacifiCorp suggests that the TDG criterion for waters be set at 120 percent of saturation using the averaging procedure proposed in WAC 173-201A-200(1)(f)(ii) and then averaging the daily average over a 7-day moving period. (PacifiCorp)</p>

<ul style="list-style-type: none"> • Too stringent 	<p>RESPONSE: <i>This suggested less stringent TDG criteria would potentially harm fish and other aquatic organisms. The 120% special condition in the Columbia and Snake Rivers was a compromise because less anadromous fish would be harmed by TDG in spill water at that level than would be killed by going through the turbines. More study needs to occur before determining that a higher TDG standard could be fully protective on a statewide basis.</i></p> <p>We encourage Ecology to support ongoing review of best available information regarding the TDG standard. The current standard may be too conservative. (Avista)</p> <p>RESPONSE: <i>Comment noted.</i></p>
<p>(22c) 201A-200(1)(f)(i)</p> <p>Total Dissolved Gas</p> <ul style="list-style-type: none"> • Exemption for 7Q10 flow 	<p>We recommend dropping the seven-day criteria and rephrase the remaining sentence: i.e. one-in-five-year event, one-in-ten-event, etc. (Lewis County PUD)</p> <p>RESPONSE: <i>The 7Q10 flow exemption is in the existing regulation and has been found to be workable.</i></p> <p>Most facilities also have a 7Q10 for the spillway. Since elevated TDG results primarily from spill and not powerhouse flow, employing this alternative 7Q10 should be considered. (USACE)</p> <p>RESPONSE: <i>The total river flow is considered in the 7Q-10. The 7Q-10 design flow for the spillway does not need to be placed in the standards. It is a dam by dam calculation toward being able to spill water up to the 7Q-10 total river flow and not exceed standards.</i></p> <p>Not applying the TDG standard when river discharge exceeds the 7Q10 is reasonable and prudent. Is the appropriate 7Q10 the average daily flow of the river or is it the hourly quantity that passes over and through a dam? (USACE)</p> <p>RESPONSE: <i>The 7Q10 flood flow is a statistical value derived from a long-term record of daily average flows. The proposed TDG criterion does not apply "when the stream flow exceeds the seven-day, ten-year frequency flood." For a dam, this would apply to the instantaneous flow of the river as it arrives at the dam.</i></p>
<p>(22d) 201A-200(1)(f)(ii)</p> <p>Total Dissolved Gas</p> <ul style="list-style-type: none"> • Average measuring 	<p>Table 200(1)(f) lists the criterion as "Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection." The narrative accompanying that table at (1)(f)(ii) states that "TDG is measured as the average of the twelve highest consecutive hourly readings in any one day, relative to atmospheric pressure." Are these consistent with each other? Is compliance with the criterion on a per sample basis or only based on an average of the twelve highest hourly readings? What if there aren't 12 readings? If the metric is now an average of the twelve highest hourly readings, what is the likely range of data points, based on existing data? How high might an individual reading be and still have the average comply with the criterion for a twelve-hour average? (EPA)</p> <p>RESPONSE: <i>Ecology has reconsidered this proposed revision and revised the narrative section accordingly.</i></p> <p>PacifiCorp is pleased that the proposed TDG criteria are based on an average, rather than instantaneous, value. (PacifiCorp)</p> <p>RESPONSE: <i>See previous comment. The special condition of the Columbia and Snake Rivers does contain an averaging provision.</i></p> <p>The specification of the average of the highest 12 consecutive observations in a day differs from that used by the state of Oregon. (USACE)</p> <p>RESPONSE: <i>See previous responses.</i></p>
<p>(22e) 201A-200(1)(f)(iii)</p> <p>Total Dissolved Gas</p>	<p>If the monitoring in the gas abatement plan (1)(f)(iii) indicates harm to the fish population that exceeds that caused by passage through the turbines, what actions can Ecology take? Ecology needs to provide additional information/clarification regarding the application of this criterion. (EPA)</p> <p>RESPONSE: <i>Agreements are in place to reduce spill if biological monitoring indicated TDG trauma above the acceptable levels. If these are not heeded, Ecology will consult with fish and operating agencies to reduce spill when possible and take appropriate</i></p>

<ul style="list-style-type: none"> • TDG criteria adjusted to aid fish passage 	<p><i>administrative actions if voluntary spill is still killing fish. That said, historically, gas bubble trauma signs in fish have always been below the threshold, including during higher involuntary spills.</i></p> <p>The biological basis for allowing higher TDG numbers than EPA’s criteria recommendations is not discussed. Ecology needs to include a discussion of the basis for the alternative TDG numbers in its submission to assist EPA in both the CWA review and in conducting the ESA consultation. (EPA)</p> <p><i>RESPONSE: The higher gas standard for the Columbia and Snake rivers has been used to successfully improve passage of juvenile salmon over the dams thus avoiding the direct and indirect dangers from going through the turbines. The biological monitoring performed on migrating juveniles at collection facilities at six dams inspected eye, fin, and lateral line for signs of gas bubble trauma, based on a ranking process looking at the percentage of area of the fish covered with bubbles. Seven years of data have been collected and very low incidence of trauma has been observed. This special condition for total dissolved gas will only apply to the Snake and Columbia rivers for fish spill. Consideration of applying this condition statewide would require further information to be collected in areas outside of the Columbia and Snake rivers. Ecology recognizes that long-term effects of dissolved gas on resident species is not fully known and would require more studies on depth and duration of these resident species in different habitats to better analyze potential impacts to these creatures. Until a study of this nature is completed, Ecology will not move forward with proposed changes to the statewide standard.</i></p> <p>The tribe supports permanent allowances for higher TGD; however, the standard for spill at Columbia and Snake River dams should be 125% total gas pressure at any point in the river. Salmon are better protected by spill than by passing through powerhouse screen systems and turbines. (Umatilla Tribe)</p> <p><i>RESPONSE: Setting a higher TDG limit to allow more fish to pass over dams must be balanced against potential harm to resident aquatic species. Federal fish agencies are supportive of allowing 120% saturation, but going higher would add risk to resident species and would require more study in order to ensure those species would be adequately protected. It should be noted that the special condition allows averaging of 120%, with no single measurement higher than 125%..</i></p> <p>Does Ecology feel that sufficient public involvement was included in developing total dissolved gas exemptions for the Columbia and Snake River dams. (Kalispel Tribe)?</p> <p><i>RESPONSE: The special condition for TDG in the Snake and Columbia River has been in place since 1997 and has been shown to be effective in passing fish over the dams without appearing to cause undue hardship to resident species. This provision went through a full public review before being adopted, as has the current revisions to the TDG standard. We believe the public has had adequate opportunity to be involved.</i></p> <p>Ecology’s proposal is too conservative and does not adequately protect the uses. It will reduce voluntary spill that better protects anadromous fish. Risk assessments (NMFS 2000 Biological Opinion and Fishery Agencies and Tribes 1995 Risk Assessment) and in-river studies have clearly shown that gas levels up to 125% do not pose a threat to salmon that research suggests achieve depth compensation in the river (further references in support provided) CRITFC believes that spill would result in greater juvenile survival and overall stock productivity because indirect and delayed mortality is less for spill than for turbine or screen system passage. (CRITFC)</p> <p><i>RESPONSE: We believe studies have shown that 125% TDG can be unhealthy and even lethal to resident fish--salmon, resident fish, aquatic organisms, and other anadromous fish. Until further studies are done, Ecology is not proposing to raise the allowance for TDG in the special condition for the Snake and Columbia Rivers.</i></p> <p>(f)(iii) - It is not clear what a department approved gas abatement plan is. Likewise, it is not clear what a “fisheries management and physical and biological monitoring plans” are. These should be defined and a process for approval be explained. (NEA)</p> <p><i>RESPONSE: A gas abatement plan is a result of investigations into operational</i></p>
---	--

	<p><i>adjustments and structural changes to each Columbia and Snake River dam to reduce dissolved gas in the tailrace. Since structural changes in particular require large investments and adjustments are quite difficult to make after new structures are built, extensive engineering and modeling studies have to be undertaken. Only on-site monitoring after the structures are built provides the actual realized gas abatement figures. If further gas reduction is necessary, the abatement plan becomes more of an adaptive management program with the next step to evaluate further structural (and operational) solutions. Physical monitoring plans may consist of both quality controlled long-term fixed monitoring and seasonal transect monitoring to better understand gas behavior. Biological monitoring consists of dissolved gas trauma sampling of migrating juvenile salmonids at several selected dams on the Columbia River. Exceedance of a trigger level of trauma will result in reducing fish spill at upstream dams. Because of the flexibility needed in developing and approving these plans on a site specific basis, they are not further defined in the regulation.</i></p>
<p>(22f) 201A-200(1)(f)(iv) Total Dissolved Gas</p> <ul style="list-style-type: none"> Special exemption for Snake and Columbia River 	<p>The current WQS include a specific compliance point below Bonneville dam (Camas-Washougal), in the absence of a forebay downstream. No such indication of where compliance will be measured below Bonneville is included in the proposed revisions. Where will compliance be measured below Bonneville? (EPA)</p> <p><i>RESPONSE: The Camas-Washougal site is not in the proposed standards because it has consistently given variable readings and there are concerns about the representativeness for the mixed river. Forebay monitors measure mixed conditions for comparison with downstream conditions below the dam. There are no other man-made sources of TDG below Bonneville.</i></p> <p>The compliance location for total dissolved gas should be modified and a dilution area for dams should be acknowledged. The City proposes additional language stating that dams are not responsible for total dissolved gas that reaches the forebay of a dam. (Seattle City)</p> <p><i>RESPONSE: Forebay condition may contribute to TDG in several ways: 1) Lack of turbulence in a reservoir means that gas does not get a chance to effervesce as in a shallower faster moving natural river. Plant growth in a changed reservoir habitat can contribute to higher TDG. 2) Higher temperatures found in slower moving reservoirs can contribute to TDG. That said, if gas sources are coming from man-made sources outside the project influence, Ecology does not hold the project responsible. This is a common sense approach that Ecology uses for all other water quality parameters, not just gas.</i></p>
<p>201A-200(1)(g) pH</p>	
<p>(23) 201A-200(1)(g) pH</p> <ul style="list-style-type: none"> Clarification 	<p>PacifiCorp suggests adding: “For purposes of evaluating compliance with pH criteria, pH measurements in thermally stratified lakes or reservoirs shall be taken from depths and locations that are biologically relevant to the species and life stages for which the applicable criterion was established.” (PacifiCorp)</p> <p><i>RESPONSE: Ecology is not aware of a basis for changing the existing pH criteria, and cannot make such a change at this point in the rule process. Since the documentation on the basis for the states pH criteria is no longer available, we could not address the question of what species were considered and so could not really use your suggested language for this parameter. Ecology recognizes, however, that more guidance on applying the standards to lakes is warranted.</i></p> <p>Natural rainwater has a pH of 5.5. The pH of such streams can easily drop from 6.5 to 5.8 during a storm. Is someone in violation if they are discharging stormwater with a pH of 5.8 at that time? (WDOT)</p> <p><i>RESPONSE: Exceedances of the criteria due to natural causes would not be an exceedance of the water quality standard..</i></p>

201A-200(2) Water Contact Uses

(24) 201A-200(2)

Water contact uses

- Clarification

Retain recreation as protected uses of a water body. (SCKC) (Mountaineers) (CELP) (CRC) (Clifford) (Cole) (Hensley) (Maxwell) (Sierra Club) (Mazetti) (Castleberg) (Bowers) (Osborn) (Rowe) (Bottles) (American Whitewater)

RESPONSE: *We have made changes to the standards that retain the specific uses of boating, fish harvesting, fish migration, and aesthetics. Boating, harvesting, and aesthetics are now included as miscellaneous uses under 173-201A-200(4). Migration is included in the aquatic life use category for salmon and spawning under 173-201A-200(1)(a).*

The recreational classification has been used to protect many rivers, especially in re-licensing proceedings for dams. “Water contact” category is simply not an acceptable. We therefore request that you re-insert recreation as an explicitly protected beneficial use under state water quality law, and that you do so in a way that retains full protection of instream flows. (SCKC) (Mountaineers) (Osborn)

RESPONSE: *See previous response.*

201A-200(2)(b) Bacteria

(25a) 201A-200(2)(b)

Bacteria

- General

What will be the status of our current fecal coliform data? Will you be comparing it to the new e coli data or will the new data be considered separately? (CNF)

RESPONSE: *After careful deliberation and consideration of the comments that were received, Ecology has decided to continue to use the existing fecal coliform criteria in fresh waters throughout the state. All fresh waters will continue to be protected at their current levels. In marine waters, fecal coliform will continue to be applied at the current criteria levels in all waters that currently have shellfish harvesting listed as a characteristic use in the state standards. The only waters where a new criteria would be applied will be the few marine waters that are currently classified as Class B and Class C. In these waters, Ecology will apply an enterococci criteria of 70/100 ml to protect the secondary contact uses characteristic of these water bodies. Ecology will retain the implementation guidance that was proposed for the bacteria criteria with minor modifications to make them clearer.*

The continuation of the use of fecal coliform was determined appropriate for numerous reasons prominent among them being: 1) fecal coliform has a very strong correlation with E.Coli (90-95%) and therefore is believed to be at least as effective an indicator as E.Coli in Washington, 2) fecal coliform in shellfish marine waters will continue to provide stringent protection for shellfish as well as primary contact 3) many comments were received on fecal coliform monitoring and how past monitoring would now be compared to the new indicators, and 4) because of close correlation with E. Coli, staying with fecal coliform will avoid the higher costs associated with the monitoring and analysis for E. coli and enterococci without their being superior indicators for our state.

Why has *E. coli* been chosen as the new indicator organism? (USACE)

RESPONSE: *See previous comment.*

We are neutral towards these new bacteria standards. We hope that Ecology’s stormwater standards and city and county education efforts pay off in the long run for lower bacterial counts in fresh and marine waters. (PAS)

RESPONSE: *See previous comment.*

In Kittitas we have wildlife that probably outnumbers the local population. We’re finding lots of bacteria in our waters that are not from human sources. (KCWP)

RESPONSE: *We recognize that in some areas wildlife can be a significant localized source.*

If you want a productive stream that has lots of nutrients and organic matter and repairing

	<p>habitat, it's going to have some fecal. Primary contact may not be advisable. Fish and humans may be different water quality characteristics. (KCWP) RESPONSE: We have not found that healthy streams have high concentrations of bacteria.</p> <p>(b)(ii) - This statement should be clear as to whether the averaging under discussion is for discharges or for receiving streams or for both. (NEA) RESPONSE: It is for ambient waters. Permits contain separate conditions designed to meet the ambient water criteria or technology-based standards, whichever is appropriate to the circumstances.</p> <p>(b)(ii) - This is redundant, in the wrong location, and should be removed. (NEA) RESPONSE: We have reorganized the notes so that they apply more to the specific uses and water body type then occurred in the proposed version. This reduces the redundancy and hopefully future confusion.</p>
<p>(25b) 201A-200(2)(b)</p> <p>Bacteria</p> <ul style="list-style-type: none"> • Protection for wading and people around water 	<p>Please eliminate text that permits a lower quality of water for wading streams. Young children play and swim in shallow waters (PTCC) (Marquardt)(Holt)(Newman-L) (Brimm) (Turner) (Royer) (Lawton) (Herman)(Johnson-LaTour)(Buttmer)(Lodzinski)(Vandergriff)(Eller)(Ostlund) (Bottles) (Parker) RESPONSE: The bacteria criteria for secondary contact apply to incidental contact such as wading, fishing, or boating. It is important to note that the criteria for secondary contact are set at only twice the concentration used to protect primary contact uses. Based on the risk rates calculated by the EPA for bacterial indicators, this approach would only allow a very minor increase in risks (roughly 3-4 more illnesses per 1,000 users) if the waters were unexpectedly used for primary contact. This is far below what EPA is currently allowing in guidance recently proposed for setting bacterial criteria for secondary contact use.</p> <p>I would recommend that either in the bacteria standard or in the agricultural water standard that you give some indication that a secondary bacteria standard is recommended for such water. I am concerned about people who are using siphon tubes or working with water cleaning sprinkler or spray hoses getting sprayed with water. While that's probably incidental, it still is significant. I think there should be some protection for the farmers in that case or the people that are working with water. (McKenzie) RESPONSE: While we have decided not to add specific criteria for agricultural water supplies (see comments in section 27), bacteria criteria will continue to be retained for all waters</p>
<p>(25c) 201A-200(2)(b)</p> <p>Bacteria</p> <ul style="list-style-type: none"> • Support change in indicators 	<p>We note that Ecology is adopting E. coli criteria for freshwater at a level more stringent than EPA's national criteria recommendations. Ecology's E. coli criterion is based on a close correlation found between fecal coliform and E. coli in fresh water in Washington. This is an appropriate and well-supported risk management decision on the State's part, and therefore supportable under the CWA. (EPA) RESPONSE: After careful deliberation and consideration of the comments that were received, Ecology has decided to continue to use the existing fecal coliform criteria in fresh waters throughout the state. All fresh waters will continue to be protected at their current levels. In marine waters, fecal coliform will continue to be applied at the current criteria levels in all waters that currently have shellfish harvesting listed as a characteristic use in the state standards. The only waters where a new criteria would be applied will be the few marine waters that are currently classified as Class B and Class C. In these waters, Ecology will apply an enterococci criteria of 70/100 ml to protect the secondary contact uses characteristic of these water bodies. Ecology will retain the implementation guidance that was proposed for the bacteria criteria with minor modifications to make them clearer.</p> <p>The continuation of the use of fecal coliform was determined appropriate for numerous reasons prominent among them being: 1) fecal coliform has a very strong correlation with E.Coli (90-95%) and therefore is believed to be at least as effective an indicator as E.Coli in Washington, 2) fecal coliform in shellfish marine waters will continue to</p>

	<p><i>provide stringent protection for shellfish as well as primary contact 3) many comments were received on fecal coliform monitoring and how past monitoring would now be compared to the new indicators, and 4) because of close correlation with E. Coli, staying with fecal coliform will avoid the higher costs associated with the monitoring and analysis for <u>E. coli</u> and enterococci without their being superior indicators for our state.</i></p> <p>We support the changes proposed to the bacteria criteria. We are hopeful that the use of E. coli will help to lessen or eliminate the problem of over-designation of waters, given that E. coli is more highly specific to fecal sources. (Seattle Port) RESPONSE: See previous comment.</p> <p>The primary contact use criterion should be 126 E.coli organisms/100ml geometric mean value, not 100 organisms/100ml. The agency suggests that the difference between 100 and 126 E. coli organisms/100ml will somehow result in a 40-150 percent increase in actual bacterial levels in state waters. This conclusion is apparently based on a correlation study and many assumptions that have not been adequately verified or field-tested. EPA data demonstrate that the illness risk to swimmers at exposure levels of 126 E. coli organisms and the current fecal coliform standard is equivalent. We suggest that Ecology's support for a 100 E. coli/100ml geometric mean criteria does not achieve the statutory (APA) criteria. (Weyerhaeuser) RESPONSE: See previous comment. We acknowledge that Washington has stricter standards than EPA recommendations for E. Coli, however these numbers are based on risk, and a state has the option to choose more stringent risk levels for its population. Further, it should be noted that EPA found no statistical correlation between the illness rates and the concentration of fecal coliform but chose to use it anyway to estimate illness rates. The draft cost benefit analysis for bacteria found that increasing the risk of illness by higher limits resulted in potential costs to consumers who get ill from swimming and recreating in waters at higher levels. This cost offset costs associated with the regulated community.</p>
<p>(25d) 201A-200(2)(b)</p> <p>Bacteria</p> <ul style="list-style-type: none"> Do not support change in indicators 	<p>Based on our consultants report (attached to the comment letter) we agree that EPA's interest in a new indicator bacteria is not needed and support your assessment that the current fecal coliform standard is adequate. (YRBCC) RESPONSE: See previous response.</p> <p>As part of a monitoring team for Padilla Bay, the switch to E. coli or other bacteria tests will be costly to us and render past data obsolete. If in freshwater the ratio is 1:1 why not stay with FC. And why the proposed change focuses on human health we have seen high fecal levels that correspond to extremely low oxygen levels that have led to fish kills (Henery)? RESPONSE: See previous response.</p> <p>Adopting less protective EPA standards is not warranted just because they will allow it. (Mielke) RESPONSE: See previous response.</p> <p>Weakening bacteria standards will harm local rivers. (KRCG) RESPONSE: See previous response.</p> <p>EPA assumed the stance that the new water contact bacteria criteria would better serve the public health. This did not include an analysis of the impacts to those entities (such as the shellfish industry and regulators) that would be subject to three bacteria criteria (E.Coli, Enterococci, and fecal coliform). We strongly recommend pursuing consistency between the federal standards of EPA and the FDA and adopting a common standard. (CBP) RESPONSE: See previous response.</p> <p>It is unfair to require the city's effluent meet an absolute Class A requirement of 100 colonies when the receiving water stream is so far out of compliance and the effluent (22 colonies) does not even affect the stream. (Sunnyside) RESPONSE: See previous response. It is not clear why you are concerned with a</p>

	<p>100/100 ml limit if you are discharging at 22/100. Ecology cannot postpone water quality standards implementation until all sources agree to reduce their loads together. The other sources are not exempt but many will not be brought into compliance without local support.</p> <p>Where marine waters are classified as ‘good,’ we do not have a bacteria standard. And under the old system, we kind of equate AA with ‘extraordinary’ and A with ‘excellent’ and B with ‘good.’ There was a standard. In our case, we’ve got Shelton Harbor classified as a B that feeds and the water from there circulates on to our shellfish beds and yet there’s no standards for what the bacteria, the maximum bacteria levels in Shelton Harbor are. So you need to address that -- all water, all marine waters with bacteria standard. (Squaxin Tribe)</p> <p>RESPONSE: The narrative standards that direct the need to protect downstream/downgradient uses is being retained in the standards, as is the stronger proposed language on the need to adjust criteria where necessary to protect downgradient shellfish uses.</p>
<p>(25e) 201A-200(2)(b)(iii)</p> <p>Bacteria</p> <ul style="list-style-type: none"> Geometric mean 	<p>More appropriate wording to this section would state: “When determining compliance with the geometric mean criteria, the period of averaging should not exceed 12 months, and should have sample collection dates well distributed throughout the reporting primary or secondary contact period”. (Bellingham City)</p> <p>RESPONSE: This would allow averaging between the rainy season and the dry season, and does not seem appropriate.</p> <p>Rather than saying no more than ten percent may exceed, that you should use the 10th percentile. That is a fit of the distribution of the data and it would be a more even -- a more representative and consistent value to use rather than not to exceed ten percent of the time. The correct equation for percentiles, I believe, comes from a publication called Statistics for Methods in Water Resources and the authors are Helsel, and Hirsch. (McKenzie)</p> <p>RESPONSE: We appreciate your suggestion, but find that the existing use of an arithmetic average is more representative and appropriate for the small data sets that are typically available.</p> <p>The apparent relationship I see in the field is that when there are the occasional excursions represented by that 10 percent limit, it is an indicator of severe degradation of a catena of riparian habitat integrity, bank and channel stability and function, turbidity and nutrient loading. The degradation of that catena strongly detracts from values for fisheries, wildlife, contact use, riparian domestic withdrawals and tribute to lake symptoms. The avoidance and remediation of that degradation are addressed easily by low cost, widely available technologies. (Swartz)</p> <p>RESPONSE: We generally agree with your assessment.</p>
<p>(25f) 201A-200(2)(b)(v)</p> <p>Bacteria</p> <ul style="list-style-type: none"> Site specific criteria 	<p>(b)(v) - The statement that the department will, “at its discretion,” establish site-specific criteria does not illuminate the reader as to what process it will use to do so. We strongly support the department’s setting of criteria for upstream waters that are necessary to ensure that downstream criteria are met, particularly when the results of not doing so are as clear as they are with shellfish harvesting restrictions. (NEA)</p> <p>RESPONSE: We would deal with setting site specific criteria for bacertia similar to how we would do it for other parameters.</p>
<p>(25g) 201A-200(2)(b)(vi)</p> <p>Bacteria</p> <ul style="list-style-type: none"> Alternative bacteria criteria 	<p>We strongly support the concept embodied in the alternative indicator criteria section. We suggest this subsection be re-worded to say: “(vi) Where information suggests that bacteria monitoring results are due primarily to sources other than fecal material from mammals, alternative indicator criteria may be established on a site-specific basis by Ecology.” (Weyerhaeuser)</p> <p>RESPONSE: We are not prepared to defend an exemption of avian species from the bacteria standards, which we assume you are referring to.</p> <p>WAC 173-201A-200(2)(b)(vi). For consistency, the last word in the last sentence,</p>

	<p>“ecology,” should be changed to “department.” (NEA) RESPONSE: We have made the change.</p>
<p>(25h) 173-201A-200(2)(b)</p> <p>Bacteria</p> <ul style="list-style-type: none"> Lakes and Class AA 	<p>Ecology needs to clarify that for waters in lakes and Class AA meeting the current bacterial criteria, degradation of water quality to the levels in the proposed criteria would require a Tier II antidegradation analysis. (EPA) RESPONSE: We do not believe this clarification is necessary for bacteria, since we don’t do it with any other criteria. It is explained in the antidegradation section that Tier II applies to all appropriate waters and criteria.</p>
<p>201A-200(3)(b) Water Supply Criteria</p>	
<p>(26) 201A-200(3)(b)</p> <p>Water supply criteria</p> <ul style="list-style-type: none"> Clarification 	<p>What are the criteria for domestic, industrial, and stock watering uses. (WDOA)? RESPONSE: There are not specific criteria. The uses are protected by the general narrative standards at 200-260(1), and by more sensitive uses that are also protected on the waterbody.</p> <p>Domestic water supply does not have numeric criteria, and the “anything can be cleaned up” tack is taken. Standards for domestic water supplies should not be based on assuming extraordinary treatment. (NCAS) RESPONSE: Criteria for protecting domestic water supplies was proposed early in this rulemaking and then dropped due to a lack of continued support from municipalities. We are not in a position to reinsert such criteria at this time.</p> <p>The department of Ecology has employed flexibility in implementing the Model Toxics Control Act for sites located on Lake Union, part of the Lake Washington Chip Canal water body. With the proposed rule revision, this flexibility is removed, since all water bodies will be designated by default as drinking water (through the domestic water supply use). The proposed process to remove a designated beneficial use (WAX 173-201A-440) is particularly onerous given the default method in which those uses have been designated in the proposed rule. (FSMI) (NBC) (NSIA) RESPONSE: We do not concur that any of the changes have altered the allowances under the Model Toxics Control Act and note that the current standards apply domestic water supply as a default use to Class AA and A waters - with no distinction provided for fresh versus marine water. The new use-based system will better enable such uses to be removed where they are not attainable or incompatible with the natural potential of the system. As separately designated uses it is more clear that they can be removed and any associated criteria removed along with the use. Under the current system the domestic water supply use is assigned as part of a set of uses and it is not clear if and how it can be removed from that set. In either case, the only mechanism to remove the use would be through the use attainability analysis procedures established in the federal rules and referenced in the revised state water quality standards.</p>
<p>201A-200(3)(b) Agricultural Water Supply</p>	
<p>(27a) 201A-200(3)(b)</p> <p>Agricultural water supply</p> <ul style="list-style-type: none"> Support criteria 	<p>We support the proposed criteria for protecting agricultural water supplies. We suggest a pH of 6.5 to 8.4 for the protection of salmonids when water from agricultural lands is discharged into waters containing salmonids. (NMFS) RESPONSE: Specific criteria for the protection of agricultural water supplies has been dropped from the changes in this rulemaking due to comments received, many from the farming community, who felt the criteria would have no practical benefit and were unnecessary. Because farmers (who are the intended beneficiaries of these criteria) were not supportive, and since the criteria were more preventative in nature and problems are not widespread, Ecology decided to drop the proposal at this time. We will continue to list agricultural water supply as a designated use, and may</p>

	<p><i>reconsider adding specific criteria if existing water quality is shown to be on a troublesome downward trend for the constituents of concern.</i></p> <p>In spite of work group opposition, we support Ecology taking the agricultural criteria out for broad public review. (Lands Council) RESPONSE: See previous response.</p> <p>One bright spot among the proposed changes is a new regulation for agricultural irrigation water. If we value our farms and crops, we want to protect them with good irrigation water quality standards. (PAS) RESPONSE: See previous response.</p> <p>DOE's Protection for agricultural supply water should be adopted. (Umatilla Tribe) RESPONSE: See previous response.</p>
<p>(27b) 201A-200(3)(b)</p> <p>Agricultural water supply</p> <ul style="list-style-type: none"> Do not support criteria 	<p>The current system for protecting agricultural water supply is more than adequate, and numeric criteria are completely unnecessary. (Farm Bureau) (QCBID) (Camenzind) RESPONSE: Specific criteria for the protection of agricultural water supplies has been dropped from the changes in this rulemaking due to comments received, many from the farming community, who felt the criteria would have no practical benefit and were unnecessary. Because farmers (who are the intended beneficiaries of these criteria) were not supportive, and since the criteria were more preventative in nature and problems are not widespread, Ecology decided to drop the proposal at this time. We will continue to list agricultural water supply as a designated use, and may reconsider adding specific criteria if existing water quality is shown to be on a troublesome downward trend for the constituents of concern.</p> <p>Irrigation supply criteria should be a goal rather than a requirement. I am concerned it will become more and more stringent over time as new studies are developed. Establishing a numeric criteria will in time create a more restrictive use of agricultural waters and cause irrigation companies and producers inflated costs to maintain irrigation water at prescribed levels. (Sunnyside) RESPONSE: See previous response.</p> <p>I would consider removing the agricultural criteria. I've heard from my constituents that there doesn't seem to be a need for that, and that would remove a lot of other monitoring activities that, then, wouldn't then be necessary. (KCWP) (VanderPloeg) RESPONSE: See previous response.</p> <p>The criteria for agricultural water supply, the Ecology working group opposed setting these supply criteria for agriculture. We agree. (Good) RESPONSE: See previous response.</p> <p>Irrigation water supply criteria are not needed because the district already prohibits one user from making the water unusable by another user. (ECBID) RESPONSE: See previous response.</p> <p>Reconsider applicable temperature, pH, and dissolved oxygen level standards for waters within regulated reclamation irrigation storage, conveyance and drainage facilities. The standards are not reasonably achievable and will add to resources that will be needlessly consumed (wasted) in a load allocation process with the eventual outcome showing ambient and/or natural conditions control. (GCPHA) RESPONSE: See previous response.</p> <p>WSDA prefers Ecology just rely on the use of BMPs to protect water quality for the parameters proposed rather than to establish numeric criteria. Alternatively, only implement the agricultural criteria within irrigation system and impose the other water body criteria at the points of direct return flow to the water body. Ecology should not adopt standards for agricultural water for temperature, DO, and bacteria. (WSPC) RESPONSE: See previous response.</p>

	<p>Agricultural Criteria may reduce the range of mitigation options available to watershed planning groups or increase the cost of implementing control options. (WSPC) RESPONSE: See previous response.</p> <p>Less irrigation is not the answer. Irrigation provides many benefits to the environment. Getting fish upstream earlier, stopping soil erosion, building reservoirs, and continued irrigation should be tried before irrigation is restricted. Look at all the options for improving water quality before putting new standard in place. If management of streams negatively affects irrigation, it could result in more dependence on foreign food. Let's not make impossible standards or cause growers to go out of business. (Riley) RESPONSE: See previous response.</p> <p>Based on our consultants report (attached to the comment letter) the need for agricultural water criteria is unwarranted. This proposal would put limitations on water quality that appear to meld with your bias toward fisheries interests. (YRBCC) RESPONSE: See previous response.</p>
<p>(27c) 201A-200(3)(b)</p> <p>agriculture water supply</p> <ul style="list-style-type: none"> • Application 	<p>Is temperature excluded from agricultural criteria? There are numerous historic streams that do not meet water quality standards for temperature because water control structures block water movement. When these water control structures open to let water out, bull trout may enter these waters and become trapped. If temperature is not included in the agricultural criteria, clarification or a statement is needed on why they are exempt. (USFWS) RESPONSE: See previous response in (27b).</p> <p>Are drainage and irrigation ditches exempt from the criteria? Natural watercourses may be part of a drainage or irrigation system network, and usually have been significantly altered, but these systems may be important to bull trout recovery and should not be exempt from meeting all water quality standards. (USFWS) RESPONSE: See previous response in (27b).</p>
<p>201A-200(4) Miscellaneous Uses</p>	
<p>(28) 201A-200(4)</p> <p>Miscellaneous Uses</p> <ul style="list-style-type: none"> • Clarification 	<p>See comments concerning wildlife habitat protection. The department should consider whether its toxic criteria are sufficient to protect orca whales. (NEA) RESPONSE: Ecology is only proposing a change to the freshwater ammonia criteria at this time. Ecology cannot at this point in the rulemaking make changes to the existing criteria or develop new criteria.</p> <p>This section is inadequate to ensure the protection of wildlife habitat use. Unfortunately, the general criteria on toxics are not sufficient to afford protection to some species of wildlife because they consume a much higher level of contaminated aquatic food relative to their body. The department should include in the rules, an explicit recognition that many of the numeric criteria applicable to protection of human health and aquatic life in surface waters are inadequate to protect wildlife. It should also include a provision where piscivorous mammals and birds are present or constitute an existing use, numeric criteria may not be applicable and may require instead the development of an interpretation of narrative criteria and/or provide for full support of the use. The department should commit to creating a methodology for interpretation and application of narrative criteria for the protection of wildlife within one year of final promulgation of this rule. (NEA) RESPONSE: See previous response.</p> <p>Recommend protecting tribal fisheries from toxic substances using the higher consumption rates of Tribal members. (Umatilla Tribe) RESPONSE: See previous response. Further, or human health criteria are established in a federal rule and Ecology cannot change factors such as consumption rates.</p>

	<p>The fish harvesting use should include stocks healthy enough to be harvested. (Lummi Tribe) RESPONSE: See previous response.</p> <p>The fish harvest use should have aquatic life criteria apply. Harvesting is not totally for recreational use. (Lummi Tribe) RESPONSE: Fish harvesting criteria would not be applied independent of the criteria to protect the fish.</p> <p>Fishers should be protected from bacterial risks and fish quality must be protective of the health of tribal member consuming the fish in accordance with treaty rights. (CRITFC) RESPONSE: Fish harvesting waters would also a receive either the secondary contact or primary contact bacteria criteria.</p>
201A-210 Marine Uses	
<p>(29a) 201A-210</p> <p>Marine uses</p> <ul style="list-style-type: none"> • Clarification 	<p>The brief introduction under the title to WAC 173-201A-210 refers to “fresh surface waters” rather than the marine waters in the title – this should be changed. (EPA) (WDOA) RESPONSE: We have corrected the mistake.</p> <p>Ecology has revised the section of its standards dealing with marine waters (WAC 173-201A-210) without adequately seeking input from stakeholder groups The changes in the marine standards come as a surprise to those of us who have been involved in Ecology’s stakeholder process as there has been no dialog with the regulated community on this topic. Ecology has not made a case to stakeholders for its rewriting of the marine standards. (GPC) RESPONSE: To our knowledge, we have only changed the formatting for the marine criteria section as part of moving from the class-based system to the use-based system which is a topic that was widely discussed. The uses and criteria currently assigned to the water bodies (with the exception of bacteria, which was part of the proposed rule) were not changed.</p>
<p>(29b) 201A-210</p> <p>Marine uses</p> <ul style="list-style-type: none"> • Quality designations 	<p>The section describing Water Quality Ratings is vague and poorly defined. How are the qualitative rankings determined? Shellfish harvest is not a recognized use under the Fair Quality category where water temperature reaches 71 F. But spawning and larval survival of oysters are supported by high water temperature in late summer. The rating system does not appear to accommodate the range of biological needs. (Warnberg) RESPONSE: Because our focus on switching to the use-based format was on fresh water, we are not proposing to change the existing class designations for marine waters. For this rulemaking we tried to only make the necessary formatting changes to eliminate the format of the old class-based system. However, the essence of the class system remains embedded in the new rule. During the next triennial review we will consider changing the marine system over more fully to a use-based system.</p> <p>The definitions of Extraordinary and Excellent are the same. Since some of the criteria are different it would seem that the definitions should also differ. (USACE) RESPONSE: See previous response.</p> <p>Why have two identical categories for Extraordinary and Excellent? Is this a typographic error? (WDOT) RESPONSE: These reflect the existing rule classifications. See previous response.</p> <p>The use categories included for marine waters are unclear because there are no differences or minimal differences between the categories. These should be simplified. (Seattle City) RESPONSE: See previous response.</p> <p>The fair quality designation for marine waters should really not be used at all. The</p>

	<p>temperature and dissolved oxygen limits are so poor as to not be appropriate for any water body. "Fair quality" indicates that Ecology no longer considers the water body to be viable as a habitat, and that is not acceptable. (Steffensen)</p> <p>RESPONSE: <i>See previous response.</i></p>
<p>(29c) 201A-210</p> <p>Marine uses</p> <ul style="list-style-type: none"> Support move to use-based for marine uses 	<p>The department should establish a plan to convert to a use-based system for marine waters. (NEA)</p> <p>RESPONSE: <i>We agree, and will consider the change during the next triennial revision. See previous response.</i></p> <p>A direct cross-walk for marine water from our existing class based system was possible and preferable. Suggest a format similar to how some other states identify uses and associated criteria (see comments of Heller-Eherman). (Heller-Ehrman)(Weyerhaeuser)</p> <p>RESPONSE: <i>While we appreciate the effort you put into suggesting an alternative format for reflecting marine waters in a use-based system, we did not feel it was appropriate to make that extensive a change without further public review and discussion. We will keep your suggestions on file and consider them when we consider further changes to the standards. See previous responses.</i></p> <p>We are disappointed that this restructuring does not apply to marine waters. We urge Ecology to move forward expeditiously with the next rulemaking to accomplish this. (Seattle Port)</p> <p>RESPONSE: <i>Because of the need to focus on fresh water and staffing constraints, it was not possible to focus on marine water also during this rulemaking. See previous responses.</i></p>
<p>(29d) 201A-210(1)(b)</p> <p>Marine uses—</p> <p>Narrative criteria</p>	<p>The narrative components of the freshwater aquatic criteria should not be extended to marine waters as this is procedurally flawed and possibly invalid for vagueness. (NWPPA)</p> <p>RESPONSE: <i>We made some adjustments to reduce this confusion and limit the clauses to the sections where they apply.</i></p>
<p>201A-210(1)(c) Marine Temperature Criteria</p>	
<p>(30) 201A-210(1)(c)</p> <p>Marine Temperature criteria</p> <ul style="list-style-type: none"> Clarification 	<p>The "Notes" discussion below Table 210(1)(c) is imprecise in identifying which subsections of –200(1)(c) will apply to marine waters; i.e., the uncertainty of the "where applicable" language. The appropriate regulatory requirements should be specifically identified. 200(1)(c)(iv) and (v) would not seem to be applicable to marine waters or discharge to marine waters. (Weyerhaeuser)</p> <p>RESPONSE: <i>See previous response.</i></p>
<p>201A-(1)(g) Marine Aquatic Life Bacteria Criteria</p>	
<p>(31) 201A-210(1)(g)</p> <p>Marine aquatic life bacteria criteria</p> <ul style="list-style-type: none"> Clarification 	<p>Table 210(1)(g) might be titled more appropriately "Shellfish Harvesting Bacteria Criteria in Marine Waters", although we understand the harvesting function is contained within the overall aquatic life use. The bacterial criteria are intended to protect human health rather than aquatic life, so alternative labeling might make this more clear. (EPA)</p> <p>RESPONSE: <i>We have reorganized this section and separated shellfish harvesting.</i></p> <p>If Ecology wishes to continue monitoring for fecal coliform only as a surrogate for enterococci in marine waters, the ability of the one indicator to safely represent the other needs to be further documented. We recognize that the State may need a period of transition to develop experience with the new indicators and the analytical methodologies, therefore it is appropriate and recommended that states include measurement of multiple indicators for a limited period of time. (EPA)</p> <p>RESPONSE: <i>Ecology will not include a requirement for multiple indicators in the rule. The costs are not justified and the available information is quite adequate for demonstrating the relative relationship between fecal coliform and enterococci in our</i></p>

	<p><i>waters. We received numerous comments on the need to switch, and feel confident that the fecal coliform numbers in the current standards are very protective of human health.</i></p> <p>Reference to relationship with shellfish sanitation rules seems unclear and only appears to address commercial harvesting. (WDOA) RESPONSE: <i>The language has limited application but is intended to prevent the situation where the Department of Health approves a growing area but where we list it as impaired for that use. Since Health uses a separate process with typically more intense sampling this appears to be a reasonable concession for insuring consistency.</i></p> <p>There is no bacteria standard for marine waters classified as good. This should at least have something equivalent to the existing Class B standard. We are concerned that these waters border and circulate into shellfish waters. Criteria adopted should prevent this scenario. (Squaxin Tribe) RESPONSE: <i>We are applying an enterococci criteria at 70/100 ml for those existing Class B and C waters.</i></p> <p>Aquatic Life Uses (g)(i) - This is redundant, in the wrong location, and should be removed. (NEA) RESPONSE: <i>We have made the necessary changes.</i></p> <p>210(1)(g)(iii) is a footnote to the bacteria criteria in marine water. However, it pertains to water contact criteria, and not aquatic life use criteria, and it is repeated in Section 210(2)(b)(iii). Consequently, it is not needed in this section and can be deleted. (Everett) RESPONSE: <i>We have made the necessary changes.</i></p>
--	--

201A-200(2)(b) Marine Water Contact Bacteria

<p>(32a) 201A-200(2)(b)</p> <p>Marine Water Contact Bacteria</p> <ul style="list-style-type: none"> • Protection for shellfish 	<p>Shellfish is an important resource to most of the tribes. We need to make sure shellfish protection isn't weakened. What we need is an umbrella consultation process for management. Ecology, Fish and Wildlife and Department of Health Shellfish Program need to consult with tribes. (Jamestown Tribe) RESPONSE: <i>Shellfish protection will not be weakened by the changes.</i></p> <p>It is assumed that shellfish water quality testing will not change with the proposed rule? We are concerned with increased costs of testing using enterococci as an indicator in marine waters and question whether the standards require any increases in monitoring or testing in relation to the current standards. (Island County) RESPONSE: <i>Enterococci will only be used in those few marine waters that are currently Class B and Class C. Fecal coliform will continue to be the indicator for shellfish waters.</i></p> <p>We are very concerned with eroding protection in Class AA waters from 50 to 100 organisms. These streams contribute to shellfish areas. (Jamestown Tribe) (Squaxin Tribe) RESPONSE: <i>After careful deliberation and consideration of the comments that were received, Ecology has decided to continue to use the existing fecal coliform criteria in fresh waters throughout the state. All fresh waters will continue to be protected at their current levels. In marine waters, fecal coliform will continue to be applied at the current criteria levels in all waters that currently have shellfish harvesting listed as a characteristic use in the state standards. The only waters where a new criteria would be applied will be the few marine waters that are currently classified as Class B and Class C. In these waters, Ecology will apply an enterococci criteria of 70/100 ml to protect the secondary contact uses characteristic of these water bodies. Ecology will retain the implementation guidance that was proposed for the bacteria criteria with minor modifications to make them clearer.</i></p> <p><i>The continuation of the use of fecal coliform was determined appropriate for numerous reasons:</i></p>
--	--

	<p><i>a) fecal coliform is believed to be an effective indicator in Washington, b) to avoid the higher costs associated with the monitoring and analysis for <u>E. coli</u> and enterococci without their being superior indicators for our state, and c) the draft cost benefit analysis demonstrated that costs associated with increased illness rates from raising the risk of illnesses from the existing criteria far outweighed the benefits.</i></p> <p>Shellfish growers see the proposed changes as a serious problem. Problems with bacteria often come from the freshwater rivers. With three different ways to look at bacteria local jurisdictions will adopt the one that allows the most pollution. Keep fecal coliform as the bacteria for the Chehalis River. (WGHOGA) RESPONSE: See previous response.</p> <p>We are concerned that changing the indicators from fecal coliforms to enterococci may compromise the ability of shellfish growers to survive. (FOGH) RESPONSE: See previous response.</p> <p>It is assumed that shellfish water quality testing will not change with the proposed rule? We are concerned with increased costs of testing using enterococci as an indicator in marine waters and question whether the standards require any increases in monitoring or testing in relation to the current standards. (Island County) RESPONSE: See previous response.</p> <p>We understand fecal monitoring will only occur in “shellfish harvesting areas”. The tribe must be a co-manager to the monitoring determination process in the U and As. (Jamestown Tribe) RESPONSE: See previous response. The criteria apply to waters with shellfish harvesting as a designated use in the standards. This is almost all of our state’s marine waters.</p>
<p>(32b) 201A-210(2)(b)</p> <p>Marine Water contact bacteria</p> <ul style="list-style-type: none"> Clarification 	<p>Note that bacteria is mislabeled as –210(2)(a) in the draft regulation. (EPA) (Weyerhaeuser) RESPONSE: Correction noted.</p> <p>Does –210(2)(b)(i) intend to say that attainment in a water body segment of the fecal coliform criteria established by the National Shellfish Sanitation Program for protection of shellfish growing areas will alleviate the need to demonstrate compliance with the enterococci criteria in Table 210(2)(b)? (Weyerhaeuser) RESPONSE: It intends that even if our sampling program shows a violation, if DOH has determined a shellfish area suitable for harvest we will not consider it impaired.</p> <p>The proposed standards cause confusion for wastewater treatment permittees discharging to marine waters. The language in the proposed standards says “fecal coliform levels for shellfish growing areas will be viewed by Ecology as also being fully protective of primary and secondary water contact uses”. We have been expecting to monitor for just enterococci if the standards are adopted. It would result in higher cost impacts if we are expected to monitor for enterococci and fecal coliform, rather than just fecal coliform. (King County) RESPONSE: Few entities, if any at all, will need to monitor for more than fecal coliform in the state. Only those in Class B or C waters have any chance of being required to do dual monitoring.</p> <p>How any new enterococci standard is applied to a wastewater facility discharging to a marine environment – to the effluent leaving the plant or to new ambient measurements at the end of a mixing zone – is of great concern. We are submitting data from our treatment plant to illustrate this point. These data show that without a mixing zone non-compliance would occur. If such a water quality based standard was implemented inappropriately it could escalate the cost of treatment and increase risks to aquatic life from additional disinfection by-products, without achieving any additional protection of human health. If this bacteria standards change is to go forward, there must be a time where Ecology will phase in an appropriate enterococci technology-based standard for</p>

	<p>compliance. During that time fecal coliform should continue to be used. (King County) RESPONSE: See previous response. Even if enterococci were required, Ecology would not assume the change could be made overnight.</p> <p>The current approach to “measurable change” in bacterial counts is unworkable from a technical and practical standpoint. We would like to see Ecology either create a narrative “measurable change” standards or propose a revised quantitative standard that reflects more accurately a statistically relevant level for “measurable change”. Such a level should reflect the normal range of bacterial counts in water bodies and take into account seasonality as well as changing meteorological conditions. (King County) RESPONSE: It would typically, and perhaps exclusively, be applied as part of a dilution calculation or modeled result not a field study.</p> <p>(2) Water Contact Uses (b)(ii) - This is redundant, in the wrong location, and should be removed. (NEA) RESPONSE: Correction has been made.</p>
201A-210(3) Marine Miscellaneous Uses	
<p>(33) 201A-210(3) Marine Miscellaneous uses</p> <ul style="list-style-type: none"> • Clarification 	<p>See comments concerning wildlife habitat protection. The department should consider whether its toxic criteria are sufficient to protect orca whales. (NEA) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking.</p>
201A-230 Lake Nutrient Criteria	
<p>(34) 173-201A-230 Lake nutrient criteria</p> <ul style="list-style-type: none"> • Clarification 	<p>(3) (b) contradicts itself. Setting criteria limits based on the existing level is not appropriate because it assumes that the lake has no more assimilative capacity, or that its beneficial uses might not increase. We recommend striking the opening statement. (Boeing) RESPONSE: Ecology did not propose or discuss with the public any intention of making changes to the existing regulations governing the establishment of lake nutrient criteria. We cannot, therefore, make substantive changes to this section at this time.</p> <p>There are no available BMPs that can reduce phosphorus concentration to such low levels. Ecology’s 2001 stormwater manual sets a goal of 50% phosphorus removal. This standard is unachievable for any project that discharges stormwater. (WDOT) RESPONSE: Comment noted, however the comment is outside the scope of this rulemaking. See previous response.</p> <p>It is not clear however, how the application of this nutrient criteria and the actions described in 173-201A-230 parts (3) – (6) interface with designations of impaired status with respect to section 303(d) of the Clean Water Act. (Bellingham City) RESPONSE: See previous response.</p> <p>Nutrients: We would recommend that standards be developed for nutrients in streams that protect aquatic resources. (Yakama Nation) RESPONSE: See previous response.</p>
201A-240 Toxics Criteria	
<p>(35a) 201A-240 Toxics criteria</p>	<p>An appendix should be added to the rule that provides tables / charts with the water quality standards already calculated for quick and easy reference by any user. (Boeing) RESPONSE: This would be very complicated given the need to incorporate ambient hardness and pH in many of the toxics equations. We can provide access to spreadsheets on the internet.</p>

<ul style="list-style-type: none"> Clarification 	<p>Has diurnal cycling of metals concentrations been adequately addressed in the new criteria. Meeting or exceeding certain metals criteria in some waters may be solely based on the time of day the sample is collected. This issue should be addressed if possible. (USACE) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking.</p> <p>We support the department’s intent to include the cumulative effect of multiple toxic substances in its narrative criterion. However, NWEA suggests the language is not complete and proposes: “Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare; aquatic life; wildlife; or other designated beneficial uses. Numeric criteria contained in Table 240(3) or the National Toxics Rule shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the department on a site specific basis.” (NEA) RESPONSE: See previous response.</p> <p>We are pleased to see a reference to the legal requirement to protect existing uses in this section. We suggest elimination of the word “characteristic”. It is unclear what the following rule language means: “The department shall employ or require chemical testing, acute and chronic toxicity testing, and biological assessments, as appropriate, to evaluate compliance with [the narrative on toxics and protection of aquatic communities and uses]. The language suggests that pollution sources, or at least regulated pollution sources, can be required by the department to conduct monitoring exercises within receiving streams in addition to effluents. We support this approach to determining whether permit limits are sufficiently stringent for future permit revisions and whether sources are complying with existing permit limits. (NEA) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking. Further, we have standardized the terminology to existing and designated uses rather than characteristic uses.</p> <p>We have not had sufficient time to understand the implication of the standards for toxic substances and request government to government consultation. (Umatilla Tribe) RESPONSE: See previous response.</p> <p>Tribal members who consume as much as 10 times as the average Americans should be protected. (CRITFC) RESPONSE: See previous response.</p> <p>Subsection (1) is straightforward and should be sufficient to keep toxic substances out of water. But the use of Short-term Modifications allows many exceptions for the discharge of toxic pollutants, negating the intent of the proposed goals. (Warnberg) RESPONSE: The short-term modifications are an existing practice that are only intended to respond to emergencies and protect the public interest.</p>
<p>(35b) 201A-240(3)</p> <p>Toxics criteria</p> <ul style="list-style-type: none"> Ammonia 	<p>Because the EPA 1999 criteria does not appear to be protective of all life stages of salmonids, we recommend that Ecology keep the existing criteria for all waters, regardless of the water body use designation. (NMFS) RESPONSE: The new EPA 1999 chronic criterion for early life stages is very limited in application, and will only be applied in areas where salmonid habitat is not an existing or designated use. This safeguard should avoid any chronic impacts to salmon from ammonia.</p> <p>The criteria in this table should be accompanied by a caveat that protection of human</p>

	<p>subpopulations that consume species, fish parts, and amounts of fish not taken into account in the development of numeric criteria to protect human health, must be protected at the same risk level as the general population. In addition, the recommendations concerning wildlife protection are a required addition. The department should use total recoverable not dissolved measurements of metals because they better estimate the uptake mechanisms used by some species. Selenium and mercury criteria should be based on the trigger levels in the Biological Opinion issued for the California Toxics Rule. (NEA) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking.</p> <p>Subsistence fishers should be protected at the same risk of cancer. (NEA) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking.</p> <p>Past studies (Burrows, 1964) have found significant adverse effects on salmonids from low concentrations of unionized ammonia (0.002 mg/l). The documentation provided by Ecology is insufficient to make the case that the proposed increases are justified in acute criteria. (SLS) RESPONSE: Ecology examined the data in the EPA ammonia criteria document to determine whether the new EPA acute criteria would be protective of salmonids. The data set is quite large, and there are no data that indicate that acute effects would occur to salmonids at the concentrations of the new acute criteria. EPA based the new acute criterion on the lowest LC50 for salmonids. The data from Burrows (1964) is a histopathology study. Their information on proliferation and clubbing of gill filaments does not have a direct connection to growth or reproduction, or to survival. The data from this study are not appropriate for use in developing a water quality criterion.</p> <p>Table 240(3) fails to list carbaryl and many other toxic agricultural/forestry pesticides frequently found in surface water. The USGS has identified 55 pesticides found in surface water. Ecology has set acute and chronic criteria for aquatic use of carbaryl under an NPDES permit. These criteria should be included in the Table. (Warnberg) RESPONSE: Ecology is not revising its toxics criteria, aside from the small change to the freshwater ammonia criteria, and cannot introduce a review of all the toxics criteria at this point in the rulemaking.</p> <p>We thank Ecology for keeping the more stringent chronic standard for salmonids. (PAS) RESPONSE: Your support is appreciated.</p> <p>More study is needed to determine the actual implications between the new EPA recommended acute criteria and the new EPA chronic criteria before the effects of this proposal are well understood. (Sunnyside) RESPONSE: The acute and chronic criteria are used independently in both assessing compliance and in setting permit limits. There should be no specific interactions between the new criteria other than that both acute and chronic are used jointly to provide protection to aquatic life.</p>
--	--

201A-260 Other Water Quality Criteria and Applications

<p>(36) 201A-260</p> <p>Other water quality criteria and applications</p> <ul style="list-style-type: none"> Clarification 	<p>There are two (1) in this section. Page 38 has inconsistent numbering. Part (c)(5) needs to insert missing or revised WAC reference. (Boeing) RESPONSE: The corrections have been made.</p> <p>Develop a set of water quality standards applicable to the estuarine environment. In the interim, allow dischargers to select either fresh or salt-water standards based on the preponderance over the yearly cycle of salinity at their location. (Boeing) RESPONSE: The standards already contain a methodology for applying the criteria in estuarine areas. It was in section 060 of the existing standards, and is based on the</p>
--	--

	<p><i>vertically averaged daily maximum salinity. This was a revision to previous language that was made during the last rule revision. It appears to be working appropriately.</i></p> <p>The narrative criteria should apply to existing uses as well as all designated uses. (1)(a) - Please see NWEA comments on the narrative criterion for toxics. (NEA)</p> <p>RESPONSE: <i>We agree this is a more accurate description of the federal requirements and have made the change.</i></p> <p>We believe further narrative criteria are necessary to protect the biological integrity of Washington waters and to allow the department to use biological monitoring indices as available data allow. We suggest: “Waters of the state shall be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities. Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, as the department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical substances without numeric criteria, and the cumulative effect of multiple pollutants and of pollution, to aquatic life.” In addition, we suggest that the following language be included: “No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the state.” Moreover, we believe that Washington’s narrative criteria need additional language for them to effectively serve in their role as gap fillers. Specifically: 1) “The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.” 2) “The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed.” 3) “The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or affect the potability of drinking water or the palatability of fish or shellfish shall not be allowed.” 4) “The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.” 5) “Objectionable discoloration, scum, oily sleek, or floating solids, or coating of aquatic life with oil films shall not be allowed.” (NEA)</p> <p>RESPONSE: <i>While we appreciate the suggestions for improving this section, we have not proposed changes nor discussed any of these topics in the public review and thus cannot make changes at this point in time. Further, while not as long and detailed of a list, the existing broad narrative language against toxic and deleterious effects has always been adequate to get at the specific concerns you suggest we list directly.</i></p>
<p>201A-260(1) Other Water Quality Criteria</p>	
<p>(37a) 201A-260(1)</p> <p>Other water quality criteria</p> <ul style="list-style-type: none"> Narrative criteria 	<p>260(1) sets up preventative conditions from effects from toxics. In contrast, the narrative criteria for non-point runoff does not set criteria with respect to protecting the public or any beneficial use of water. This conflicts with 510(3) which says these activities must meet standards. Make it unmistakably clear that the obligation is to meet water quality standards. (SSC)</p> <p>RESPONSE: <i>We have deleted the language on nonpoint runoff. The standards already contains a more lengthy discussion on the obligations of nonpoint sources and the way adaptive management is used to control those sources of pollution. This existing language is currently in 160(3) of the existing regulation. We realized that the proposed language was redundant, more confusing, and did not fit alongside the specific water quality criteria it was stationed with.</i></p> <p>Determining adverse effect to human health is not the charge of Ecology. Like ground water standards, the surface standards should be done in consultation with the Department of Health. (WDOA)</p> <p>RESPONSE: <i>Ecology is also charged with protecting the public health through the programs that it administers.</i></p>

<p>(37b) 201A-260(1)(b)</p> <p>Other water quality criteria</p> <ul style="list-style-type: none"> • Aesthetics 	<p>The narrative criteria for aesthetics does not have a repeatable, demonstrable baseline. Many instances can exist when it may be objectionable to one person and not at all to a large group of people. The classic narrative standard of no floatable, sheen or highly discolored discharge seems more appropriate. (Boeing)</p> <p>RESPONSE: <i>We have found the criteria to be useful. Further, we have not proposed changes to this existing definition and it would not be appropriate to change it now after the public hearings have been completed and no further public comments on the changes would occur.</i></p> <p>In 260(1)(a) the term “deleterious material concentrations” is ambiguous and when coupled with “potential” and “cumulative” seems to effectively ban any anthropogenic compound. This seems to hold nonpoint sources to a higher standard than point sources which are allowed to discharge deleterious compounds. (WDOA)</p> <p>RESPONSE: <i>This is an existing definition. Its position in the regulation is being changed but not its content. We cannot make changes at this point in time to criteria where we have not discussed the issues with the public as part of the public review process. The definition applies to point and nonpoint sources, and the point of the permits for point sources is to ensure compliance with this and other clauses in the standards.</i></p> <p>Determination of aesthetic values should be eliminated or at least not left to narrative criteria as this is too open ended. (WDOA)</p> <p>RESPONSE: <i>This is in the existing regulation and we see no basis for its elimination. See the previous two responses on this topic.</i></p> <p>(1) - The narrative criteria should apply to existing uses as well as all designated uses. (NEA)</p> <p>RESPONSE: <i>Your suggestion for correcting the terminology to be consistent with our legal obligations under federal regulations is appropriate and has been made.</i></p> <p>(1)(a) - Please see NWEA comments on the narrative criterion for toxics. (NEA)</p> <p>RESPONSE: <i>While we appreciate the suggestions for improving this section, we have not proposed changes nor discussed any of these topics in the public review and thus cannot make changes at this point in time. Further, while not as long and detailed of a list, the existing broad narrative language against toxic and deleterious effects has always been adequate to get at the specific concerns you suggest we list directly.</i></p>
<p>(37c) 201A-260(1)(c)</p> <p>Other water quality criteria</p> <ul style="list-style-type: none"> • Runoff from Nonpoint sources 	<p>The Nonpoint Source Pollution subsection should be deleted, or at least not apply to urban stormwater runoff. (Seattle City)</p> <p>RESPONSE: <i>Agreed. We deleted the language because it was redundant and more confusing than the existing regulatory language in the standards in Section 160(3) for nonpoint sources.</i></p> <p>We find the new broad language in 260 extremely disturbing, and believe it is directly contrary to both the Legislature’s and the EPA’s position on this subject. Ecology will now regulate all overland flow, not just the point sources that have been the focus of the CWA and the SWPCA. We question the political and practical wisdom of mandating Ecology approval for every drop of rain. (Seattle Port)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>(1)(c) - This provision requires some explanation regarding the approval process for BMPs or sufficient waste treatment technologies. (NEA)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Part (c) seems to prohibit any runoff unless controlled by BMPs . What is currently considered approved BMPs today may not be considered adequate under this new section. In the proposed rule, agricultural BMPs are developed without any requirement for consultation by WSU, WSDA, and NRCS. This leaves the sole determination as to adequacy up to the Ecology that may not have the expertise in this area. (WDOA)</p> <p>RESPONSE: <i>See previous response.</i></p>

	<p>The word “approved” is misspelled. (WDOA) RESPONSE: See previous response.</p> <p>The narrative criteria regarding nonpoint sources is not sufficient to protect designated uses or make up for the inadequacies of the proposed numeric criteria. First “draining” and “discharging” is only one of the several mechanisms by which human actions undermine watershed biological integrity. Altering the hydrology for example is not a discharge in the traditional sense but alteration in the timing, frequency, and extent of high and low flows over time undermines the integrity of the water. Second, the regulation permits non-point discharges that use BMPs. Ecology has not approved BMPs for many activities – the regulation suggests that in the absence of formal approval by Ecology, BMPs are whatever a project proponent thinks they are. Further, structurally based BMPs have largely failed to provide a significant check on watershed degradation associated with urbanization. Protection is the only management practice that works. (NEA) RESPONSE: See previous response.</p> <p>We are happy to see the narrative requiring the control of nonpoint source pollution (Normandy Park) RESPONSE: See previous response.</p>
201A-260(2) Natural Conditions	
<p>(38a) 201A-260(2)</p> <p>Natural and irreversible human conditions</p> <ul style="list-style-type: none"> • Support 	<p>The proposed language for Natural and irreversible human conditions is appropriate. It would be helpful to discuss these conditions separately. (Avista) RESPONSE: We agree and have broken the two topics up to better clarify that irreversible human conditions need to be defined via a Use Attainability Analysis.</p> <p>We are glad that Ecology has recognized irreversible human-caused conditions and human-created waters. (Seattle Port) RESPONSE: Your support is noted.</p> <p>The recognition of natural and irreversible human activities that preclude meeting these ideal standards needs to be recognized promptly. (USACE) RESPONSE: Comment noted.</p> <p>The city of Bellingham City supports the new Section 173-201A-260(2), Natural and Irreversible Human Conditions, and appreciates the State’s recognition that “portions of many water bodies cannot meet its assigned criteria due to natural conditions of the water body”. (Bellingham City) RESPONSE: Your support is noted.</p> <p>The wording in new section 260(2) concerning “natural and irreversible human conditions” is appropriate, sensible and supportable by the cited federal regulations. Can such a value be implemented without having to go through rule making to first adopt it as a standard? The department will need to develop some implementation guidance concerning alternative criteria targets. (GAC) RESPONSE: Your support is noted. Further, we view developing guidance to implement the changes being made in this rulemaking as a high priority.</p>
<p>(38b) 201A-260(2)</p> <p>Natural and irreversible human conditions</p> <ul style="list-style-type: none"> • Concerns 	<p>The natural conditions provision should be refined so that it is applied and functions appropriately. (EPA) RESPONSE: We have made changes that should ensure it functions as it does in our existing standards.</p> <p>We are concerned that the two situations combined under provision WAC 173-201A-260(2) [NOTE: there is a typo in the numbering in the draft WQS – it is listed as “1” but should be “2”] are not appropriate for combining because they need to be handled differently. (EPA)</p>

	<p>RESPONSE: <i>We have made the corrections.</i></p> <p>Until this section can be clearly explained it should be removed. (Yakama Nation) RESPONSE: <i>The existing standards contain the concept of natural conditions that cause water to be of poorer quality than the assigned criteria. This is a critical element to having effective standards. The second part refers to irreversible human effects and meets the federal regulations at 40 CFR 131.10(g) for modifying and removing uses. We do not need language in the standards to go through a Use Attainability Analysis using the federal rules, but we believe that letting people understand that such mechanisms exist as part of the whole standards package results in a better understanding of the program.</i></p> <p>Subsection –260(2) needs to be reworked to accomplish an automatic resetting of numeric criteria when the factors identified above are demonstrated. The end of the last sentence should be adjusted to read, “...are above a numeric criteria, will become the alternative criteria target for a water body.” Otherwise, the reality is that any deviation from numeric criteria will involve a need to revise WAC 173-201A. (Weyerhaeuser) RESPONSE: <i>We have redesigned this clause to allow the natural conditions portion to apply automatically as it currently does in the existing state standards, and to clarify that a UAA is required to account for human structural changes that are irreversible to be consistent with the federal regulatory requirements.</i></p> <p>Ecology should recognize that paved urban areas are themselves “human structural changes that cannot be effectively remedied.” We encourage Ecology to revise language to acknowledge that truth. (Seattle Port) RESPONSE: <i>Cities certainly could be considered in a UAA as a structural change affecting the hydrology. But it is important to realize that the goal for any UAA is identify the attainable condition if using all procedures for reducing pollution and impacts, they don’t just grant exemptions from the standards.</i></p> <p>The site potential should recognize the existence of the dams as permanent components of the system. (USACE) RESPONSE: <i>We cannot assume dams are permanent unless we go through a specific Use Attainability Analysis consistent with the federal rules (40 CFR 131.10(g))</i></p> <p>Any analysis of 40 CFR 131.10 must consider the current and substantial widespread social and economic impact of severely reduced salmon populations that are, to a significant extent, caused by the dams. Further treaty reserved rights to harvest fish are invaluable and a requirement of Tribal culture and religion and must be considered in any evaluation. (Umatilla Tribe) RESPONSE: <i>We cannot change the federal regulations and there are UAA pathways that do not need to examine widespread and substantial impact. Since the change would ultimately need to be approved under state law, however, the public involvement process combined with the need to show that the benefits outweigh the costs should ensure a place will exist to consider the broader effects and state legal obligations.</i></p>
<p>(38c) 201A-260(2)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • When does it apply? 	<p>Decisions on irreversible human conditions and attainable conditions need to be made on a site specific basis. What is the public process and EPA review? What are the minimum requirements of what constitutes an adequate demonstration that natural conditions are of a lower quality than a given water quality criterion? (Umatilla Tribe) (Kalispel Tribe) RESPONSE: <i>The determination is part of a Use Attainability Analysis (UAA) Process. It must be adopted into the water quality standards consistent with state law, approved by EPA as meeting the Clean Water Act and the Endangered Species Act. Also, language is included in the rule to require tribal consultation on proposed UAAs.</i></p> <p>This section doesn’t reference whether the site-specific analysis process or the variance process or neither applies here. It is not clear where to go to get this alternative criteria target. (USACE) RESPONSE: <i>The rule references the federal regulation on removing uses through a use attainability analyses. See response above.</i></p>

<p>(38d) 201A-260(2)</p> <p>Natural conditions—</p> <ul style="list-style-type: none"> • Implementation 	<p>The significant change in the natural condition language from the current WQS is the change from “the natural conditions shall constitute the water quality criteria” (an automatic provision) to “may become the alternative criteria target for a water body.” The new language takes away the automatic character of the provision. A change to a natural condition will therefore require a site specific criterion be developed. It is unclear if the phrase “alternative criteria target” is intended to result in something other than a new criterion? (EPA)</p> <p>RESPONSE: <i>We have redesigned this subsection to make the natural condition clause automatic as it is currently in the state standards.</i></p> <p>Ecology needs to clarify whether it intends an automatic provision for natural conditions or a site-specific criteria development process, which would include submission to EPA in each instance it is used. In either case, EPA recommends that: 1) decisions on natural conditions be water body-specific, well-documented, and supported with data and information; and 2) that there be a public participation process when invoking the natural condition provision to change a criterion. If the natural conditions provision is automatic there is a clear need for a mechanism for permit writers and the affected public to track these changes in the effective criteria in the State’s standards. (EPA)</p> <p>RESPONSE: <i>We agree that a tracking mechanism and public review are appropriate. We have to date ensured public reviews either as part of the 303(d) process, permit review process, or the TMDL development process. This will continue.</i></p> <p>The rules do not provide for differentiating natural impacts Vs human impacts. (Simmons)</p> <p>RESPONSE: <i>We are trying to make it clear and have made improvements to this subsection.</i></p> <p>The revisions include language to recognize that in some reaches the natural conditions prevent compliance with the standards. (CBP)</p> <p>RESPONSE: <i>That is a correct reading.</i></p> <p>If an area cannot meet the proposed biologically-based numeric criteria the rule allows for “Targets” based on natural conditions. Is local government going to be responsible for creating and justifying these targets and, if so, what sort of technical support or funding is Ecology proposing to aid in this effort? (Island County)</p> <p>RESPONSE: <i>Ecology has the responsibility for this decision.</i></p> <p>How does Ecology plan on handling “Natural Conditions” in terms of implementation of the proposed rule? (Island County)</p> <p>RESPONSE: <i>This is an existing part of our standards. How it is implemented will depend on the situation. In some cases a simple judgment can be made due to the physical setting (the temperature of outflow water from a large natural lake or the quality of water running out of a National Park) but in others we will need to model the system so as to be able to remove the influences of human actions to derive an estimate on the natural condition.</i></p> <p>In the last sentence, I would suggest changing the end to the following: "then alternative estimates of the attainable water quality conditions, plus any allowances for further human effects as specified in this section for natural conditions exceeding numeric criteria may become an alternative target for a water body." (King County)</p> <p>RESPONSE: <i>We have reworded this paragraph and include the further allowance from human actions beyond the “irreversible effect”.</i></p>
<p>(38e) 201A-260(2)</p> <p>Natural conditions</p> <ul style="list-style-type: none"> • Human structural changes that cannot be 	<p>The provision dealing with human structural changes that cannot be effectively remedied cites language from and references the EPA standards regulations (40 CFR Section 131.10). Ecology needs to clarify what is envisioned with this provision. It appears that first a UAA would need to be completed in accordance with new section WAC 173-201A-440. After EPA review and approval and ESA consultation this UAA could be used to change both the uses and the applicable criteria. (EPA)</p> <p>RESPONSE: <i>We agree that the UAA procedure is required and have made this</i></p>

<p>effectively remedied</p>	<p><i>clearer.</i></p> <p>Expand the applicability of “human structural changes” to recognize not only the structural changes; but also the societal changes afflicted on a water body (domestic and agricultural water withdrawals, etc). (Boeing)</p> <p>RESPONSE: <i>The language must be consistent with the federal regulations at 40 CFR 131.10. Societal changes are not broadly covered, and this is likely due to the recognition that it is these behaviors that the Clean Water Act is trying to influence.</i></p> <p>This section needs to be more specific. What is the definition of human structural changes? Will there be any funds available for site-specific studies? (Longview)</p> <p>RESPONSE: <i>We have clarified this allowance is just following the federal regulations at 40 CFR 131.10.</i></p> <p>This is a particularly appropriate location to address the concerns discussed above under 200 (c)(i) and the suggested solutions. In addition, the department should note its reluctance to arrive at the conclusion that certain human structural changes “cannot be effectively remedied.” The ramifications of this simple phrase are significant in both the short and long-term. In addition, the reference to a “further human effects allowance” here, and elsewhere in the proposed rules, does not suggest that there are any bounds to when such an allowance can be given. Where the criteria have been adjusted as suggested in this section, surely there are waters where the species simply cannot tolerate any additional risk, including the risk that any regulated human source is likely to be complemented with completely unregulated human sources. It is unclear what the department means by “alternative criteria target.” The word target should be removed. In addition, the department should specify how this additional allowance will be approved as a change to water quality standards. (NEA)</p> <p>RESPONSE: <i>We have clarified this allowance is just following the federal regulations at 40 CFR 131.10. As part of those rules, protection of existing uses figures prominently.</i></p> <p>Part (2) needs to be clarified that dams are not assumed to be an irreversible human structural change. Human constructed structures can eventually lose their benefit to society, and could (and have) been removed.</p> <p>RESPONSE: <i>We have clarified that in order to qualify for this exception, the federal regulations at 40 CFR 131.10 would need to be adhered to.</i></p>
<p>201A-260(3) Procedures</p>	
<p>(39a) 201A-260 (3) Procedures</p> <ul style="list-style-type: none"> Clarification 	<p>This section should include a statement that the department intends to apply the use designations, narrative criteria, and antidegradation policy at every instance where water quality standards are interpreted, applied, or implemented. (NEA)</p> <p>RESPONSE: <i>This appears unnecessarily redundant given the many times in the regulation that this statement of intent is already included.</i></p> <p>Section (3) Procedures. . . “In applying the appropriate water quality criteria for a water, the department will use the following procedure: a) The department will establish water quality requirements for water bodies, in addition to those specifically listed in this chapter, on a case-specific basis where determined necessary to provide for full support for existing uses. b) Upstream actions must be conducted in a manner that meets downstream water body criteria. (CRITFC)</p> <p>RESPONSE: <i>We are adopting consistent language.</i></p>
<p>(39b) 201A-260 (3)(a) Procedures</p>	<p>Delete section 260(3)(a), dealing with development of case-specific requirements. (Seattle City)</p> <p>RESPONSE: <i>This states an important factor in our obligation to protect designated and existing uses and we find that it is important to retain.</i></p> <p>(3)(a) - This alleged procedure for providing full support for existing uses is really</p>

<ul style="list-style-type: none"> Requirements for full support 	<p>nothing. How does the department propose to make the initial finding that additional requirements are “determined necessary”? (NEA) RESPONSE: It will be used where and when evidence is presented or developed. It is not intended to be a methodology that is followed but a requirement to ensure that uses are protected even if the source of the harm is from parameters not in the water quality standards. It provides the mechanism to meet the primary requirement to fully protect uses.</p> <p>Ecology’s reservation for itself of the right to establish additional site-specific criteria to protect uses is not sufficient to resolve the lack of meaningful criteria. (National Wildlife Federation) RESPONSE: Ecology will continue to strive towards adopting criteria for parameters that are problems in the state as the main course for protecting uses. However, we will never have criteria for every possible pollutant and source of water quality degradation. This clause is important regardless of the amount of criteria that we adopt.</p> <p>The regulatory implications of this subsection are not obvious. The subsection should be redrafted to provide clarity or it should be deleted. Comment opportunity should be provided if the section is redrafted. What is an example of a “water quality requirement” that is not already “specifically listed” in WAC 173-201A which might be necessary to achieve full support for existing uses? (Weyerhaeuser) RESPONSE: See the previous three responses.</p>
<p>(39c) 201A-260(3)(b)</p> <p>Procedures</p> <ul style="list-style-type: none"> Protection of downstream uses 	<p>This section should be reworded to say: “Upstream actions must be conducted in a manner that does not cause or contribute to violations of downstream water body criteria.” (PacifiCorp) RESPONSE: This is a good suggestion that better reflects the intent of the sentence and we will make the change in wording suggested.</p> <p>The word “meets” should be “meet.” (NEA) RESPONSE: The correction has been made.</p> <p>(3)(b) - This section should reference the requirement to meet the downstream water quality standards of other states. (NEA) RESPONSE: We do not believe this clarification is necessary. We reserve the right to challenge determinations made by other political jurisdictions.</p> <p>If there are numerous sources to a water, then the most downstream users may cause the water body to exceed standards, but an upstream source may actually be a large contributor. (Oregon Office of Energy) RESPONSE: We agree and all sources must be controlled in a manner that meets standards .</p>
<p>(39d) 201A-260(3)(c)</p> <p>Procedures</p> <ul style="list-style-type: none"> Most stringent criteria applies 	<p>In 260(3)(c) the plural 'criteria' is used. It may be correct, but it may not be. (King County) RESPONSE: Comment noted.</p>
<p>(39e) 201A-260(3)(d)</p> <p>Procedures</p> <ul style="list-style-type: none"> Boundary of water bodies 	<p>In Section 260(3)(d), the definition of a boundary should be clarified. (Seattle City) RESPONSE: We do find a definition necessary for the word “boundary”.</p>

201A-260 (3)(f) Human Created Waters

(40a) 201A-260
(3)(f)

Human created waters

- Clarification

We read this language as applying to stormwater treatment ponds, a positive change that we heartily endorse. (Seattle Port)

RESPONSE: *That is a correct reading.*

Under this subsection, stormwater is alternately regulated (when it's in the pipe), then unregulated (when it's in a pond) and then regulated again (when it flows out of pond into another pipe). Ecology should delete that final sentence from 260(3)(f), and amend the first sentence to recognize stormwater conveyance systems. (Seattle Port)

RESPONSE: *The first sentence provides an exemption from the criteria for human-created waters managed for removal or containment of pollution. Stormwater that is just ditched to natural surface waters is not intended to be exempted. This is consistent with federal regulations and EPA views on the application of the water quality standards.*

The section should be extended to provide that numeric criteria do not apply to storm water drainage ditches and other ephemeral human-created waters that would not provide habitat for fish and other aquatic life for which the numeric criteria were established. (PacifiCorp)

RESPONSE: *The language that was proposed represents a retraction in coverage from an earlier draft. We are not planning to broaden it again. The current approach is consistent with federal regulations and EPA views on applying standards. The broader approach was not viewed as consistent and adding it back at this point in time would not be appropriate. In practical application, however, there is flexibility in the standards with the use-based approach to ensure that the criteria applied are appropriate for the specific water body in question.*

Sub-section (f) should be clarified and broadened to: 1) Substitute "human-created waters" for "human-created water bodies" or, preferably, "human-created water collection and treatment systems managed for the removal or containment of pollution"; 2) It is not reasonable to expect that artificial ditches and stormwater facilities designed and built for other purposes will meet all the numeric and narrative criteria applicable to natural water bodies; and 3) Numeric criteria should not apply to ephemeral stormwater conveyance systems. (Weyerhaeuser)

RESPONSE: *See previous response. While we do not believe ephemeral waters should be exempted, we would agree that more guidance would be beneficial to applying the standards to such waters.*

(3)(f)(i) - The idea of this section is fine but it is not clear that it will never be implemented because there is no hint of a process the department would use to determine whether a farm pond was creating an unreasonable risk to human health or other uses. (NEA)

RESPONSE: *You are correct that no process exists or is likely to be developed to examine private farm ponds. The application would be case by case.*

(3)(f)(ii) - The word "downstream" should be changed to "receiving stream." (NEA)

RESPONSE: *This is existing rule language terminology and we have not experienced problems with it. Additionally, we do not define receiving stream and so this change may create undesired ambiguity. It is not clear what benefits are expected through the suggested change or concerns with the existing language.*

Although we recognize Ecology's need to account for the fact that irrigation drainage ditches have not and do not contain suitable habitat for salmon, and therefore should not be held to stringent temperature, silt, and oxygen standards, we suggest that a specific exemption be made for irrigation ditches or other artificial waterways, if there is a legal and meaningful way to do so. (PAS)

RESPONSE: *We believe that we have gone as far as we can in this rulemaking to exempting ditches of any kind and still have the rule package approved as meeting the*

	<p><i>federal regulations for use protection and water quality standards. Those water channels that function as treatment systems can be treated more like treatment systems under the state standards. Those that just channel water do not fit this characteristic. The changes in the standards associated with the use-based system can assist the situation with agricultural drainage waters by ensuring that the criteria applied better match the uses of those waters. There may be other ways to even more precisely assign uses and criteria to irrigation systems, but the technical ground work has not been identified or established in this rulemaking.</i></p>
<p>(40b) 201A-260 (3)(f)</p> <p>Human created waters</p> <ul style="list-style-type: none"> Exclusion of ditches 	<p>WAC 260(3)(f) excludes irrigation ditches from the general exemptions described in the paragraph which implies that irrigation ditches have more than one beneficial use when in fact they do not. (SCBID)</p> <p>RESPONSE: <i>It is well known that irrigation systems support a wide variety of beneficial uses, the opinion that they are only intended to support conveyance for agricultural water and thus all the other uses that occur need not be protected does not in our view meet with our obligations under either state law or the federal regulations governing water quality standards. See previous response.</i></p> <p>Why can't alternative criteria be set for irrigation district systems without conducting a UAA? 40 CFR 131.10(k) seems to indicate that it can. It is suggested that proposed section 430 be referenced. (WDOA)</p> <p>RESPONSE: <i>A UAA is necessary when a state or tribe is establishing less stringent uses, but not when it is applying more stringent uses. This is the long-standing position of the USEPA. The reference in (k) to the broad goals of the federal Clean Water Act can be interpreted as EPA is doing. The CWA goal is to provide". . . for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water. . . " Removing swimming and aquatic life uses from irrigation district waters, as is commonly suggested, does not fit this goal. Ecology is willing to explore with any stakeholders the specific situations and how they do or do not require UAAs under the federal rules. Additionally, all of the tools in Part IV of the proposed standards are available to irrigation waters as well as all other surface waters.</i></p> <p>Ecology needs to either extend the exemption offered for human-created waters (WAC 173-201A-260(3)(f)) to conveyances such as Lacamas Ditch, which was created in the early 20th century as a mill water supply, or apply its "use-based" approach in reclassifying this water body as industrial use only. (GPC)</p> <p>RESPONSE: <i>See previous responses on the human created waters provision above. Further, a specific study called a use attainability analysis would need to be done to change the uses for Lacamas Ditch. Such a study cannot be accommodated in this rulemaking.</i></p> <p>(3)(f) - We support the exclusion of irrigation and drainage ditches from the general exemption created for farm ponds. (NEA)</p> <p>RESPONSE: <i>Your support is noted.</i></p> <p>The final sentence seems to be saying that the numeric criteria of the chapter do in fact apply to conveyance ditches. But the 'only' in there seems to suggest that conveyance ditches should not have to meet WQ criteria. (King County)</p> <p>RESPONSE: <i>We have modified the language and believe that it will be more clear that conveyances that are not being used as treatment systems are not exempt.</i></p> <p>The human created water section should apply to ditches and swales. (Seattle City) (Seattle Port)</p> <p>RESPONSE: <i>The rule would apply to those ditches and swales that are a part of a stormwater treatment system. Neither the federal rules nor state law provides for the exemption from state standards just on the basis that the water body was created by humans. We have the ability to select and apply criteria that protect the attainable uses of the system. We can grant the exemption from specific criteria for the stormwater treatment works because they function in a manner similar to a waste water treatment plant which is not required to comply in the holding/treatment basins but instead upon leaving the treatment system. EPA agrees that it is acceptable to extend the concept to</i></p>

	<p><i>stormwater treatment systems as well.</i></p> <p>What about a road side ditch designed to convey untreated runoff to a water quality treatment facility? Many ditches themselves are designed to function as water treatment facilities. Ditches should be exempted. (WDOT)</p> <p>RESPONSE: <i>If they are designed to function as part of a water treatment system then they are covered by the exemption. If only part of the water flows into treatment BMPs and the other part flows directly to other surface waters, then only the part that undergoes treatment is exempt.</i></p>
<p>201A-260(3_(i) Wetlands</p>	
<p>(41) 201A-260 (3)(i)</p> <p>Wetlands</p> <ul style="list-style-type: none"> • Clarification 	<p>This section should be revised to expressly exclude wetlands from the application of numeric water quality criteria, and especially the criteria for temperature, dissolved oxygen, and pH. (PacifiCorp)</p> <p>RESPONSE: <i>We have not proposed any changes to the wetlands portion of the rule and could not entertain making any substantial changes at this point in the rulemaking.</i></p> <p>Paragraph (3)(i)(i) describes “ground water exchange, shoreline stabilization, and storm water attenuation” as “beneficial uses.” These are more appropriately described as functions and benefits of wetlands. To avoid confusion, this paragraph should be deleted. (PacifiCorp)</p> <p>RESPONSE: <i>We have not proposed any changes to the wetlands portion of the rule and could not entertain making any substantial changes at this point in the rulemaking.</i></p> <p>It would be helpful to explain how authorized wetland fills or other authorized actions that degrade wetlands are consistent with water quality standards that may apply to those wetlands. (PacifiCorp)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The section is not very focused. Wetlands protection is covered under other laws. Unless unique standards are being set for wetlands, there is no reason to include text on which delineation manual to use, etc. (WDOT)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>(3)(i)(i) - We agree that wetlands “may have existing beneficial uses that are to be protected that include ground water exchange, shoreline stabilization, and storm water attenuation.” However, the use designation section of the rules does not include such attributes. We suggest that the use designations include such a description. (NEA)</p> <p>RESPONSE: <i>See previous response. Further, it is adequate that they are listed in this section for protection to occur.</i></p> <p>(3)(i) - Since the proposed antidegradation provisions do not mention wetlands, except for the unique characteristics of bogs that might warrant outstanding resource water (ORW) designation, this is meaningless. Nothing in the antidegradation section addresses the major threats to wetlands (e.g., fill, sedimentation, exotic species, dewatering) and nothing addresses the specific processes by which wetlands are supposedly afforded protection (e.g., fill permits). At a minimum, the antidegradation section should specifically note which general permits (fill and NPDES) have negative effects on wetlands and explain how they will apply to wetlands protection. (NEA)</p> <p>RESPONSE: <i>See previous response. There would not be a trigger for a Tier II review if the degradation of wetlands only includes changes to the hydrology that otherwise does not impact temperature, oxygen, turbidity, toxics, etc. But in most cases of significant degradation, we would expect these other parameters to be impacted as well so a Tier II analysis seems likely. Tier I protection refers to protection of the uses, and subsection 3(i) provides these important and unique wetland uses. Thus there is coverage beyond the limited eligibility for wetlands in Tier III. As to general permits,</i></p>

	<p><i>when the programs are developed and reviewed they need to evaluate the general impacts and ability to comply with standards. As wetlands are waters of the state subject to protection under the standards, they would need to be considered along with streams, lakes, etc.</i></p> <p>There are no criteria for wetland protections. (Aagaard) RESPONSE: <i>The section in 260(3)(i) clarifies wetland protections.</i></p>
<p>201A-300 Antidegradation</p>	
<p>(42a) 201A-300 Antidegradation</p> <ul style="list-style-type: none"> • Support Purpose 	<p>We support development of the new section “Antidegradation”, its stated purpose, and the use of three levels of protection referred to as Tier I, Tier II, and Tier III. (USFWS) RESPONSE: <i>Your support is appreciated.</i></p> <p>To continue to work to stop quality degradation and reverse it where possible and economically feasible is very important. (Campbell Group) RESPONSE: <i>Your support is appreciated</i></p> <p>We commend Ecology for coming into federal compliance by drafting an Antidegradation Implementation Plan, and for incorporating this into the standards rule. (American Whitewater) RESPONSE: <i>Your support is appreciated</i></p>
<p>(42b) 201A-300 Antidegradation</p> <ul style="list-style-type: none"> • Purpose needs more clarification 	<p>Antidegradation implementation procedures should be further clarified to ensure that the intent of the antidegradation policy is supported. (EPA) RESPONSE: <i>We recognize that supplemental guidance will be necessary to assist in the application of portions of the antidegradation program.</i></p> <p>In 300 (2) - The language of this sentence should be changed to read, “can or cannot be lowered,” so that it does not imply that the antidegradation provisions are primarily a matter of whether water quality can be lowered. It’s a semantic but important clarification. (NEA) RESPONSE: <i>We are substituting “can” with “may” in the final version which we believe is a simpler way to address the issue.</i></p> <p>In 300(5) - The department should clarify its intent to apply the antidegradation policies and procedures using a parameter-by-parameter approach. We commend the department for increasing the clarity in this section, using the phrase “protections” when discussing the tiers, and using federal language on outstanding resource waters. (NEA) RESPONSE: <i>We appreciate your comment on the clarity. We have tried to make the application to parameters clear by using the phrases such as “Whenever a water quality constituent is of a higher quality than a criterion designated . . .”.</i></p> <p>(5)(a) - We support the department’s inclusion of designated uses in this section. While easy to read, this version does not completely incorporate federal requirements. (NEA) RESPONSE: <i>We appreciate your support and believe that we have adhered to the federal requirements in creating this antidegradation program.</i></p> <p>(5)(b) - Rather than assuring waters of a higher quality than “standards,” this should be reworded to say “higher than the minimum required by (existing and designated) beneficial uses and (numeric and narrative) criteria.” The primary reason is that antidegradation is a part of the legal definition of a water quality standard so it becomes circular to cite to meeting of standards as a part of the definition of Tier II protections . (NEA) RESPONSE: <i>Agreed. We had not recognized the circular language and have made changes that refer to the “criteria assigned”.</i></p> <p>Keep the existing rule language in 070(1) which reads ‘existing beneficial uses shall be ...’ (Mark1) RESPONSE: <i>We agree that the old language is better in that it focuses the need for</i></p>

	<p><i>protection on the uses rather than just on water quality. We have made some slight changes to be more consistent with federal regulations by referencing both existing and designated uses.</i></p> <p>Under Antidegradation, what are the appropriate and definitive steps to bring the water quality back to levels which meet the water quality standards (Kittatas Co CDS) ?</p> <p><i>RESPONSE: This language is meant to be open-ended and applicable to programs that exist now, such as the TMDL and NPDES permitting programs, as well as to future programs and tools developed and available to the department.</i></p>
<p>(42c) 201A-300</p> <p>Antidegradation Not stringent enough</p>	<p>The antidegradation rule may allow degradation of the existing baseline conditions and does not appear to require impact reduction measures to offset potential harmful effects to listed fish. (NMFS)</p> <p><i>RESPONSE: Measurable degradation by categories of actions covered under Tier II would be required to investigate, and use where feasible, alternatives that are non-degrading or less degrading than would otherwise be required.</i></p> <p>The potential change in antidegradation is a potential change to the lowest common denominator. The anti-degradation standard has provided the single strongest protection of Washington’s waters, and has been pivotal in court decisions that link water quantity with quality. I see no need to continue to lower our overall sights and desires from the best possible to “just scraping by.” (George) (KRCG)</p> <p><i>RESPONSE: The portion of the rule that has been pivotal in the Elkhorn decision, which is what we assume you are referring to, has been retained. The antidegradation program we are adopting meets federal requirements and we believe can be implemented on the ground. We believe this will result in better water quality protection.</i></p> <p>Ecology’s antidegradation policy is far too weak and contains too many loopholes. It should not allow degradation beyond existing conditions even if the existing conditions met or exceed CWA requirements. The policy is too restrictive in identifying actions that would trigger a review. Existing activities that are not currently permitted or certified must be included. All activities that have the potential to diminish water quality should be required to comply with antidegradation not just those Ecology permits. Ecology must include an evaluation of the benefits of clean water in determining overriding public interest. The loophole for general permits and programs fails to meet antidegradation requirements. (American Rivers) (KRCG) (NSBK) (Luster)</p> <p><i>RESPONSE: The antidegradation section was designed to meet the federal requirements. Tier II requires unique pollution prevention and social needs tests to determine overriding public interest. No person or entity is exempted from adhering to Tier I or III of the antidegradation program. General permits are not given a loophole; they must develop plans for using adaptive management to get the programs into compliance with the standards. This is a very meaningful level of protection and direction for the general permit program.</i></p> <p>Although the antidegradation policy has always been difficult to implement because it is so vague, the proposed changes are not an improvement. The antidegradation policy is too narrowly defined and it provides numerous exceptions to allow for lesser water quality. (Steffensen)</p> <p><i>RESPONSE: The antidegradation section was designed to meet the federal requirements. We reviewed other state’s antidegradation plans and EPA recommendations, and believe this rule has very similar coverage to other states. The limits on Tier II application are intended to focus on permits and programs that the department has jurisdiction over, and on those actions that will cause a measurable change and therefore not require resources to be used on insignificant actions. Ecology staff can focus their attention on a fewer number of Tier II analyses and therefore do a better job ensuring the goals of Tier II are met. Ecology also believes this provision will encourage entities to minimize their pollutant discharges so that they can avoid a Tier II analysis when possible.</i></p>

	<p>We commend Ecology for its efforts to fully implement the antidegradation requirement of the Clean Water Act. Unfortunately, Ecology’s proposed antidegradation policy will not adequately protect waters from degradation. (WPIRG)(American Whitewater)</p> <p>RESPONSE: <i>The antidegradation section was designed to meet the federal requirements, which were not intended to prevent all degradation of water quality, but to make sure that the lowering of water quality for higher quality waters is “necessary and in the overriding public interest.” We believe the language in Tier II adequately meets the federal antidegradation requirements, and will provide a “pollution prevention” aspect for higher quality waters that is not as evident in the existing rule.</i></p> <p>The rule should contain an antidegradation policy that ensures that all our state’s waters are protected from further degradation, provides the public with meaningful opportunity to protect Washington’s waters, and avoids unnecessary political hurdles. (758 commenters, see Appendix 1) (Belzer) (CRC) (Raisler) (Mountaineers)</p> <p>RESPONSE: <i>See comments above.</i></p> <p>Recommend keeping the existing antidegradation standards and strictly enforcing them. We recognize that some guidance will be needed to help with that implementation (Chehalis Tribe)</p> <p>RESPONSE: <i>EPA is requiring all states to develop implementation plans to meet the intended policy. We will develop additional guidance on aspects of the plan, especially Tier II.</i></p>
<p>(42d) 201A-300</p> <p>Antidegradation</p> <ul style="list-style-type: none"> Application 	<p>We recommend that Ecology commit to a review of its antidegradation implementation procedures after a set initial period, such as three years. A review within a few years could be an opportunity to re-check both the expectations and the performance of the implementation program you have designed. (EPA)</p> <p>RESPONSE: <i>We are continuously evaluating our programs and will plan to evaluate antidegradation as well.</i></p> <p>These antidegradation protections must apply to all pollution sources, including nonpoint pollution sources, which do include the agricultural pollution. Agricultural pollution is the last and largest unregulated source of pollution in our state, and we must find a way to address these problems, and blanket exemptions will not do the job. (Linholdt)</p> <p>RESPONSE: <i>New and revised Pollution Control Programs that are developed and administered by Ecology will go through antidegradation Tier II requirements during development of the program. Until a specific program is developed, the Nonpoint Source Pollution Control Program uses voluntary measures to protect waters from land uses that cause nonpoint source pollution, such as agriculture. Pollution from land uses are also controlled at the county or local level.</i></p> <p>Despite assurances in the preceding rules, at WAC 173-201A-260(c)(i), that the antidegradation policy is sufficient to protect wetlands, there is nothing in the policy that has that effect. Although Washington has traditionally deemed all its waters that are not impaired and are not ORW (although, of course, none currently exist) to be high quality waters, it seems prudent to include this approach in the rule language itself. This would also be an appropriate location in the rules for the department to clarify whether it takes a parameter-by-parameter or classification approach to such designations. (NEA)</p> <p>RESPONSE: <i>There would not be a trigger for a Tier II review if the degradation of wetlands only includes changes to the hydrology that otherwise does not impact temperature, oxygen, turbidity, toxics, etc. But in most cases of significant degradation, we would expect these other parameters to be impacted as well so a Tier II analysis seems likely. Tier I protection refers to protection of the uses, and sub section 3(i) provides these important and unique wetland uses. Thus there is coverage beyond the limited eligibility for wetlands in Tier III. Further, since this section is meant to provide an overview we have simplified descriptions, which are followed by sections that have details, such as application on a parameter basis.</i></p> <p>Under the proposed Antidegradation Policy if a water body is not functioning at a laboratory defined optimal condition then human activity can be restricted. Fish use is the primary use and the most restrictive use. The policy states “the department will take</p>

	<p>appropriate and definitive steps to bring the water quality back to levels which meet the water quality standards”. Please define “appropriate and definitive steps” and tell me how much they will cost. (Meenach)</p> <p>RESPONSE: <i>This refers to all the legal tools and programs the department has at its disposal to bring about compliance with the standards. These include mechanisms such as voluntary agreements, memorandums of understanding, administrative orders, permits, and load allocations developed under TMDLs. There is no way to estimate the costs given that we have no idea what tool will be used where and when. Further, this is not a new requirement but is an obligation under the existing standards. Portions of the antidegradation program just explain what is already required since it is developed in part to satisfy the USEPA regulatory requirement to explain the how the program will be implemented.</i></p> <p>The antidegradation decision process is open ended and does not integrate the Tribes as co-managers. (Squaxin Tribe)</p> <p>RESPONSE: <i>It is not clear what is meant by the process being open ended. Ecology was given the authority and responsibility for implementing the water quality standards program and this antidegradation program reflects that charge. We will be developing further guidance on implementing antidegradation, which may help define what appears to be “open ended.” Ecology is always willing to look for meaningful and legal roles for the tribes in our review processes, and antidegradation is no exception.</i></p> <p>Antidegradation policy implementation must not be a roadmap for permitting new and continual declines in water quality. Broad public and tribal notice must be required for any proposal that will lower water quality parameters that support anadromous fish uses. The proof of overriding public interest needs to be judged against the full array of tribal benefits. Programmatic exemptions and general permits should not be grand-fathered into the implementation plan. (CRITFC)</p> <p>RESPONSE: <i>The program will include public notification associated with the action that is being reviewed. The tribes should certainly be on those notification lists. In evaluating the benefits and costs, tribal interests can be incorporated in the considerations. General permits are not exempted; they must be developed to meet the standards and are directed to use an implementation plan to test and incorporate BMPs as the permit program develops.</i></p> <p>Non-point sources and current sources, reviewable at the time of permit renewal, should be included in the antidegradation plan. These are the sources responsible for the majority of degradation now occurring in our waters. (NSBK)</p> <p>RESPONSE: <i>Antidegradation Tier II does not apply to existing facilities since they have already invested heavily in their locational and facility design choices. Tier II is a pollution prevention program that works best at the facility design stage. Tier II will only apply to nonpoint sources that have programs developed and administered by Ecology, since otherwise there is no mechanism to trigger the Tier II review.</i></p>
<p>(42e) 201A-300</p> <p>Antidegradation</p> <ul style="list-style-type: none"> Concerns with stringency 	<p>Antidegradation would result in a no net loss water policy for the state. It would prevent withdrawals, even if the impact was immeasurable. (WSHA)</p> <p>RESPONSE: <i>Water allocations may take into consideration the impact to water quality and the water quality standards, but the standards and the antidegradation requirements are just some of the factors considered in authorizing water withdrawals. Additionally, only Tier III has a provision that applies non-degradation protection and Tier II specifically lists those activities that are to be considered. This list does not include water withdrawals.</i></p> <p>The new language “restore and maintain” is a major deviation from the current “maintain and protect.” We believe this new language constitutes a significant expansion of authority without legislative approval. (Seattle Port)</p> <p>RESPONSE: <i>State law is strongly directed towards securing and maintaining the highest possible standards to ensure the purity of all waters of the state and directs Ecology to participate in the application of the federal Clean Water Act and its programs which include the requirement to restore and maintain the quality of the</i></p>

	<p><i>Nation's waters. Restoration is also going to be a necessary component of securing stable aquatic populations by improving previously degraded habitat and this is necessary to protect existing uses. The department is further directed to extinguish all sources of degradation to the waters of the state, which is also going to result in restoration. We believe restoration is well within our authorities and directives under state law (see chapters 90.48 RCW and 90.54 RCW).</i></p> <p>The anti-degradation element of the proposed rule is interpreted to mean that local government is creating a "Base-Line" from which no water quality shall fall below, even if that water body is meeting the established standards. With the great strides that have been made over the past decade in this area it is not realistic, practical, or fair to impose this increased burden on our constituents. (Island County)</p> <p><i>RESPONSE: This is not what the proposed regulation proposes to do. It ensures that standards are maintained, that high quality water is only measurably degraded by a category of regulated entities if necessary and in the public interest, and that specially qualified waters adopted through a public process as being outstanding can be protected from future degradation.</i></p>
<p>(42f) 201A-300</p> <p>Antidegradation</p> <ul style="list-style-type: none"> • Protection of cold water refugia 	<p>We recommend that coldwater refugia should be identified and protected in a process similar to the one developed in the State of Oregon. (USFWS)</p> <p><i>RESPONSE: Our discussions with Oregon suggest that they are still working on trying to create a process, and that no process exists at present. We do not want to establish a requirement that will be highly controversial and that may be difficult to implement.</i></p> <p>With the allowance for 2.8°C increase for nonpoint sources and 1.6°C for point sources it is unclear what the standard is for recovery. If you would allow 16°C at both the downstream and upstream end of a salmon spawning/rearing area then it is clear that there is no intention to manage water temperature on a system basis whereby colder waters are needed in headwater areas. Section (3) is good. You should not allow additional human impact in waters where natural conditions are stressing fish species (CRITFC)</p> <p><i>RESPONSE: It is correct that if the standards could be met at both the upstream and downstream extents of a use class, then that would be in compliance with the standards. The programs that we use in Washington, such as the Forest and Fish timber harvesting rules, provides effective requirements for protecting headwater that end up maintaining colder waters in the headwater portions even though the standards would on paper allow them to be warmer.</i></p> <p>Considering the case of headwater streams, with temperature increases to be caused by shade removal, it is not clear whether any meaningful Tier II process would occur. First, section 200(c)(ii) appears to allow an incremental increase of 2.8°C (Which we believe is too large, especially without an analysis of impacts on fish habitat). As it affects anti-degradation, would this provision supersede the Tier II analysis threshold of 0.3°C set in section 320(2)(a)? Even if not superceded, it is unclear the action would fall under the Ecology authorities listed in section 320(3)(a-d). Without a Tier II analysis, there would be no administrative authority to make sure the change would be in the overriding public interest. (WDFW)</p> <p><i>RESPONSE: Tier II is applied if a regulated action is expected to cause more than a 0.3°C increase in temperature. This requirement supercedes the 2.8C incremental allowance. The 2.8°C increase is in our existing rules and has been carried forward with only the clarification that it is to be used as a cumulative standard for the water body.</i></p>
<p>(42g) 201A-300</p> <p>Antidegradation</p> <ul style="list-style-type: none"> • Allowance for dam removal 	<p>For water bodies that have been altered by dams or other human structures or activities, it is essential that this provision not be construed to prohibit restoration of the water body to its original condition or function. We suggest adding: "WAC 173-201A-300 through WAC 173-201-330 shall not apply to the restoration of instream uses or conditions that existed before human-caused alteration of a water body or to actions taken to effect such restoration." (PacifiCorp)</p> <p><i>RESPONSE: Based on comments, we are including more specific language in the</i></p>

	<p><i>antidegradation section that clarifies how protection of existing uses is to be interpreted where those existing uses include uses that occur in response to human alterations of natural systems. This should address the concern that the standards can be used as a tool to interfere with efforts to restore healthy stream conditions to preserve pollution tolerant species of native species, or reservoir species over riverine species, etc. The water quality standards are not intended to prevent habitat restoration that is determined to be appropriate.</i></p> <p>The proposed changes in the antidegradation language are inconsistent with federal law. The U.S. Supreme Court recognized that states must implement antidegradation in a manner consistent with existing uses of the stream. Ecology is proposing an exception for “major watershed restoration activities that will provide greater benefits to the health of the aquatic system in the long term (such as removing dams...) which, in the short term, may cause significant impacts to designated uses. The proposed rule is vague and inconsistent with regard to the federal antidegradation mandate regarding minimum protection of existing uses. (FP&S) RESPONSE: <i>See previous response.</i></p> <p>Proposed changes to the state's antidegradation policy would allow acute degradation, such as the unmitigated release of 2.4 million cubic yards of sediment and debris from behind Condit Dam without adequate environmental safeguards. The proposed language in WAC 173 is vague and inconsistent with federal antidegradation standards. An attempt to classify the Condit Dam Blow-and-Go Method of dam removal as a major watershed restoration activity having short-term impacts, is, at best, a stretch. (Struck) RESPONSE: <i>The changes do not authorize any specific project. The changes do allow the short and long-term environmental costs and tradeoffs to be weighed when determining watershed restoration that would have the overall environmental benefits that justify the restoration action.</i></p> <p>It is likely that dam removal will cause changes in use which will not be reversible. If the dam is removed, there would presumably result in a change of Aquatic Life Uses. Other uses will also change irreversibly, such as recreational use on the pool behind the dam. I would suggest that Antidegradation be amended to allow for a change of use, especially “existing uses... must be protected and maintained.” (Arnold) RESPONSE: <i>We have clarified that antidegradation does not prevent restoration of natural uses, and that short term harm to desired uses or elimination of artificially created uses can be allowed if the long term benefits from restoration are greater.</i></p> <p>Tier I does not appear to allow modifications in order to meet restoration goals; language that reconciled Tier I and Section 410 appears to have been removed. Section 310, as written, may prevent us from restoring our reservation’s treaty fisheries. (LEK Tribe) RESPONSE: <i>See previous response.</i></p> <p>Policy should allow for important river restoration projects and accommodate the impacts to uses that can occur along with such efforts. Clarify that where necessary to benefit the river ecosystem and when in the public interest, long-term impacts to certain existing beneficial uses may be permitted. (FOTWSR) RESPONSE: <i>See previous response.</i></p>
<p>201A-310 Tier I Antidegradation</p>	
<p>(43a) 201A-310</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> Clarification 	<p>Ecology should clarify how to it will identify when an existing use exists but is not designated. Without a clear process, it will be impossible to trigger analysis for Tier I waters. (WPIRG) RESPONSE: <i>We do not have a process developed, but may be able to include some guidance in the future. Typically the broad extent of the uses applied under our state standards makes this a minor risk. When almost all waters are protected for salmonid spawning and primary contact recreation, and almost all marine waters are protected for shellfish harvesting and primary contact recreation, there was no other sensitive</i></p>

	<p><i>uses likely to have been omitted. But with char protection now in place in the rule, there may be reason to discuss in guidance how existing uses that are not designated should be identified and protected.</i></p> <p>Ecology should clarify that Tier I protection will apply to general permits and that general permits will be prohibited for pollutants in waterways impaired by the pollutant. (WPIRG) RESPONSE: <i>We have added additional application information in Section 300 in addition to the mandate in the general permits subsection that directs the program to meet the requirements of the chapter.</i></p> <p>The definition of human actions is so broad that almost any human presence/activity could be construed as the cause of a water quality violation in this section. (WDOT) RESPONSE: <i>It is intended to be broad enough to cover any human action that would harm water quality. This is consistent with state law and is our long-standing position.</i></p> <p>The general narrative requirement that water quality be adequate to support each classification should not be eliminated. (Ianniello) (KRCG) (Kelly) RESPONSE: <i>We have added back in the existing regulatory language that is more directed to the requirement to protect uses not just meet criteria that is a better match with the purpose of antidegradation Tier I.</i></p> <p>What language in the federal requirements for state anti-degradation policies does Ecology interpret as allowing the anti-degradation requirement to be limited to the areas outside designated zones of acute and chronic toxicity? (CRK) RESPONSE: <i>The federal regulations do not restrict application to within or outside of mixing zones. We believe it is not appropriate to apply within a mixing zone if we are setting the threshold at causing a measurable change to the quality of the water body. The effect to the water body will only be obvious after dilution has occurred.</i></p>
<p>(43b) 201A-310</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> Water quality-limited waters 	<p>Is a “degraded water” synonymous with a water body segment listed as being impaired and on the 303(d) list? If so, the language should be “For 303(d) listed impaired waters, the department will take...”. If the agency intends “degraded waters” to represent a different category of waters, a definition of the term should be offered and an opportunity for comment provided. (Weyerhaeuser) RESPONSE: <i>Degraded waters mean the water body does not meet the water quality standards. The 303(d) list is a federal requirement, and the listings are not a direct translation of the standards but incorporate policy overlays that are designed to focus more on the significant & persistent impaired waters. Therefore, we do not believe it is appropriate to specifically mention the 303(d) List. Practically speaking, however, the list will function as the key indicator for determining where to apply this provision.</i></p> <p>If a given water body is listed as water quality limited for any pollutant, then it is our belief that it must be assumed that existing uses are not being protected and relaxation of standards for a different pollutant is not appropriate. (CRK) RESPONSE: <i>We do not concur that a discharge should be categorically prohibited that does not involve parameters that are in violation of the standards. Ecology must be sensitive to avoiding unnecessary economic impact.</i></p> <p>How does one determine if waters are degraded with regards to various water quality constituents? (USACE) RESPONSE: <i>It generally would require that data be collected, or available, for the water body. In some cases Ecology has data sufficient to make the determination. In others data will need to be collected as part of the approval process for projects. This is a standard procedure unrelated to the change in the standards or the establishment of the antidegradation revision. It involves determining compliance with the criteria which is required for approval of all actions.</i></p> <p>Is the directive to “bring the water quality back to levels which meet water quality standards” a reference to 303(d) and TMDLs. (Kalispeel Tribe)? RESPONSE: <i>Ecology has many tools and programs at its disposal to bring waters into</i></p>

	<p><i>compliance with the standards and the 303(d) listing process is only one of them. We may use permits, administrative orders, educational programs, referrals to conservations districts, and a variety of other means to bring waters back into compliance.</i></p>
<p>(43c) 201A-310</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> • Application 	<p>Tier I should not preclude a new or expanded action that has no measurable effect on water quality. (PacifiCorp)</p> <p><i>RESPONSE: Our approach is consistent with the federal language that suggests the quality of the water body would be lowered. The federal language does not suggest it is to be applied where a discharge occurs to a water body that does not cause the quality of the water body to be impacted. We believe this is a reasonable way to implement the federal regulations and results in a less burdensome rule for industries and municipalities than if we were to have taken a very strict interpretation and assumed any addition of pollution triggers a review.</i></p> <p>Assuming Tier I compliance when data is not available is not acceptable. Reliance on BMPs without regard for actual use-attainment does not provide the needed level of protection. Use support should not be limited to criteria attainment. (Lummi Tribe)</p> <p><i>RESPONSE: We cannot categorically require testing of streams and effluents for every pollutant and must use professional judgment to identify pollutants that may likely be present. To authorize most actions requires that we have data on compliance since permits must be set to meet standards. Forest practices rely on BMPs determined to typically meet water quality standards and adaptive management. We have also included the existing language that focuses on the need to protect uses rather than just meet criteria.</i></p> <p>There is nothing in this section of the rules that refers to the triggering issue for existing uses, namely their identification as existing but not designated. The rules need to state who is responsible for identifying such existing uses, in what contexts, and by what process. Second, if such existing uses are found there must be an evaluation of whether existing designated use criteria are sufficiently protective. The department should include specific language addressing how it intends to treat new or increased discharged loads and existing loads that are presently causing or contributing to impairment. Specifically, the rule language should state clearly that the department will not issue permits or approvals that would cause or contribute to violations of water quality standards, including existing and designated uses and criteria. New or increased discharged loads will not be granted for parameters if the receiving stream is classified as impaired for those parameters, or uses related to those parameters, unless necessary to solve an existing, immediate, and critical environmental problem. The rule requires language that explains how Tier I protections will be applied to general permits. This should be done by prohibiting the use of general permits for waters impaired by the pollutants allowed by the general permits. (NEA)</p> <p><i>RESPONSE: Washington applies uses so broadly that we believe the costs of requiring an investigation of whether all the existing uses are protected as designated uses is not appropriate. We may include some guidance to help with understanding on any newly identified uses would be protected in the guidance we will develop for this rule. We already have an obligation not to issue permits that would not meet water quality standards. Not renewing permits on water that don't meet standards would be unreasonable and would cause unacceptable social and economic impact. We have considered the moratorium of general permits in 303(d) listed waters, but believe the minor nature of the activities covered and the difficulty of characterizing their contributions makes this an unreasonable requirement.</i></p> <p>We question the wisdom of allowing all waters to fall to Tier I over time, and would like to see loading allocations for Some Tier II waters conserve their higher water quality. (NSBK)</p> <p><i>RESPONSE: Your suggestion goes well beyond the federal requirements and would likely cause higher compliance costs and impacts to the economy than is reasonable.</i></p>

<p>(43d) 201A-310(1)&(2)</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> Suggested changes to (1) & (2) 	<p>In 310(1) - The language is not entirely consistent with federal regulations. (NEA) RESPONSE: We believe that we have appropriately addressed the requirements of the federal regulations.</p> <p>310(1) Existing uses are not sufficient for restoring numerous anadromous fish species. For Ecology to narrowly construe existing uses in a basin and selectively downgrade the importance of various species or life history variants is counter to the overall health of the species and ecosystem health. ESA and treaty obligations require a more holistic approach and excludes habitat of treaty reserved fisheries present at the date of treaty signing in 1855 that were illegally eliminated prior to 1975. (CRITFC) RESPONSE: The rule specifies that both existing and designated uses must be protected. In Washington we have very broad designations of salmon spawning, primary contact recreation, and other sensitive uses. We believe this is sufficient, and have not selectively downgraded any uses.</p> <p>Address cumulative impacts to waters, in the absence of a required TMDL. Guidance is necessary to ensure that Tier I waters don't fall below the standards. (NSBK) (Aagaard) RESPONSE: Many actions that impact water quality are not regulated by Ecology and developing a process that tracks their effects on the watershed is not possible in our estimation. Actions regulated by Ecology are to be approved only where it would not cause or contribute to a violation of the water quality standards. Unfortunately, many sources outside Ecology's control will only be improved after TMDLs have been developed and standards exceeded. Ecology continues to assist other regulatory entities and private parties in establishing sound best management practices to achieve better upfront protection.</p> <p>In 310(2), the 'which' should be a 'that.' (King County) RESPONSE: We have eliminated the word "which".</p> <p>In 310(2) - The citation to "standards" should be replaced with "uses and criteria." Additionally, while this statement of policy is nice it is not terribly helpful. This would be an appropriate location for the department to at least list the appropriate and definitive steps that 1) it is required to take, 2) it has the authority to take, and 3) it could take with the voluntary participation of other parties, or to reference other sections of the code. In addition, this is an appropriate location in the antidegradation policy for the department to note that to afford Tier I protections to waters that are degraded, or water quality parameters and/or uses that are degraded, the policy requires both a no degradation standard as well as a reduction in pollutant loading and other forms of pollution. (NEA) RESPONSE: We believe the broader term "standards" is appropriate here. The policy statement is helpful in that it makes it clear what the requirement is. This is old news to some but not to other stakeholders and users of the standards. We do not create a list so that this will be adaptable to changing authorities and new programs. The language is intended to direct the department to use all the tools at its disposal. This ranges from encouraging voluntary actions; to using administrative orders, permits, and TMDL allocations to bring the water body back into compliance. Since actions are not to be authorized that cause violations of the standards, the "no degradation" part of the program is integrated into the first clause-310(1)-of this section.</p>
<p>(43e) 201A-310(3)</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> Clarification of natural conditions 	<p>It should not matter whether water quality criteria are exceeded because of natural or human causes. (PacifiCorp) RESPONSE: The purpose of this clause is to recognize and authorize that where natural conditions are of lower quality than the assigned criteria, those natural conditions become the assigned criteria. Since the purposes of the federal Clean Water Act and the state Water Pollution Control Act are to gain protection from human-caused pollution, the distinction between natural and human caused degradation matters greatly.</p> <p>The statement "...except where explicitly allowed in this chapter" should specifically cite WAC 173-201A-200. (Longview) RESPONSE: We actually would need to reference both 200 and 410.</p>

	<p>In 310(3) 'due to' should be 'because of. (King County) RESPONSE: The language has been rewritten and the “due to” eliminated.</p> <p>Part (3) should read “human actions that have an effect on water quality. (SLS) RESPONSE: This means the same as the proposed “human actions are not allowed to lower the water quality”.</p> <p>Numeric criteria based on biological needs will not be attainable and targets must, at a minimum, reflect natural background of the watershed. (Storey) RESPONSE: Your support for this provision is noted.</p> <p>Basing the standards on natural conditions may sound reasonable but how are those defined? If conditions were natural, we would have healthy fisheries, swimming holes safe for our kids and floodplains free of contaminants? We don't have that. (Peterson-M) RESPONSE: Natural conditions are determined in various ways but in the more complex situations where many human forces exist, Ecology uses sophisticated water quality models to essentially remove the human effects one by one to get an estimate on what the water quality would be without them.</p> <p>The department should allow itself the ability to allow for some incremental increase from human actions in such situations on a case-by-case basis. The specific parameter to consider in this regard is the arsenic human health criteria for Washington. Ecology has firm knowledge that the natural surface water arsenic concentrations often exceed the human health criteria. In cases where Ecology knows that the natural levels of arsenic in surface or ground waters exceed the standards, they must have flexibility for a small incremental increase from the discharge. (Everett) RESPONSE: We agree that the wide spread of arsenic across the state makes this pollutant problematic. However, we have not discussed it in this rulemaking and even if we could agree on how much of an increment to allow, we would not be able to add this new topic to this rulemaking at this point in time.</p>
<p>(43f) 201A-310(3)</p> <p>Tier I Antidegradation</p> <ul style="list-style-type: none"> Reinstate natural condition language 	<p>The antidegradation section should re-instate the following language: “Whenever the natural conditions of said waters are of a lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria”. (Seattle City) (Everett) (Weyerhaeuser) RESPONSE: We have put back in the existing phrase that you reference. We agree that is important to make it clear that the natural conditions can become automatic replacement criteria.</p>
<p>201A-320 Tier II General</p>	
<p>(44a) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> Clarification needed 	<p>Ecology’s approach to antidegradation is a parameter by parameter approach, rather than a designation approach. As we understand it, this approach does not include identification in advance of what waters are considered to be Tier II waters for which parameters. One issue that needs to be addressed in implementation guidance is how Tier II waters will be determined. We recommend that the calculation of existing permitted loads be taken into account before it is assumed that there is remaining assimilative capacity for further allowable degradation under Tier II. (EPA) RESPONSE: This would be a good issue to include in guidance if some workable approach can be identified for tracking the allowances for existing activities to increase their discharges under their existing permits.</p> <p>It is still unclear which actions must have Tier II analysis, how to define a lowering of water quality, and how the information that is being obtained for the analysis will be evaluated. The term "full support" is not part of this federal regulation and should not be used by Ecology. The requirements for submittals are open-ended, and the standard for approval is indeterminate. (Seattle City) RESPONSE: We have specified the types of actions. Only the general category of “Other water pollution control programs, authorized, implemented, or administered by</p>

the department” is not specific. At this time only the forest practice rules would fall into this category. The concept of full support is embodied in the federal regulations and in the state law under the concept of securing the highest quality of standards, even if it is not terminology used in either the federal regulation or state law (90.54 and 90.48 RCW). We agree that an entity could not know confidently that it would be considered in the overriding public interest using just the language in the proposed regulation, since many site-specific factors could come into play. We have tried to make the process clear and provided examples of the types of benefits that would be considered in making such a determination. We do anticipate the need for additional guidance in order to more fully and consistently implement this section.

Designated uses must be taken into account in any Tier II analysis. (WPIRG)

RESPONSE: The protection of uses is the focus of Tier I. Tier II is for protecting water quality that is better than necessary to protect existing and designated uses.

Ecology identified some triggers for Tier II analysis, but the decision-making process that results after the process is triggered is very vague and open to wide interpretation which makes us feel very uncomfortable. We don't really know how that process is going to work. (Squaxin Tribe)

RESPONSE: Ecology is responsible for the determination but will be providing an opportunity for public comment as part of the approval process established for the type of action. Determining what feasible options that are available to reduce the impact on water quality, as well as what economic and social impacts constitute an overriding public interest, will be done taking into account site-specific and action-specific factors. We were not able to establish one-size-fits-all requirements and thresholds as part of the rule.

How will Ecology determine that the water is better than the criteria? This could be a very large problem for nonpoint sources and general permits. The requirement that water quality must be demonstrated to be of better quality than the criterion implies that Ecology's default assumption is that waters will only be considered Tier I unless demonstrated to be otherwise. This means the default is that waters are at the minimum level to protect uses and therefore no further degradation can occur. Based on the loopholes provided by Ecology elsewhere in the standards this appears to be inconsistent with Ecology policy. (Lummi Tribe)

RESPONSE: The determination is not going to be made individually for general permits or for activities conducted under the forest practices rules. New and revised nonpoint source programs and general permits would have to go through the Tier II review at the time they are developed. There are currently no other eligible nonpoint source programs for Tier II review. It is appropriate and consistent with Ecology practice not to approve the degradation of a water body without first doing some form of assessment that the water quality criteria would not be violated.

The department should include any antidegradation analysis and findings in the required fact sheet for any proposed or draft individual or general NPDES permit. (I) - The language in this rule is inconsistent with federal requirements. In the federal rules discussing Tier II protections, existing sources are specifically included: "Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control. (NEA)

RESPONSE: It is anticipated that the antidegradation analysis for permits will be included in the required fact sheet. We have included in antidegradation the requirement that all sources use all known, available, and reasonable, methods to reduce their impact on water quality. This applies as a minimum regardless of the antidegradation tier. This is why we placed the statement upfront in the antidegradation section (300).

Are antidegradation criteria equivalent to the no measurable increase criteria and cumulative human impact criteria specified in the Aquatic Life Criteria sections? (USACE)

RESPONSE: The same increments of what is considered measurable are used for

	<p><i>temperature and dissolved oxygen.</i></p> <p>This Tier II section reads like a triumph of process over what might be expected as tangible “improvements” in permitting decisions or actual water quality improvements. (Weyerhaeuser)</p> <p>RESPONSE: <i>We worked with numerous stakeholders in various forums to create the process. It was designed to meet federal and state antidegradation requirements while applying and impacting only a limited universe of entities that cause the pollution of surface waters. The plan focuses on only those actions that cause measurable changes, and then allows a wide variety of demonstrations to occur to support the argument that that pollution is in the overriding public interest. To achieve this balance requires that we include a more complex process. We agree that the added protections are not dramatic, but our goal was to provide clarity for what currently exists.</i></p>
<p>(44b) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> Concerns with expanded language being too onerous 	<p>Actions which are existing, yet improvements are made which does not cause any additional discharge would be considered expanded under this definition. (WDOT)</p> <p>RESPONSE: <i>This would only occur if the “improvements” degrade the quality of the water by more than a measurable extent.</i></p> <p>These rules will impose a heavy administrative burden, because we’ll have to prepare a Tier II analysis for each of these scores of projects, for every surface water criteria. (Seattle Port)</p> <p>RESPONSE: <i>Assuming this comment refers to stormwater discharges, we would disagree with your assessment. Most stormwater discharges are treated under the general permit provisions of the antidegradation program. Individual assessments under the general permit are not required. A Tier II analysis would only be required for individual permits discharging to water bodies that are better than standards. This will require Tier II analysis for those projects which cannot be covered under general permits. However, it is required to meet federal law.</i></p>
<p>(44c) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> Concerns with expanded language being too lenient 	<p>I’d like to see the antidegradation policy, some of the loopholes, be closed up. I’d like to make sure the interpretations are thought through, and that the language is amended so we can eliminate any possible loopholes that may come about in the future, and also help in enforcement. Once you tighten something, it’s also much more difficult to enforce, so I’d like to make sure that these thoughts are initiated and can be enforced. (Bowers)</p> <p>RESPONSE: <i>We believe that we are adopting an enforceable program that has flexibility where appropriate and requirements sufficient enough to be effective for implementation.</i></p> <p>The tier II definition should be re-written to require all citizens and businesses in Washington, including nonpoint sources, to avoid degradation of high quality waters. (Sierra Club)</p> <p>RESPONSE: <i>We believe the proposed approach that limits the application of the Tier II reviews only to actions that are regulated by the Water Quality Program at the Department of Ecology is appropriate and consistent with federal requirements.</i></p> <p>It is clear that Ecology proposes to lower applicable water quality standards for Tier II waters whenever there may be economic pressure to do so. (Sierra Club)</p> <p>RESPONSE: <i>We will not be changing the standards, only allowing some lowering of high quality waters when it is found necessary and in the overriding public interest. Tier II does not allow the water quality criteria to be violated. Economic, social and legal factors can all be brought into consideration if a lowering of water quality should be allowed to occur.</i></p> <p>The economic viability of the Tribe’ fisheries must not be subordinated to the need for economically viable projects that would lower water quality. If proponents are unwilling to spend the money to implement BMPs adequate to eliminate water quality degradation, then that action should not go forward. (SSC)</p> <p>RESPONSE: <i>The economic and social impacts to the tribes can be brought into the determination of whether a lowering of water quality can be allowed, but we would not</i></p>

	<p><i>allow the waters to degrade to levels that violate the water quality standards and harm the fisheries.</i></p> <p>Ecology seems to be giving itself considerable discretion to weaken standards. Antidegradation should be reworded so that further degradation is not allowed. (Yakama Nation)</p> <p><i>RESPONSE: The purpose of Tier II ensures that any degradation to waters better than the standards is necessary and in the public interest, not to stop all activities that would lower water quality. This is consistent with the existing Tier II protection in the standards regulation and consistent with the federal antidegradation regulations that states must comply with.</i></p> <p>Tier II is not truly protective of water quality. Proposed language states Tier II waters currently exceed what the proposed standards require but can be degraded if it is in the “overriding public interest”. This exception appears to allow an unnecessary loophole through which a variance from the standards can be obtained. (Bellingham City)</p> <p><i>RESPONSE: Tier II does not allow degradation that would violate the established criteria.</i></p> <p>The amendments provide lesser protection than the existing rules and create a suite of new procedures by which polluters can obtain a variance from the standards. We are concerned with dischargers receiving variances based on economic benefits and necessary social services. We expect Sea-Tac Airport will use this process to further degrade local creeks. (Normandy Park)</p> <p><i>RESPONSE: The revised rule language for Tier II clarifies more explicitly what is in the existing rule. Since the old language was not being implemented outside of Ecology programs, the reduction in application is not a change in on-the-ground protection. The existing rule language used the same general language on overriding public interest but did not include direction to conduct an alternatives analysis to determine if the degradation is necessary. For these reasons, we do not concur that the changes represent lesser protection.</i></p> <p>The use of Tier II analyses should be disallowed. (NSBK)</p> <p><i>RESPONSE: We are required to provide a Tier II analysis as part of the federal antidegradation requirements.</i></p>
<p>(44d) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> • Have guidance instead of rule language 	<p>The agency should not adopt the Tier II portion of the proposed regulation. Instead of Water Quality Program staff developing implementation guidance in coming months, that effort should be directed at developing a targeted, legally adequate, resource-sensitive, well-defined Tier II program which can then be implemented through appropriate rule-making procedures. (Weyerhaeuser)(NSBK)</p> <p><i>RESPONSE: The change in the rule is the result of years of work balancing the competing interests of stakeholders and formulating a program that satisfies state and federal laws and regulations. It is the least burdensome approach that we were able to develop that meets the regulatory goal of ensuring the high quality waters are protected unless the benefits of allowing the degradation exceed the benefits of maintaining that high quality water.</i></p>
<p>(44e) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> • Application to Nonpoint sources 	<p>The main problem with water quality in the Skagit basin is nonpoint sources, yet the antidegradation plan has no provision for examining forest practices on private lands, national forest plans, or timber sales etc. There is no provision for examining the propriety of plans, regulations, and BMPs adopted by local governments that would affect Tier II waters. (SSC)</p> <p><i>RESPONSE: The forest practices rules are captured under the general water pollution control programs category in the antidegradation program. You are correct that local government plans and regulations are not activities we would analyze under Tier II. This was done to avoid passing on regulatory responsibility for protecting high quality waters without our being able to pass along the funds or provide the critical assistance to help develop and implement such water pollution prevention programs.</i></p> <p>Non-point sources must be required to meet the standards. (Suter)</p>

	<p>RESPONSE: <i>All non-point sources are still required to meet the standards.</i></p> <p>It is the Committee’s understanding that the Antidegradation Tier II criteria does not apply to nonpoint sources such as agriculture. Is this accurate? If yes, then the WAC should be more explicit. In general, this section needs to be more clear regarding nonpoint sources. (CBP)</p> <p>RESPONSE: <i>Yes, it is true that Tier II does not apply to nonpermitted agricultural operations. If at some time a formal program is established, such as with forest practices, the existing language would apply Tier II protection to that new regulatory program.</i></p>
<p>(44f) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> Public right to comment 	<p>Ecology’s draft implementation procedures contain no discussion to indicate whether or how determinations to allow degradation of Tier II waters will be made available to the public for their input and comment. We recommend that Ecology use existing public notice opportunities and make preliminary Tier II determinations (and their basis) available for public comment at the time of permit public notice or notice of action to issue a Section 401 water quality certification. Determinations that degradation is not significant and does not require a Tier II analysis should also be included in a public notice for the action. (EPA)</p> <p>RESPONSE: <i>A public review is part of the antidegradation program, but it is incorporated as part of the public review that is associated with the specific action (such as with a NPDES permit). We have included language to this effect in the final version.</i></p> <p>Any rewrite of the antidegradation policy should include the ability of a citizen or a group giving an adequate argument to request and obtain an antidegradation review. Without this ability, the antidegradation policy does not serve the public. (Steffensen)</p> <p>RESPONSE: <i>See previous response.</i></p>
<p>(44g) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> Waters of higher quality 	<p>How much higher than the standard does a water body have to be in order to meet the criteria? The standards are already near the practical detection limits for many parameters. Shouldn’t this designation be based on TMDL studies? (WDOT)</p> <p>RESPONSE: <i>The water body would have to be of high enough quality to be able to make the determination that the action would result in a measurable level of degradation but not cause a violation of the assigned water quality criteria.</i></p> <p>Does the phrase “waters of a higher quality than the standards” refer to water body segments which are listed on categories 1-4 on the state 303(d) list? (Weyerhaeuser)</p> <p>RESPONSE: <i>No, it refers generically to waters that are meeting all of their established water quality criteria. The 303(d) list includes policy determinations that are designed to focus the list on waters that regularly exceed the criteria as a means to help focus resources that are committed to TMDL development. It is also only developed every two years and may be extended in the future to longer periods of time, and is based on only the data available to the department at that time. Tier II must consider more than just the what was listed using the above approaches and limitations.</i></p> <p>In (1)(a), the language is not inclusive of protecting all uses like the existing language. Reword to “The resulting quality of the water must still be of sufficiently high quality to support all existing and beneficial uses” (SLS)</p> <p>RESPONSE: <i>We have included language that clarifies that the Tier I protection for uses applies to all waters. This should function the same as the old language but fits better into the new format for antidegradation which includes four sections of the regulation.</i></p> <p>Appears to require a water body be demonstrated to be Tier II before it receives the protection. The existing language does not require this demonstration. Change to read “Where a water is of a higher quality than the criterion assigned to that water...” (SLS)</p> <p>RESPONSE: <i>We have re-written the language and the new version does not contain the phrase requiring that it must be “demonstrated”.</i></p>

<p>(44h) 201A-320</p> <p>Tier II General</p> <ul style="list-style-type: none"> waters of higher temperature quality and application of natural conditions. 	<p>Ecology should strengthen its provisions for the protection of waters colder than the criteria in order to provide more complete protection of its designated salmonid uses. If these cold water protections are sufficient, it may not be necessary to have a separate bull trout spawning criterion. (EPA)</p> <p>RESPONSE: <i>We have developed numeric criteria that we believe will be protective of bull trout and other species. In part to address the strong concerns by the USFWS and EPA, Ecology has lowered the criteria for char spawning waters to 12°C instead of the proposed 13°C and has additionally provided a narrative provision that would ensure waters of 9°C where necessary to protect summer spawning char. We believe these changes combined with the antidegradation program protections will provide the needed protection for char. We believe the categorical protection of existing cold water creates an unnecessary economic and social burden that will not be compensated for by improved protection for fish and other aquatic life given the protective criteria that are included in the rule.</i></p> <p>The allowances for temperature increases when the natural condition of the water is cooler than the criteria in Table 200(1)(c) is not protective of bull trout. We support the proposal in EPA’s guidance to protect existing water bodies that have summer maximum temperatures colder than Ecology’s numeric criteria. One approach would be to adopt a narrative temperature criteria (or alternatively include language in its antidegradation rules) that explicitly states that summertime temperature increases above a de minimus level are generally prohibited in waters with ESA-listed salmonids that are currently colder than the summer maximum numeric criteria. Another approach would be to identify and designate such water bodies as ecologically significant for temperature and either establish site-specific numeric criteria for the current temperatures or prohibit temperature increases above de minimus levels in these waters. (USFWS)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Clarification is needed on when the antidegradation policy applies to waters of higher quality (Tier II and III for temperature) versus increasing temperatures following Part II, 1(ii)(A or B). These two statements seem inconsistent with each other. (USFWS)</p> <p>RESPONSE: <i>Antidegradation applies to any measurable lowering of water quality.</i></p>
<p>201A-320(1) Tier II Application</p>	
<p>(45a) 201A-320(1)</p> <p>Tier II Application</p> <ul style="list-style-type: none"> Clarification of (1) 	<p>320 (1)(a) and (4) describe the SEPA/NEPA process, not water quality standards (i.e. physical and chemical water quality parameters). (WDOT)</p> <p>RESPONSE: <i>There are similarities between the general philosophies of evaluating alternatives and benefits, but antidegradation is a regulatory program more than primarily a decision- making tool.</i></p> <p>(1)(a) - The restriction to protecting water quality for existing uses appears to be an error. There is no reason why protection of designated uses would not also be included in Tier II protections. (NEA)</p> <p>RESPONSE: <i>We agree and have included the terminology for designated use protection as well, but have moved the discussion to section 300(5)(a).</i></p>
<p>(45b) 201A-320(2)</p> <p>Tier II Application</p> <ul style="list-style-type: none"> Clarification of measurable change 	<p>Ecology includes under WAC 173-201A-320 (2) an approach that defines “measurable change” in terms of individual criteria. We recommend that guidance clarify that the “measurable change” approach is not intended to result in double counting of an allowance for measurement error plus an allowance for degradation. (EPA)</p> <p>RESPONSE: <i>We recognize that explaining how to use the measurable change provision will be an important component to the guidance document for implementing the antidegradation section.</i></p> <p>Our concern with Ecology’s “measurable change” approach is that it is conceivable that permit limits could be calculated to fit within the measurable change thresholds without ever assessing whether a water is a Tier II water. This would make it virtually impossible for the public to track what is happening overall to water quality in Tier II waters. (EPA)</p>

RESPONSE: *We would expect the permitting process to not allow misuse and mischaracterization of data.*

The measurable changes criteria are so small that there is no means to determine with confidence that a human activity is responsible for it. Under the current language, a detectable decrease in a toxic substance would be a violation of standards. (WDOT)

RESPONSE: *It is used when determining if an action should be allowed. This follows the same procedures that we characteristically use when determining if an action has the reasonable potential to cause a violation to the established criteria. We do not allow the action and then try and sort out how much change in the water body is caused by that action on a day to day basis.*

Will project proponent have to estimate the character of process and stormwaters under all operating and climate conditions, and then to perform sophisticated modeling to ascertain receiving water impacts, or will best professional determinations be accepted? (Weyerhaeuser)

RESPONSE: *It is the same level of rigor that exists now when determining if the discharge will meet water quality standards. Stormwater is regulated as a program and not as individual discharges so it is the program as a whole that goes through the Tier II analysis. This part of antidegradation follows an adaptive management process to answer all the key questions over time.*

While the trigger establishing applicability based on “measurable change” criteria is a credible concept, it sets the wrong thresholds and it is poorly integrated with the rest of the regulation. (Weyerhaeuser)

RESPONSE: *We see no issues of conflict with the rest of the regulation, and the use of the measurable change values fits very well with the federal regulatory concept of Tier II being triggered by a lowering of water quality, and with the requirement in state law (90.54.020 RCW) directing that existing water quality not be reduced unless it is in the overriding public interest.*

The measurable change threshold in 320(2) needs to be explicitly subject to Tier I requirements to ensure uses are supported. (Lummi Tribe)

RESPONSE: *We have incorporated language in section 300 that states the universal application of Tier I to all waters.*

In section (1) waters can be lowered to the assigned criteria. From this interpretation of antidegradation, it is questionable whether any temperature standard is applied to non-fish bearing streams contributing to downstream fish-bearing streams. If not, then it would be acceptable to degrade any of these streams and thereby raise background temperatures for the downstream system. New or expanded actions that might be allowed to affect waters with higher water quality than required for the water body would at least be required to meet the standards for the water body (e.g., 16C in spawning/rearing areas). (CRITFC)

RESPONSE: *We have expanded the proposed language for protecting non-fish species and headwater streams.*

The restriction on new or expanded actions is inconsistent with federal regulations. (NEA)

RESPONSE: *We believe it is consistent with the federal Tier II concept of “allowing lower water quality” in waters with quality that exceed those needed to protect uses.*

The description of “measurable changes” will effectively limit the use of the Tier II protections such that this core aspect of the antidegradation policy is not likely to result in a slowing of the rate of degradation of Washington’s waters. (NEA)

RESPONSE: *We believe that it focuses the state’s resources on those activities can best be described as putting the existing quality of a water body at risk – those that are capable of causing a measurable change.*

Section (2) is inadequate, poorly defined, and applies the wrong action in the wrong sequence. Replace with “If a potential exists for a new or expanded action to lower the

	<p>quality of a water, Ecology shall require the responsible parties to prepare an analysis which can be used by Ecology to determine if the activity will cause a measurable change to the quality of a water. The analysis shall identify any measurable changes to the quality of a water outside of any proposed mixing zone including . . .” (SLS) RESPONSE: We made many changes to the order of the Tier II provisions, and have expanded the overview of the sequence and requirements more in section 300.</p>
<p>(45c) 201A-320(2) Tier II Application</p> <ul style="list-style-type: none"> Measurable change-specific comments on criteria limits 	<p>The measurable change for temperature should be presented as greater than 0.3°C., not “0.3° or more.” The measurable change for dissolved oxygen should be presented as greater than 0.2 mg/l, not as “0.2 mg/l or more.” (Weyerhaeuser) RESPONSE: We have chosen the terminology of “or greater” which better fits with the idea that Tier II is triggered by a measurable change and the value chosen is the value that is measurable.</p> <p>What type of “bacteria” did the agency have in mind, and how does 2 cfu/100ml compare with the Standard Methods detection level for that bacteria? As written, every discharge will exceed this threshold. (Weyerhaeuser) RESPONSE: The 2 cfu/100 ml represents the reportable limit that is used by Ecology’s ambient monitoring program for fecal coliform. Only discharges that with dilution cause the water quality to be degraded are captured by this requirement. We have no data that indicates there would be high rates of triggering of this threshold, let alone having every discharge exceeding it.</p> <p>The measurable change for pH should be presented as greater than 0.2 pH units, not “0.1.” This change would ensure consistency with the accepted view of minimum measurement capability in ambient waters as expressed in proposed sections –200 and –210. The measurable change for turbidity should be presented as greater than 5 NTU. An increase of 0.5 NTU is not measurable. This change would ensure consistency with the accepted view of minimum measurement capability in ambient waters as expressed in proposed sections –200 and –210. (Weyerhaeuser) RESPONSE: The proposed values represent the values Ecology uses as reportable when collecting field data.</p> <p>A ‘significant’ change, rather than a ‘measurable’ change, of 0.05 or 0.1 mg/L oxygen, and 0.01 C, for example, would trigger a Tier II review more quickly and therefore further slow degradation of the water body. These types of changes are easily modeled. (PAS) RESPONSE: We have selected values that are based on confident measurability but are used to represent de minimus levels for the purposes of applying the Tier II review. We agree that smaller changes can be modeled, but we believe the measurable change represents a reasonable call for what is significant.</p> <p>320(2)(c) addresses the measurable change level for bacteria. Is the identification of the unit of measurement (cfu/100ml) correct? Since there are now several bacteria tests, is the unit of measurement applicable to all the tests? (Everett) RESPONSE: This is the value that Ecology used for reporting purposes and represents our confident level for measurement, but it’s use in the context of antidegradation is for identifying de minimus changes.</p> <p>320(2)(f) is overly stringent for toxic criteria., since analytical methods are able to get lower and lower, and for many parameters are now orders of magnitude below water quality standards. Some other approach is needed here. Suggest wording to say that a measurable change for purposes of this section shall be a change greater than 10% of the applicable standards, or if there is not standard, then a change of greater than 10% of a potential level of concern for the parameter in questions, based on available information for the parameter in question. (Everett) RESPONSE: We recognize this is a sensitive trigger for use in determining when to conduct a Tier II antidegradation review. It was intentional that measurable degradation from toxics causes a review of less degrading alternatives.</p> <p>320(2) needs to be modified to include 200(1)(e) and 210(1)(e) in the mixing references. These sections address the mixing considerations for turbidity during in-water</p>

	<p>construction activities. Everett) RESPONSE: We will not be going though the Tier II test for short-term projects that adhere to the requirements in sections 200(1)(e)(i) and 210(1)(e)(i).</p>
<p>(45d) 201A-320(2) Tier II Application • Measurable change, reference to mixing zones</p>	<p>We recommend that Ecology clarify in this section that Tier II analysis will be needed if WAC 173-201(a) 400 (12) is used to develop a mixing zone that exceeds the numeric size criteria established in WAC 173-201A-400(7). This would limit the possibility of the “measurable change” provision becoming an exit ramp from Tier II analysis for all projects simply by manipulation of the mixing zone size. (EPA) RESPONSE: We believe we have already covered this concern by referencing specifically the standards size limits for a mixing zone as the point for determining if measurable change has occurred. Even if we grant a larger mixing zone the Tier II determination would be based on the amount of dilution that occurs at the edge of a standard sized zone.</p> <p>Is “outside the source area” synonymous with the point of discharge or edge of mixing zone boundary if one is authorized? If so, substitute language consistent with those familiar concepts would be better. (Weyerhaeuser) RESPONSE: See previous response. We have worded the language so that it will be implemented as intended and can be applied even if a mixing zone has not been formally established.</p> <p>The reference to WAC 173-201A-400(7) is too narrow. Subsection (7) describes the default maximum mixing zone size. The reference should more broadly refer to section – 400 to encompass all of the provisions which direct the authorization of a mixing zone. (Weyerhaeuser) RESPONSE: The purpose is to look for discharges of substance. Tier II is not intended to be avoidable by granting larger areas of dilution.</p> <p>Detection of changes outside of the mixing zone may not be the only way or the most accurate way to assess degradation. For instance, degradation might be better assessed using sediment data or by checking whether the mixing zone model for a contaminant is accurate within the mixing zone where contaminant concentrations are higher and, therefore, more easily detected. (Steffensen) RESPONSE: This is the method that we can most readily incorporate into our existing practices and thus will have the least burden on those effected and yet still identify significant sources of pollution.</p> <p>The definition of “measurable change” limits the application of Tier II protections. Criteria should not be measured at the edge of a mixing zone, but rather at end of pipe. Also, the definition should be changed to account for small increases a pollutant as often times small increases are what “tips the balance” for a waterway. (WPIRG) RESPONSE: The measurability factors are just a screen for sorting out which discharges are significant enough to warrant a Tier II review. It is not intended to capture every one, and the water quality criteria are in place to guard against tipping the balance for the health of a waterway.</p> <p>Restricting the Tier II applications to the effects of pollution at the edge of a mixing zone is simply to allow more unlimited incremental pollution. There is no need for the Department to focus on what is “measurable.” In addition, the proposed levels of determining “measurable change” are inappropriate. For example, (f) calls for any detectible change in the concentration of a toxic substance. For some toxic substances, for example where the levels called for in the numeric criteria are not even directly measurable in water, this threshold of detectible change is meaningless. Moreover, a small additional increment may be what uses the remaining capacity. Surely application of the Tier II analysis provided by the proposed rules would constitute good public policy in such an instance. (NEA) RESPONSE: Ecology has selected this means for focusing on the discharges that have a material impact on water quality. This is done to minimize the burden of the rule as well as to focus Ecology’s resources such that where a Tier II review is required we will</p>

	<p><i>be able to give it the attention that is required to do the analysis well. We do not agree that a unique need arises if a water body is within less than 0.3C (or one of the other measurability screens) of the water body's temperature criteria and some entity wants to use the remaining 0.3C. Preserving high quality waters is the point of Tier II. Once you are essentially at the criteria the water body less resembles the high quality waters Tier II is aimed at protecting the quality of.</i></p>
<p>(45e) 201A-320(2)</p> <p>Tier II Application</p> <ul style="list-style-type: none"> • Cumulative effects of measurable thresholds 	<p>To manage cumulative effects for Tier II, we encourage Ecology to develop a mechanism to either establish a baseline for water quality or to track degradation over time when it results from actions that never receive a Tier II analysis. These approaches do require that baseline water quality be known and some record-keeping system to track degradation from the baseline in water quality and assimilative capacity. (EPA, NMFS)</p> <p><i>RESPONSE: Cumulative effects are allowed in Tier II waters under the EPA antidegradation rules. The mechanism described in the comment would involve a complex scheme of data collection in the context of the antidegradation program. Our first priority with the antidegradation section after adoption will be to make sure that adequate guidance is available to adequately and consistently implement the section.</i></p> <p>The measurable change threshold in 320(2) needs to be explicitly subject to Tier I requirements to ensure uses are supported. (Lummi Tribe)</p> <p><i>RESPONSE: It is and we have added some additional language to 300 to help clarify that Tier I always applies.</i></p> <p>The “measurable” clause (up to 0.3 C and 0.2 mg/L D.O.) could lead to a “death by a thousand cuts.” A true anti-degradation policy would require that any new sources mitigate their effect on the stream by planting shade trees or doing other low-tech fixes. (PAS)</p> <p><i>RESPONSE: Tier II allows degradation only down to the water quality criteria that were established to protect the uses of the water. Antidegradation could in theory be more protective, but in state government all rules must be justified as necessary and provide balanced protection for the environment and development.</i></p> <p>How will restoration efforts that improve the beneficial uses of a water body be incorporated in water body ratings over time? Will gains from restoration activities be allowed to disappear through the Tier II process? (NMFS)</p> <p><i>RESPONSE: We have not considered restoration efforts, but rely on the pollution prevention aspects of Tier II to maintain healthy waters.</i></p> <p>The Tier II analysis must take into account the cumulative effect of foreseeable increases in water withdrawals and uncontrolled degradation by unregulated sources, as well as the additive effect of multiple pollutants on beneficial uses. The department should determine how much assimilative capacity remains and what portion of the remaining assimilative capacity should be allocated to this proposed action. This analysis must take into account likely reductions in instream flows required for dilution purposes and for support of beneficial uses. (NEA)</p> <p><i>RESPONSE: We have opted for a program that we can implement and in doing so believe we will get more value than if we adopt a more complex program that will in the end not be effectively used because the agency lacks the necessary resources. We cannot make decisions based upon speculation over what might be happening and will be happening in the future from uncontrolled and unregulated sources and future water withdrawals. Also, while water quality and water quantity are linked, they are controlled under a separate set of laws.</i></p> <p>Tier II does not account for cumulative effects if only measurable changes are regulated. This could be done simply by examining the land use in the watershed, determining how widespread the activity would be and use that as the basis for whether it would cause a measurable change. (Lummi Tribe)</p> <p><i>RESPONSE: Tier II is not intended to account for cumulative effects, and we do not believe that such effects could be easily accounted for by examining land use in the watershed.</i></p>

	<p>The plan does not allow for the use of sediment data, toxicity data, body-burden data or the consideration of multiple point and non-point sources. (NSBK) RESPONSE: Tier II does include consideration of whether there would be a discharge of toxics in detectable amounts after limited dilution.</p> <p>Measurable changes: This is obviously proposed to reduce Ecology’s workload. It is a shortsighted administrative fix that will result in a long-term problem. It does not recognize that water quality problems are more often cumulative. It is not consistent with the cumulative impact analysis so necessary in determining environmental impacts in almost any environmental review. (Luster) RESPONSE: It is a realistic way to implement the federal regulations on antidegradation which were not designed to protect the waters from cumulative effects that do not cause a violation of the criteria established to protect the beneficial uses of the waters.</p>
--	--

201A-320(3) tier II Activities

<p>(46a) 201A-320(3)</p> <p>Tier II Activities</p> <ul style="list-style-type: none"> Clarification of activities that require Tier II analysis 	<p>Antidegradation is difficult to follow with respect to categorizing the Tier II surface waters. WAC 173-201A-320 does not fluently describe the Tier II classification. The most confusion came when reviewing Section 3 describing when a Tier II analysis would be required. It did not articulate to whom, it applied. (CBP) RESPONSE: We have rearranged this section to make it more fluid and hopefully clearer.</p> <p>Do you intend for the COE to do this analysis each time we send in a request for 401 cert? Would this be required concerning the COE’s existing structures? (USACE) RESPONSE: As stated in the rule, only new or expanded actions that would cause a measurable change in water quality and that require a 401 certification would need to go through a Tier II analysis.</p> <p>Does this include Stormwater NPDES permits? Do multiple discharges to the same water body all have to repeat the same analysis? Must they all meet the same standard, or will each permit have a unique “standard.” (WDOT) RESPONSE: Subsection 320(6) discusses the application to general permits such as the one applied to stormwater. The general permit itself goes through antidegradation analysis on a general basis, but the individual covered discharges do not need to go through a separate analysis. Individual stormwater discharge permits would have to go through the analysis.</p> <p>In subsection (b) it is not clear what class of permits are being referred to. Permits issued under WAC 173-216; i.e., “state waste discharge permits,” do not authorize discharges to surface waters. Those would be NPDES permits. (Weyerhaeuser) RESPONSE: We do not currently have state discharge permits to surface waters, but we can use them for such a purpose if we choose to. This language just covers the potential for such use.</p> <p>Ecology should identify all the “Other water pollution control programs...” Proponents of “new and expanded actions” should not have to guess which permitting actions might trigger the antidegradation review. (Weyerhaeuser) RESPONSE: It should be rather straight forward. Is the action authorized, implemented, or administered for water quality protection by Ecology? If no, then it would not be required to go through the Tier II analysis. At present only the forest practices rules fits the “other water pollution control programs” definition.</p> <p>Any Tier II guidance which effectively defines the criteria Ecology permit writers will use to decide pertinent regulatory matters should be subject to RCW 43.05 rule making. (Weyerhaeuser) RESPONSE: Guidance is not subject to rule making unless it essentially functions like a rule.</p>
---	---

	<p>We suggest the appropriate decision criteria are that an eligible “new or expanded action” in a Tier II water with AKART, and which demonstrates compliance with water quality criteria at the point of discharge, or at the boundaries of an authorized mixing zone, has demonstrated the “lowering of water quality is necessary and in the overriding public interest.” (Weyerhaeuser)</p> <p>RESPONSE: <i>This suggestion does not meet the intention of either state or federal antidegradation requirements. Degrading the quality of a high quality water body even after being allowed substantial dilution does not appear related either to a test of necessity or to a test of overriding public interest.</i></p> <p>Recommend 320(3) be clarified so it is clear Tier II does not automatically apply to dam relicensing: “(3) <u>When the requirements of subsection (1) and (2) have been met</u>, a Tier II analysis . . .” (MC-PUDs)</p> <p>RESPONSE: <i>Tier II for any activity only applies to new or expanded actions that cause measurable degradation to water quality after moderate dilution. This is true of relicensing dams just as reissuing wastewater discharge permits. Adding clarification for one type of facility then brings into question whether it was intended for the other types not clarified.</i></p> <p>The department apparently proposes to conduct Tier II evaluations for entire nonpoint source programs, a proposal that effectively negates the benefits the antidegradation policy can provide to controlling this important and ubiquitous source of pollution. (NEA)</p> <p>RESPONSE: <i>For general permits and programs such as the forest practices rules, treating the actions by category is the most efficient way to get those sectors into compliance even if individual cases may sometimes not be exemplary examples of the program as a whole. We do not have the resources to conduct individual antidegradation reviews for every potentially covered action, and we do not believe that doing so is consistent with these general statewide coverage programs.</i></p>
<p>(46b) 201A-320(3)</p> <p>Tier II Activities</p> <ul style="list-style-type: none"> • Activities that require Tier II analysis—too narrow 	<p>In the proposed policy, DOE will limit the degradation analysis to four of the eight types of permitting activities, to new or expanded actions, and to situations where changes in water quality are detected outside of the mixing zone. This obviously leaves out many permits and the renewal of permits. (Steffensen)</p> <p>RESPONSE: <i>That is correct, but we have focused on those that are most closely linked to application of the water quality standards and for which there is clear legal direction and not conflicting mandates.</i></p> <p>Existing sources, in addition to new and expanded uses, must be included. (WPIRG)</p> <p>RESPONSE: <i>We do not believe Tier II antidegradation is appropriate to existing sources or that such application is consistent with the federal regulations for Tier II. Many of the most important technological options to reduce pollution need to be made at the facility design stage to be cost-effective or reasonable. Not reissuing a permit would effectively close a facility and even entertaining that option would cause undue conflict and use up scarce agency resources when the outcome would rarely result in a meaningful change due to the benefits and constraints of existing facilities.</i></p> <p>It is unclear whether this section will apply to permit renewal actions. The federal regulation does not support the assumption in the proposed rules that an existing discharge that is inconsistent with the protection of existing uses should be allowed to continue on the grounds that it is not a new or expanded discharge. (CRK)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The application of antidegradation review is too narrow. It should apply to existing regulatory programs that address the CWA definition of water quality – chemical, physical, and biological attributes. Antidegradation should be applied to non federal projects as well as certifications for federal activities. The language should clearly apply Tier II to all Section 401 certifications. (Kalispel Tribe) (Lummi Tribe)</p> <p>RESPONSE: <i>See previous response.</i></p>

	<p>All sources must be regulated in order to protect existing high quality waters, not just point sources. It is unclear whether nonpoint sources would require an analysis. (CRITFC)</p> <p>RESPONSE: Water quality must be protected regardless of the source of pollution. Tier II analysis for new or expanded nonpoint source control programs would occur at the time that they are developed (such as the forest practices rules) We have no regulatory vehicle for managing other nonpoint sources at this time, and thus no vehicle for applying the antidegradation requirements.</p> <p>A concern with the Tier II designation as currently written is in its limited authorizations granted in WAC 173-201A-320-(3). While such authorizations may be more manageable at the state level, it removes from consideration many other sources of water quality degradation. (Bellingham City)</p> <p>RESPONSE: It was done to focus realistically on the actions for which there is an opportunity and clear authority to apply antidegradation Tier II analysis.</p> <p>We suggest the state of Washington follow the example of other state standards which grant themselves additional authorization such as the example of Ohio Administrative Code 3745-1-05 (B)(1) (Ohio Water Quality Standards, Dec. 2002). (Bellingham City)</p> <p>RESPONSE: Only the state legislature through the enactment of laws can adjust the authority of the department and change the application and considerations of other existing state laws.</p> <p>Programs specified have provisions for compliance schedules, mixing zones, etc. so it seems that Tier II as written is redundant. Simply removing 320(3) would provide reasonable protection to waters currently higher than proposed criteria and protect these waters from the full and real range of pollution. (Kalispel Tribe)</p> <p>RESPONSE: Earlier proposals did not have the threshold for measurable degradation. It was added to assist the department in focusing its resources on significant sources, and to enable those sources to receive a quality Tier II review.</p>
<p>(46c) 201A-320(3)</p> <p>Tier II Activities</p> <ul style="list-style-type: none"> Support language that reduces duplication 	<p>We support Ecology’s proposal that activities which have already been through review should not have to go through additional review for Tier II. (WFPA) (Plum Creek) (Campbell Group) (McCollum) (Schwartz) (Schroeder) (Davis) (Schwendiman) (Simpson Timber) (Reese) (Harper) (Grette) (Hoffman) (Junkin) (Shedd) (Kalahan) (Cota) (Remmers) (Raschko) (Prestrud) (Singsaas) (Porter) (Wilbur) (Blinks) (Holmes) (Bailey) (NOTAC) (Ogden) (Britt) (Pierson) (Anderson-P) (Anderson-R) (Plampin) (Ploeg) (Rayonier) (McKee) (Zettle) (Rick) (Glaser) (Goelzer) (U.S. Timberlands) (Markland) (Bjorklund) (Bryan) (Carney) (McDonell) (Anonymous) (Goedhard) (Folsom) (Bye) (Parks) (Bieker) (Harman) (Oberg) (Williamson) (Longview Fibre) (Holman) (Gabriel) (Opp)</p> <p>RESPONSE: Comment noted. Only new or expanded actions will require a Tier II analysis.</p> <p>We are asking that there is no duplication in those processes because of the amount of work that has been already gone through. (McCaulay)</p> <p>RESPONSE: See previous response.</p> <p>Current forest practices rules should not, therefore, be subjected to additional review for Tier II under the antidegradation implementation plan. (Boyd)</p> <p>RESPONSE: See previous response.</p> <p>Ecology's proposal that regulated activities, such as forest practices, which are consistent with the recent forest and fish report is good. These kinds of reports have gone through in the Ecology review and public process. (VanderPloog)</p> <p>RESPONSE: See previous response.</p> <p>The forest practice rules as outlined in the Forest and Fish Report anticipated changes to water quality standards and already addressed the goals of the antidegradation provisions as described in the Federal Clean Water Act. (McDonell)</p>

	RESPONSE: See previous response.
201A-320(4) Tier II Overriding Public Interest	
<p>(47a) 201A-320(4)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> Clarification of necessary and in the over-riding public interest 	<p>While the rule language makes clear that the department will allow the process to be biased by the applicant, in that the applicant will conduct the entire analysis, it does not state how the department will be able to use this information. (NEA)</p> <p>RESPONSE: We have added a statement saying that Ecology will use the information to determine overriding public interest.</p> <p>Reword Section (4) to “Once a new or expanded action has been determined by Ecology to cause a measurable change in the quality of a water, then an analysis must be conducted to . . .” (SLS)</p> <p>RESPONSE: We have made broad changes to hopefully improve the clarity of the process sequencing.</p> <p>Section (4) is not balanced and only emphasizes the factors that accommodate the action and not the mitigating factors. Also the analysis must take place prior to lowering water quality. The language “once an activity has been determined to cause a measurable lowering” gives the impression that water quality can be lowered until detected. (Sauk-Suiattle Tribe)</p> <p>RESPONSE: We believe the intent is clear within the full context of the language being adopted for the antidegradation program (see 300(2)(e)(ii) and 320(1)). The statement is to be read as a sequence of steps. The first step is to determine whether the action would be expected to cause measurable degradation. The second step is based upon a positive determination in the first step.</p>
<p>(47b) 201A-320(4)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> Definition of over-riding public interest 	<p>Ecology should provide clarification on what constitutes the “overriding public interest” to allow a lowering of water quality for a water body. (NMFS)</p> <p>RESPONSE: We have clarified this aspect of the proposal to the extent that we believe is appropriate. Site and discharger-specific factors will be at the heart of this determination.</p> <p>We also have a concern that there seems to be no definition for the term "overriding public interest". This is a deep concern of ours, because it seems to then present itself as a loophole for possible degradation of Washington State waters. (Castleburg)</p> <p>RESPONSE: See previous response.</p>
<p>(47c) 201A-320(4)(a)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> Concern will allow further degradation 	<p>I'm concerned under Tier II about the caveat that degradation would be allowed if it could be explained as to why it is in the overriding public interest. It strikes me that this allows for a death of this tier by a thousand loopholes and overrides. (Cosby)(American Whitewter)</p> <p>RESPONSE: Allowing degradation that doesn't violate the water quality criteria established to protect uses is consistent with state and federal laws and regulations on antidegradation. Tier II just ensures that such degradation is necessary and that it provides compensating public benefits.</p> <p>Tighten the overriding public interest test requirement and eliminate the proposal to allow waters to be degraded on the basis of economic factors. (Kelly) (KRCG)</p> <p>RESPONSE: We do not concur that these are appropriate changes that balance environmental protection with other issues of the public's interest.</p> <p>There can be no greater overriding public interest than preservation of clean water. We cannot place short-term financial interests above the environment we leave to future generations. (Scarvie) (Herb Hadley) (Hughes) (KRCG)</p> <p>RESPONSE: See previous response.</p> <p>Overriding public interest tests should allow information provided by other entities besides the proponent or Ecology to be used. It establishes a clear bias in favor of polluters. The language states the information “will be used to justify that the lowering of</p>

	<p>water quality . . .”. This language directs the outcome of the process. Almost any project will likely experience economic benefits – is that sufficient justification? This approach seems to assume that dirty water is economically more beneficial than clean water, which begs the question on why the state has water quality standards in the first place if it only regulates how much dirtier the water gets. (Luster)</p> <p>RESPONSE: <i>We have made changes to the wording to respond to your concern over directing the outcome. During the public review of the antidegradation determination the public or any other entity may provide contrary or supporting information. This Tier II program is not meant to greatly restrict the actions that are approved under the water quality standards. We have found no way to apply a more directed overriding public interest test, but believe the effort to consider overriding public interest will provide a more thoughtful and deliberate process than has previously existed.</i></p> <p>Overriding public interest allows high level water quality to be measurably reduced based upon economic factors. Polluters will focus on this, or another loophole, rather than undertake efforts to reduce their pollution and comply with the standards. (Hollingsworth) (Lands Council)</p> <p>RESPONSE: <i>It is an element of the state and federal laws and regulations on antidegradation.</i></p> <p>It's often politically expedient to favor short-term economic benefit over long-term ecological cost. So the duration of alleged benefit and the duration of the cost of the degradation to the ecosystems should be included in the cost benefit analysis as to whether or not public interest actually does override ecological damage. (Cosby)</p> <p>RESPONSE: <i>There is no reason that duration would be necessarily excluded from consideration.</i></p> <p>Stop disguising industrial, timber and agricultural interests as "overriding public interests." (Belzer)</p> <p>RESPONSE: <i>The question is whether or not the degradation associated with these economic interests provides benefits that are in the overriding public interest.</i></p>
<p>(47d) 201A-320(4)(a)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> Clarification of Over-riding public interest 	<p>Would compliance with SEPA typically provide the information and decision process to support the –320(4)(a) analysis? (Weyerhaeuser)</p> <p>RESPONSE: <i>It might be a good central vehicle for providing such information, but it would not out of necessity include it.</i></p> <p>There is a general lack of detail on the needed content, analysis process, and decision criteria for deciding whether an “action” to lower water quality is in the overriding public interest. (Weyerhaeuser)</p> <p>RESPONSE: <i>We believe we have included the appropriate amount of detail for this element given the importance of the site and discharger-specific considerations and the fact that we do not want this part of the program to become a major focus of either the applicant or Ecology’s resources. We have been candid throughout this rulemaking in expressing the intent to focus on the alternatives analysis rather than the overriding public interest test, since the former is a tangible and less subjective element for which Ecology has sufficient expertise to conduct well.</i></p> <p>In 320(4)(a) ‘affects’ should be ‘effects’. (King County)</p> <p>RESPONSE: <i>Comment noted.</i></p> <p>This requires a level of understanding about the impacts from specific discharges that is non-existent in many areas, particularly where TMDLs have not been done. (Menzies)</p> <p>RESPONSE: <i>Project proponents will be required to describe the benefits and potential costs and we would expect they will be capable of discussing these basis factors in sufficient detail to satisfy the requirements.</i></p> <p>When I asked what that means we’re to regulate under OPI, you said well we’ve regulated through the permitting process such as permits for things like sewage treatment facilities, sewage discharge. That would be in itself a restriction on our ability to use some of our</p>

	<p>existing lands. If we weren't able to get, for example, a sewage discharge permit, that would limit ability to develop land in a density level that would meet the economic criteria for development. (Hawkins) RESPONSE: The OPI test asks that the public costs and benefits be described. As you have just demonstrated, the benefits and costs are readily apparent for many types of projects, and only some added detail on the potential tradeoffs is typically lacking from people's initial thoughts on this issue.</p> <p>320(4)(a): Compliance with the population density requirements of the Growth Management Act should be included as an example of an economic benefit. (Everett) RESPONSE: The list provides some examples, and is not intended to be exhaustive.</p> <p>Examples of overriding public interest are inadequate. How can the precedence of either water quality or affordable housing or social services be decided? (Mielke) RESPONSE: See previous response.</p> <p>We feel the overriding public interest process would be politically charged and result in powerful interests taking over from the public at large. (NCAS) RESPONSE: It could potentially be politically charged if there are any significant economic or social costs or benefits.</p>
<p>(47e) 201A-320(4)(a)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> Environmental benefits of overriding public interest 	<p>Previous review drafts of Ecology's standards, including the December 2001 version, contained a substantive list of these counterbalancing benefits of maintaining the water quality, including assisting in the recovery of threatened and endangered species, providing assimilative capacity for future industry and development, and promoting fishing, recreation, and tourism industries. These examples are now missing from the implementation procedures and therefore likely to be overlooked. We recommend that Ecology reinsert into Section (4)(a) of the Tier II procedures the examples of benefits of maintaining water quality that were listed in the December 2001 draft WQS under (5)(c) (ii) within the antidegradation section. (EPA) RESPONSE: We added back in some of the counter balancing factors.</p> <p>(4)(a) - All examples given are of the benefits from allowing additional pollution. The department should be embarrassed to suggest such a lopsided proposal. (NEA) RESPONSE: See previous response.</p> <p>There does not appear to be a fair value for salmon and other natural resources included in the process. There should be special attention given to those resource attributes (including prey base) that are necessary for maintaining and/or returning viable salmonid runs in Washington. (NMFS) RESPONSE: The social and economic factors associated with viable salmonid populations can be included in the consideration of overriding public interest.</p> <p>320(4) analyses tend to undervalue the economic benefits of protecting the few remaining areas of high water quality. Ecology must ensure a fair analysis of the values of maintaining high quality water is done seriously. (Umatilla Tribe) RESPONSE: Ecology does support proper use of the requirement.</p> <p>According to the new standards, actions in the 'overriding interest' could include the creation of one more job or the addition of any amount to local tax bases. What is really needed is a true cost-benefit assessment taking into account all uses of the river as well as local public opinion. This assessment should be conducted by the interest that proposes the new use. (PAS) RESPONSE: See previous response. The requirement opens up the issue of cost to benefit ratios and qualitative considerations.</p> <p>We believe that broad public notice is imperative for any proposal to lower high quality water parameters, and that the proof of "overriding public need" should be judged against the full array of public benefit – not just that of industry. (Mountaineers) RESPONSE: Public involvement will occur in association with any approval and permit process for the action.</p>

<p>(47f) 201A-320(4)(b)</p> <p>Tier II Overriding Public Interest</p> <ul style="list-style-type: none"> alternatives analysis 	<p>Does the information, analysis, and decision process presented in –320(4)(b) describe a technology-based requirement? Does Ecology imagine this requirement is something more than AKART? (Weyerhaeuser)</p> <p>RESPONSE: In some cases the results of such an analysis will parallel AKART, such as where AKART is being determined for a new sector, and in others it would be viewed as something more, such as where AKART is defined using standards practices that fall short of what could be practically considered for an activity.</p> <p>(4)(b) - We note that the bypass language has been greatly abused to the point where it has been rendered meaningless in some states and with some sources. (NEA)</p> <p>RESPONSE: Comment noted.</p> <p>(4)(b) - The alternatives do not include changes in agricultural and silvacultural chemical use, stormwater controls, physical agriculture techniques other than buffers. (NEA)</p> <p>RESPONSE: The alternatives provide some examples to help foster an understanding about what is being asked.</p> <p>(4)(b) should be amended to include a requirement that the predicted economic costs of various alternatives be researched and disclosed and that such costs be presented in comparison to a given facilities’ annual operating and revenue budget. (CRK)</p> <p>RESPONSE: We are not convinced that this would be useful as a categorical requirement for both industry and local government actions, and we are not of the opinion that knowledge on the annual operating and revenue budget would shed clear light on what is affordable.</p>
<p>201A-320(6) Tier II General Permits</p>	
<p>(48a) 201A-320(6)</p> <p>Tier II General Permits</p> <ul style="list-style-type: none"> Clarification of General permit and pollution control programs 	<p>I’m assuming that the “other water pollution control programs” include safe water practices, rules and regulations that resulted recently from state legislation, and designed specifically to protect water quality. (Bell)</p> <p>RESPONSE: We are not aware of any new programs enacted from state legislations that are designed to protect water quality and which are administered or approved by the Ecology Water Program.</p> <p>Ecology should clarify that Tier II protections will apply to general permits. (WPIRG)</p> <p>RESPONSE: It is specifically discussed in the section, which we believe provides adequate clarification.</p> <p>Exemptions for nonpoint source pollution and timber and agriculture should be eliminated. Explicitly require these non-point sources meet the standards. (Herdsman) (Kelly) (KRCG) (Mazzetti)</p> <p>RESPONSE: The rule specifies that pollution control programs, including those for nonpoint sources, must meet provisions of Tier II when the program is being developed by Ecology.</p> <p>The statement about general dischargers with similar processes and process pollutants sounds like an artifact of true point-source permitting and doesn't apply that well to stormwater discharges. Could you just say they apply to similar discharges? (King County)</p> <p>RESPONSE: Agreed. We dropped the process pollutants terminology that does sound like it only applies to point sources.</p>
<p>(48b) 201A-320(6)</p> <p>Tier II General Permits</p> <ul style="list-style-type: none"> Application of General permit and 	<p>Ecology has followed EPA’s suggestion that the Tier II analysis for these general permits and programs be conducted primarily at the time of permit issuance. How will this process allow individuals to identify waters where further degradation would not be in the “overriding” public interest? We recognize that a complete site-specific analysis is not feasible at the time of general permit issuance. We recommend that Ecology clarify what kind of information will be made available to the public at the time of public notice of a</p>

<p>pollution control programs</p>	<p>draft general permit. (EPA) RESPONSE: <i>When a facility has filed a notice of intent to be covered under a general permit, the public is requested to comment on the appropriateness of that coverage. If the discharge would not be in accordance with the analysis performed at the time of permit issuance, it should not be eligible for coverage under the permit. Comments to show why it is not in accordance with the analysis could and should be submitted at that time.</i></p> <p>(6) - The department has not explained sufficiently how it intends to conduct Tier II analysis for general permits such that it complies with state and federal antidegradation policies. The rules should preclude any sources to discharge pollutants to waters violating standards for the parameter discharged or other parameters that will increase the harm to the beneficial uses which the parameter is intended to protect, pursuant to a general permit. No General permits should be issued for discharges containing toxic contaminants. (NEA) RESPONSE: <i>General permits are not evaluated on a site-specific basis, but as a category. The permit vehicle is chosen because there are a large number of facilities that need coverage and their effects are believed to be relatively minor or can be controlled with the same set of BMPs. By allowing the adaptive management approach to apply in tailoring control actions to the entire sector we can move that sector together in an efficient manner into compliance with the water quality criteria and meet the core elements of the antidegradation program. If we had to review each activity on a site-specific basis we would not have adequate resource; further, the effort to review each one would nor result in significant improvements to the environment. Thus the chosen path is the one that we believe serves the goals of water quality protection best.</i></p> <p>Programmatic exemptions and general permits should not be “grand fathered” into the implementation plan. All general permits and pollution control programs must be subject to full anti-degradation review, and comply with anti-degradation standards. (Mountaineers) RESPONSE: <i>The general permit and control programs are not exempt from antidegradation. The method for their inclusion is described in the rule. See previous response.</i></p> <p>Ecology should interpret 320(6) as including those 401 certifications that are being conducted under the Corps’ Nationwide Permit and Regional General Permit authorities. As with other general permits, the analysis could be conducted just once, and then referenced in all subsequent actions. (Seattle Port) RESPONSE: <i>Ecology has done a general certification on the nationwide permit which is basically the same as a general permit, therefore it would be treated the same.</i></p>
<p>(48c) 201A-320(6)(a) Tier II General Permits <ul style="list-style-type: none"> Individual actions for general permits </p>	<p>Language has been dropped from the previous proposal that stated that general permits and control programs must be designed so that individual actions would not be expected to: “(i) Cause violations of water quality standards or harm existing uses”, “(ii) Result in further lowering of water quality for parameters reported on the most recent EPA approved Section 303(d) list”, or “(iii) Lower water quality in waters designated by name in this chapter as Water Quality Preservation Areas.” We recommend the December 2001 language be reinserted into this section. (EPA) RESPONSE: <i>Some of these requirements are believed to require too much site-specific consideration to allow the general permit program to function properly. However, we have clarified that the intent is for the plan to bring the sources into compliance with the antidegradation requirements.</i></p> <p>The provision that individual activities covered under general permits would not require a tier II analysis seems impractical given the typical lack of site specific facts at the time when general permitted occurs. (CRK) RESPONSE: <i>That is the purpose of the clause, to recognize that insufficient information exists for any site level considerations and therefore such examination is not required.</i></p> <p>Individual activities covered under general permit and water pollution control programs</p>

	<p>will not require a Tier II analysis. Individual activities will need to be monitored to assure that they meet the water quality standards. We do not believe that exemptions from Tier II analysis are protective of bull trout. (USFWS)</p> <p>RESPONSE: We will not be installing monitoring requirements for every action covered under general permits and the forest practices rules. This is viewed as extraordinarily burdensome and contrary to the way the general permit program works.</p>
<p>(48d) 201A-320(6)(b)</p> <p>Tier II General Permits</p> <ul style="list-style-type: none"> General permits will meet conditions of 4(a) 	<p>The statement in 320(6)(b) reflects an assumption that the economic and environmental considerations pass Tier II. It isn't clear how or whether that would be the case or whether that determination would be publicly available. We are not clear on why only section (4)(a) is referred to, when the Tier II analysis also includes (4)(b). We recommend that the reference to section (4)(b) of the antidegradation procedures be included under (6)(b). (EPA)</p> <p>RESPONSE: We have clarified that Ecology will describe how it complies.</p>
<p>(48e) 201A-320(6)(c)</p> <p>Tier II General Permits General permits adaptive management</p>	<p>320(6)(c)(ii): The requirement to review and refine programs every 5 years should be deleted. In many case, such NPDES stormwater permits, permit re-issuances by the department take longer than 5 years. Re-issuance is a logical opportunity to review and refine programs. Permittees should not be considered in violation of the anti-degradation policy because of inaction by the department. (Everett)</p> <p>RESPONSE: We agree and have modified the language to recognize where Ecology is not reviewing the permit in five years.</p> <p>I would ask that you re-examine adaptive management and AKART and look at the whole concept of adaptive management, because it can be a black hole in which a landowner business falls into and can't escape from. (Harrison-Bryan)</p> <p>RESPONSE: It is not a new concept for our state and Ecology believes it has proved to be the least burdensome way to move a sector of activities into compliance. The alternative is to require a full array of BMPs at the start in a combination that will ensure compliance. Such an alternative would not allow the effectiveness to be checked over time so that only the most cost-effective BMPs are selected.</p> <p>The proposed rule only sets the standard and does not specify how a water body should meet the standard. It is our understanding that compliance will be achieved through "Adaptive Management". What will local government's role be in this "Adaptive Management" process and what are the consequences for non-compliance with draft rule? (Island County)</p> <p>RESPONSE: That is correct. The standards allow adaptive management to be used by permittees of general permits and pollution control programs in complying with Tier II requirements. This recognizes that with some emerging pollution control programs, solutions may be tried and then adapted if pollution control is not achieved. Compliance would be through the appropriate permit or program implementation.</p> <p>Concerned the General permit and program allowance under Tier II will allow polluters to have an indefinite (5 years and renewable) exemption if "reasonable progress" is being made. This politically charged statement should be quantified if allowed at all (Lands Council)</p> <p>RESPONSE: The purpose for requiring a plan for attaining compliance is to prevent such a scenario from occurring.</p> <p>A huge loophole exists for general permits and other pollution controls like forestry. No time limit is given on analyzing their effectiveness or bringing those causing degradation into compliance. It exempts any activity with an adaptive management system, however inadequate the science, process or funding may be. (Aagaard)</p> <p>RESPONSE: It is not a new concept for our state and Ecology has believes it has proved to be the least burdensome way to move a sector of activities into compliance. The alternative is to require a full array of BMPs at the start in a combination that will ensure compliance. Such an alternative would not allow the effectiveness to be checked</p>

over time so that only the most cost-effective BMPs are selected.

201A-330 Tier III Antidegradation

(49a) 201A-330

Tier III
Antidegradation

- Clarification

How will these water bodies be protected? What are the standards? What is achieved by establishing the designation if it will only be applied to parks, preserves and refuges? Since Ecology is mandated to complete TMDLs for Washington's water bodies, the process of having the public nominate sites seems duplicative and unnecessary. (WDOT)
RESPONSE: *We do not see a relationship between our doing TMDLs and the public nominating sites to be preserved from any and all future degradation. There are two levels of protection being provided for Tier III waters – non-degradation and de minimus degradation. The level of protection would be selected during the nomination and approval process. This antidegradation level is a required element of the federal regulations.*

As to Tier III, it's unclear to me why there isn't a list of potentially outstanding resource waters. Why do we have to start from scratch? (Cosby)

RESPONSE: *We are going through a rulemaking in part to establish the characteristics that would be used to identify such waters, since none exists in the current standards.*

There should be a definite list put together of headwater watersheds that meet this qualification before this goes across so that environmental movements do not have to fight to preserve headwaters that clearly meet all of these guidelines already. (Clark-S)

RESPONSE: *The designation of Tier III waters will require a separate rulemaking process and will result in the designation being carried in the rule. Specific Tier II nominations were not considered during this rulemaking.*

There's not a definition exactly what constitutes outstanding resource water. It should not be used to penalize a land owner who has actually achieved outstanding resource water because of good practices. (Schaaf)

RESPONSE: *The Tier II section includes specific factors for eligibility.*

In 330(1)(b) 'which' really needs to be a 'that' to maintain parallel construction, and for proper usage as well. (King County)

RESPONSE: *Comment noted.*

The Antidegradation Tier III classification also posed some confusion for the Committee [73-201A-330(1)]. The WAC needs revision to better describe which criteria must be met and the process for the classification under Section 1. One solution would be to change the language from "one or more of the following..." to must apply to all of the following. The lack of serious scientific criteria required to establish a Tier III classified water body was disturbing. The only scientific criteria included in the designation criteria relates to thermal refuge, found in WAC 173-201A-330(1)(d). (CBP)

RESPONSE: *This Tier is about protecting waters that have outstanding qualities that the public is willing to protect. This concept does not lend itself to a pure scientific system. We have included sufficient details on nomination that should prevent confusion on how Ecology intends to review them. But we recognize that even more supplemental guidance would be helpful and plan to develop it outside this rulemaking. We believe that replacing the "or" with "and" would fail to meet the federal regulatory intentions and requirements for this program.*

Tier III. The opening sentence of this section creates the requirement that the baseline condition for an ORW be that a water is high quality. A casual reading could lead one to believe that all parameters, and by inference uses, must be of high quality in order that a water body be considered for ORW designation. We believe that would be in error for two reasons. First, it would preclude some of the very waters that are called out for ORW consideration, such as unique habitat types that are not well-represented by the use designations and criteria. Second, it would eliminate from consideration some waters that could benefit from ORW designation merely because one or more parameters or uses is

	<p>impaired. The end of the first sentence creates ambiguity as well. It should state, unambiguously, that the level of protection afforded by ORW status is nondegradation. What is wholly missing from the eligibility considerations for ORW status is the issue of the need for a high level of protection for the support of aquatic species. (NEA)</p> <p>RESPONSE: <i>In response to the first concern, we have included a specific category for eligibility that recognizes unique habitat types that are not considered high quality using conventional measuring tools. But it can eliminate waters that have been degraded that otherwise would have met the requirements. We believe our numeric criteria are fully protective of aquatic life, so only the unique attribute of thermal refuges was included since this is where typical water column standards often fall short for recognizing the need for special protection. We have added unambiguous language that states that degradation is not allowed to Tier III waters.</i></p>
<p>(49b) 201A-330</p> <p>Tier III Antidegradation</p> <ul style="list-style-type: none"> Suggestion for Tier II ½ 	<p>Because of the significant difference in allowable activities between Tier II and Tier III waters, many states have adopted a Tier II ½ provision that allows some very limited degradation, but offers much of the Tier III protection. We would support the State adopting in addition to the Tier III category, a Tier II ½ as mentioned in the Draft EIS. (EPA)</p> <p>RESPONSE: <i>We have included the concept of a Tier II ½ into the Tier III waters. We are establishing the ability to chose between two levels of protection as part of the Tier III process. The highest Tier III level would provide non-degradation protection and the second Tier III level would allow for de minimus degradation from actions, using state of the art pollution control methods.</i></p> <p>It is unfortunate that the state dropped “Tier II.V. We strongly encourage the state to add this additional Tier II,V to the anti-degradation section. (Bellingham City)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>We recommend a Tier 2.5 option that allows a very high level of protection without precluding unforeseen future development considerations. The rule should allow both III and 2.5 approaches and allow them to be applied on a reach by reach basis. (Sauk-Suiattle Tribe)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The ability to place waters in Tier III is severely limited. We strongly recommend the addition of a tier between II and III as discussed in the DEIS. This will help protect critical habitat for endangered species, shellfish growing waters, and domestic supplies. (NCAS) (NSBK)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Tier II ½ should be added for domestic water supplies and habitat critical to endangered species . (Engle) (Mason)</p> <p>RESPONSE: <i>See previous response. We have added eligibility for waters of statewide ecological significance, but not for domestic water supply source waters. Because of the ability to treat these sources and the ability of the local jurisdiction to balance the costs of added treatment to the political and economic costs of controlling the sources of degradation, Ecology dropped this factor from the proposal several years ago. We are not making to reinstate it at this time in the rulemaking.</i></p>
<p>(49c) 201A-330</p> <p>Tier III Antidegradation</p> <ul style="list-style-type: none"> Economic viability of local communities 	<p>I notice that the protection for tier III waters do not include “other water pollution control programs” and I’m assuming they do not include the state forest practices rules and regulations. (Bell)</p> <p>RESPONSE: <i>That is incorrect. All sources must comply with Tier I and Tier III. We have added language to make this more explicit.</i></p> <p>Looking at the description of tier III waters, all our streams on the Olympic Peninsula can fit into this tier III category. My current concern is that the tier III category will eventually be used to impose stream protection measures that go beyond the state forest practices measures that were intended by the Legislature and acts enacted by the forest practice boards. (Bell)</p>

	<p>RESPONSE: <i>Where a Tier III water is established it may require more, but that depends on the situation and most importantly it depends on the water body having satisfied all the conditions for adoption which include consideration to local economies. Further the version to be adopted includes two levels of Tier III protection, and one of them allows de minimus effects which may be able to be satisfied by the agreed upon forest practices.</i></p> <p>Tier III should not impose protection measures beyond those that were intended by the legislature and the Forest Practices Board. (Green Crow) RESPONSE: <i>See previous response.</i></p> <p>Tier III nominated water bodies should go through a legislative or gubernatorial review. (WFPA) (Campbell Group) (Longview Fiber) (Green Crow) (Ploeg) (Weyerhaeuser) (Anonymous) RESPONSE: <i>A state agency cannot write into their rules that the legislature has to do something. They are free to take this authority and responsibility back, but we cannot give it back to them without their consent. We have included a very substantial process that is designed to only adopt Tier III waters where strong support exists locally and through the various levels of government.</i></p> <p>The proposed process of Tier III water classification is on open door for the production of economic hardship through bureaucratic mischief. Ecology is giving itself broad authority to make the benefit cost decisions that should be made by the legislature. (PABA) RESPONSE: <i>See previous response.</i></p> <p>The town of Darrington is extremely worried about the ramifications of the Antidegradation standards. The town opposes the 3 tier system in the standards and also requests that the standards accurately reflect the Town’s need to survive. The Town does not have the financial resources to construct costly treatment plants for the stormwater. (Darrington) RESPONSE: <i>See previous response. Also note that Ecology has established two levels of protection for Tier III with one being non-degradation, but the other allowing for de minimus degradation from facilities using state of the art treatment. Ecology has also included consideration of the potential effect of such a designation on local economies, and will not designate a Tier III water where local public support is not evident.</i></p>
--	---

201A-330(1) Tier III Eligibility

<p>(50a) 201A-330(1)</p> <p>Tier III Eligibility</p> <ul style="list-style-type: none"> • Too restrictive 	<p>While on the face of it the ORW sounds appealing, the reality is that the only waters that would likely end up as ORWs are those which are already protected in wilderness systems and that are not controversial. So the benefit to the public is minimal. (Osburn) RESPONSE: <i>Ecology established two levels of protection for Tier III and one allows de minimus degradation from activities using state of the art treatment. This opens the door, we believe, to local communities being more likely to support some designations they otherwise would not have supported if we only had the zero degradation level of protection.</i></p> <p>I see potential here for this tier dying a death by an impossible standard. It sets up a scenario where we will have ecological protection only if, (1) it doesn't cost too much; (2) it doesn't upset anybody; and (3) the status quo was maintained, which is tantamount to not allowing for protection at all. (Cosby) RESPONSE: <i>See previous response.</i></p> <p>To fully protect waterways, waterways must be eligible for ORW status on a parameter-by-parameter basis. (WPIRG) RESPONSE: <i>It is not our intention to have all or even a large proportion of the state’s waterways qualify for nomination. It is also not in our estimate the purpose for the federal regulatory requirements.</i></p> <p>We object to the institution of public support requirements for designation of OWRs . It</p>
---	--

	<p>is too easy for polluters to politicize and block the designation. (KRCG) (Mazzetti) (Herdsman) (Kelly)(American Whitewater)</p> <p>RESPONSE: <i>We recognize your objection and weighed these issues when establishing the requirements. Ecology believes locals should not have non-degradation status imposed upon them against their strong objection.</i></p> <p>We urge the department to refocus the ORW status on those waters where the need is urgent because of the very nature of the water body and its uses and/or because of the threats that are posed. (NEA)</p> <p>RESPONSE: <i>This would be a different program than the one established by EPA and would be a significant switch in our proposal from that we have discussed with stakeholders. We believe the application of the water quality criteria to protect uses is the critical element in addressing waters in urgent need.</i></p> <p>Streams such as the Sauk, Suiattle, upper Skagit, and Cascade rivers are vital salmon producers. The Sauk was submitted for consideration as an ORW. Its value to salmon is incontrovertible. Department staff opined that it would be difficult to get the Sauk protected due to the belief that designation would largely halt all development and be opposed by people in Darrington. Ecology seems to have crafted a system that allows a small minority of people to push through actions that degrade high quality waters, but that require an overwhelming consensus to protect them. This turns antidegradation on its head and squanders the nations most valuable remaining waters. (SSC)</p> <p>RESPONSE: <i>Perhaps it does not meet an idealistic vision of antidegradation, but it replaces a vision with a workable plan that involves building consensus from the start necessary to obtain protection. In the end, Ecology believes its approach is not only more realistic but will result in greater protection.</i></p> <p>330 seems to go out of its way to make the designation of Tier III waters more difficult. This seems totally at odds with the underlying purpose of the state and federal clean water laws, which is to protect such outstanding waters. (Sierra Club)(American Whitewater)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>A double standard is set up where significant public support is needed to protect water quality but only a perfunctory level is required to degrade water quality. (SSC)</p> <p>RESPONSE: <i>Ecology has water quality programs designed to prevent degradation of waters from both point and nonpoint source pollution and these programs involve significant public processes through permits and program development. Designation of a Tier III water does require significant public support because it will be placed in a special protection status that will likely affect growth and development potential of that local community. Therefore, it is necessary that the public be involved in that special protection status.</i></p>
<p>(50b) 201A-330(1)</p> <p>Tier III Eligibility</p> <ul style="list-style-type: none"> Clarification 	<p>Considering the list of exceptions and the use of the term “will” instead of “shall,” the protection afforded an “outstanding resource water” is arguably less than for a Tier II water. Significant changes are needed for Tier III to be a special protection category. Ecology should require that specific water quality criteria be identified in the application for designation and incorporate those criteria in the designation. (Spokane County)</p> <p>RESPONSE: <i>The rule requires that applicants provide sufficient information to determine if the water body fits the eligibility requirements and one of those requirements is the existing water quality. We have been switching to the use of the word “will” instead of “shall” almost universally throughout the regulation because of the belief that most people do not know what “shall” means. They are intended to mean the same thing.</i></p> <p>Water Quality Protection Areas which meet the eligibility standards should be designated by Ecology, with no degradation or "water quality off-sets" allowed in these waters. Reductions of in-stream flows are not exempt from anti-degradation policies, and must be addressed in this plan. (Mountaineers)</p> <p>RESPONSE: <i>Tier III now includes two levels of protection. The highest is non-degradation and the next allows for de minimus degradation associated with activities</i></p>

	<p><i>using state of the art treatment and control techniques. It is hard to envision a situation where the offsetting requirements could be met in the highest level of Tier III, but it may be a very valid tool in the lower level Tier III waters.</i></p> <p>(I)(a) - We strongly oppose the inclusion of the requirement that the water occur in the stated locations as well as be in relatively pristine condition. (NEA) RESPONSE: <i>We appreciate your desire to open this category up more, but we also find that in order to be a viable program the waters must be have characteristics that truly set them apart from the bulk of our states healthy waters, and that they possess qualities that will allow us to successfully apply the stringent protections associated with Tier III.</i></p> <p>(I)(c) - We are very concerned with the emphasis placed on the human recreation values. Water quality is important to humans, for many reasons, but in this day and age it is clear that many species are wholly dependent upon high quality water for their very survival. (NEA) RESPONSE: <i>We do not see that an emphasis has been placed on recreation, and have included this eligibility factor in part to remain consistent with the federal antidegradation rules.</i></p> <p>330(1)(d) creates the potential for a substantial number of major streams in the state to be declared as outstanding resource waters along with that non-degradation protection for temperature. Hydrologically any stream that maintains flow year around exists partly because of the inflow of clean cool ground water which accounts for 68% of the total annual streamflow for upwards of 300 current and historical stream monitoring stations in Washington. These types of areas of inflow have been documented to provide excellent habitat for fish species (Baxter, Hauer 1999). This fact is what allows streams that currently violate temperature criteria to maintain fish stocks. Designation as outstanding resource water further limits the ability to use needed water resources for agricultural, public water supply, industrial and stock water uses. (WDOA) RESPONSE: <i>As stated, these cold water refuges may in some cases be the only factors that allow fish stocks to exist in otherwise thermally unhealthy streams. This suggests that special consideration is warranted for these areas. We have, however, added a second level of Tier III that would allow for de minimus degradation and in cases where protection at the highest non-degradation level would be considered too great a risk to the local economy the lower level of Tier III protection would potentially be a more serious consideration.</i></p>
<p>(50c) 201A-330(1)</p> <p>Tier III Eligibility</p> <ul style="list-style-type: none"> • Tier III Eligibility too stringent 	<p>Requiring that all parameters must be of a high quality for a waterway to be designated a ORW means that it will be virtually impossible to designate any waters as ORW. (WPIRG) RESPONSE: <i>The eligibility criteria are stringent, but that is to differentiate the truly special waters that exist in the state that fit what we see as the intent of the Tier III protection established in the federal antidegradation rules.</i></p> <p>The decision to designate an ORW should not turn on “factors relating to the difficulty of maintaining the current quality of the water body.” High quality waters should be protected regardless of the difficulty of maintaining their pristine qualities. (WPIRG) RESPONSE: <i>See previous response.</i></p> <p>Ecology’s rule is not consistent with the federal regulations and guidance and make it extremely difficult for any water body to meet the criteria for ONRW designation. Ecology has too narrowly defined which waters would be eligible and unnecessarily politicized the designation process. We are also concerned with the public participation provisions. (American Rivers) RESPONSE: <i>We believe the rule language for ONRW’s is consistent with the federal regulation, and is not out of sync with what other states consider for Tier III. The Tier III status will require an extra level of protection not afforded to other waters, and therefore needs the additional scrutiny before being placed in the rule as a Tier III water. The public participation provisions will be a part of the rulemaking process.</i></p>

<p>(50d) 201A-330(1)</p> <p>Tier III Eligibility</p> <ul style="list-style-type: none"> Suggestions for Tier III Eligibility 	<p>Ecology’s criteria for Tier III designation limit the potential to protect ecologically important waters. EPA’s regulations suggest that one criterion for designation as a Tier III water is exceptional ecological significance. We recommend that you insert a criterion for designation of waters of exceptional ecological significance. (EPA)</p> <p>RESPONSE: We agree and have added such a category.</p> <p>Tier III waters have eligibility requirements in 330(1)(a-d). Noticeably missing are waters key in supporting critical life stages of ESA listed salmon. These should be eligible for Tier III status. (NMFS)</p> <p>RESPONSE: Most of the state’s waters support critical life stages of ESA listed salmon. This fact does not make them appropriate for Tier III protection. Tier III is for the truly special waters of the state and nation.</p> <p>(1)(a), Waters in national and state parks etc. At the least we recommend that the rule include presumption that all waters within the public places named in the proposed section (1)(a) will be designated ONRWs absent a demonstration of the circumstances in section 330(3)(b). However, the federal rules are written such that national parks etc should be designated as ONRWs and further restrictions on eligibility should not be included.. (American Rivers)</p> <p>RESPONSE: We do not agree with this premise. The adoption of these waters can have significant impact on the ability to conduct human activities adjacent to protected waters even in public places (such as roads and associated recreational development in public parks) and therefore deserves specific public discussion.</p> <p>(1)(b), Unique habitat types. Ecology should reinstate prior language for including documented aquatic habitat of priority species as determined by the department of wildlife, and documented critical habitat for populations of threatened and endangered species. The federal regulations include waters of “ecological significance” and Ecology should retain such a category. (American Rivers)</p> <p>RESPONSE: We have included eligibility for waters of statewide ecological significance, but otherwise recognize that the purpose of the water quality criteria is to protect those uses and the purpose of the antidegradation Tier III is to have a process that can identify and protect the most special waters of the state.</p> <p>The Sauk, Suiattle, Cascade Rivers and their tributaries are “ecologically significant” and a major component in salmon production in the Puget Sound area. The Skagit is second only to the Columbia and produces 44% of the returning salmon to Puget Sound. The Sauk, Suiattle, Cascade provide the bulk of high quality habitat for a remarkable resource in near natural conditions. We have previously petitioned for antidegradation Tier III status for these rivers, and believe the “ecological significance” of these waters should stand alone as a criteria in designating Tier III. (Sauk-Suiattle Tribe)</p> <p>RESPONSE: See previous response. These rivers do have characteristics that would make them eligible for consideration under the Tier III program. Ecology has committed to working with the tribe to examine the merits of its petition for submission for Tier III status after the completion of this rulemaking.</p>
<p>(50e) 201A-330(1)(d)</p> <p>Tier III Eligibility</p> <ul style="list-style-type: none"> For areas of thermal refuge 	<p>We have concerns that the thermal refuge provision is too limited in potential scope and so restrictive that it will not be used in practice. We recommend including “macro” areas of thermal refugia (i.e. larger than areas of seeps and springs), which could include specific watersheds or stream reaches within a basin that are ecologically significant when assessing the basin as a whole. We also recommend that a de minimus temperature impact (e.g. cumulative amount of 0.3°C) be allowed, which would in effect make this what is sometimes called a Tier II ½ level of protection. (EPA)</p> <p>RESPONSE: We agree that the aerial scope was too limited to adequately reflect the ecological context for thermal refuges and so have made some changes to the language. We have also included a level of Tier III protection that would allow for de minimus degradation.</p> <p>(1)(d) - Granting thermal refugia ORW status is a good idea, so long as boundaries are drawn sufficiently large to incorporate the idea that species can reach the refugia and that</p>

	<p>upstream pollution sources cannot eliminate the benefits of the refugia. We think these two ideas should be included in the language. We suggest that the language in this section works against its goal due to the requirement that thermal refugia under consideration be “determined ... to be critical to the long-term protection of aquatic species.” Such restrictions may have the effect of ensuring that no thermal refugia are able to even pass the eligibility test, let alone be designated as ORWs. (NEA)</p> <p>RESPONSE: <i>See previous response. We believe that to use this language appropriately in a Tier III context it must be linked to a determination on the importance of the specific refugia. We have simplified the language as part of an effort to broaden the aerial applicability beyond a site-level. In doing so we have eliminated the language “determined . . .” but that is still the underlying meaning of our retaining the phrase “critical to the long-term protection”.</i></p> <p>The addition of thermal refugia to the list of outstanding resource waters seems premature. (Plum Creek)</p> <p>RESPONSE: <i>We do not believe that it is premature to protect critical cold water refugia.</i></p> <p>There is no reason section (1)(d) should be limited to just temperature protection (CRITFC)</p> <p>RESPONSE: <i>We believe it is appropriate for this situation given that thermal refugia is the edibility factor and we recognize that including all forms of pollutants will make the ability to use this category problematic in the lower mainstems of rivers where it is most needed. We have added dissolved oxygen, however, in recognition of the strong relationship between temperature and oxygen and in recognition that ground water source refugia are often already oxygen deprived and further degradation may limit the overall value of applying the Tier III protection to these waters.</i></p>
<p>201A-330(2) tier III Request for Designation</p>	
<p>(51) 201A-330(2)</p> <p>Tier III request for designation</p> <ul style="list-style-type: none"> Clarification 	<p>(2) & (3) - We support the processes proposed. (NEA)</p> <p>RESPONSE: <i>Your support is appreciated.</i></p> <p>We are concerned with the timing for acting on the citizen petitions to designate ONRWs. Even if the three-year time frame is strictly adhered to, this is simply far too long to delay the protection of our highest-quality waters. Currently healthy waters could be degraded in that time and no longer qualify for ONRW protection. We recommend a faster time frame that will allow for designation within a year or less. (American Rivers)</p> <p>RESPONSE: <i>We cannot promise faster and more frequent rule makings. The legal requirements are very cumbersome and expensive for the agency. We plan to begin smaller rulemakings for such changes in the future, and we hope this will work more smoothly and quickly but that is something that we cannot promise.</i></p> <p>We're very concerned that Ecology has unnecessarily politicized the ONRW designation process in its proposed rule by stating that ONRWs should not be designated or substantial and immediate social or economic impact to the local community will occur. This is an incredibly broad and vague caveat and can prevent the protection of our most imperiled waters. (American Rivers)</p> <p>RESPONSE: <i>While we recognize your concern, we believe the potential implications to local economic growth make it vital that we create a process that carefully incorporates those potential impacts into the final decision. We believe also that it is only through the upfront partnerships and agreements at the local level that any long-term protection will be effectively achieved given that many of the sources of potential degradation are outside the direct oversight of the department.</i></p>
<p>201A-330(3) Tier</p>	
<p>(52a) 201A-330(3)</p>	<p>RE: (3)(a), Departmental response to petitions. The review process for Ecology should be limited to one year. (American Rivers)</p>

<p>Tier III process</p> <ul style="list-style-type: none"> Clarification needed 	<p>RESPONSE: The rule says that Ecology will respond within 60 days.</p> <p>Water Quality Protection Areas meeting eligibility standards should be automatically designated by Ecology and no degradation or off-sets should be allowed in these waters. (CRITFC)</p> <p>RESPONSE: We believe that Tier III protection potentially has major implications on the economies of the state which would make it unable to be an automatic process for designation. Degradation would be allowed to a de minimus level in Tier III waters that are assigned to the lower level of protection, but non-degradation would be assigned to those that receive the higher Tier III status. Offsets are very appropriate in the lower level (similar to EPA's concept of a Tier II 1/2) but would seem unlikely to be accepted in the higher levels given the requirements for offsets and Tier III status established in the rule.</p> <p>RE: (3)(b), Imminent social or economic impact. Designations should be based primarily on the merits of the water body, not on political considerations. Language should make it clear that this exception would apply only in very limited circumstances. Guidance should be created to clarify the types of impacts that would prevent designation. (American Rivers)</p> <p>RESPONSE: See previous response.</p> <p>(3)(b) - We strongly oppose the factors listed for the department to weigh in considering ORW designation. The issue of need for a nondegradation level of protection for high quality waters, whether to protect aquatic species, drinking water sources, or other essential uses, should be paramount, not an assessment of the difficulty of providing the protection. Unfortunately, the issue of need is not even mentioned in the proposed rule. (NEA)</p> <p>RESPONSE: See previous response. Ultimately, any change to the standards must consider the realistic implications of the requirements given the standards set regulatory requirements rather than just goals.</p> <p>We urge the department to refocus the ORW status on those waters where the need is urgent because of the very nature of the water body and its uses and/or because of the threats that are posed. (NEA)</p> <p>RESPONSE: We suggest that you or others that may nominate waters for Tier III status consider waters that fit the eligibility criteria and are in urgent need of protection be the first that you nominate.</p>
<p>(52b) 201A-330(3)</p> <p>Tier III Process</p> <ul style="list-style-type: none"> Public support for Tier III nomination process 	<p>I don't like the sounds of having to get public support for Outstanding Resource Waters. Which public? Protecting currently pristine waters with every ounce of vigor we've got is just a no-brainer. (Belzer)</p> <p>RESPONSE: The opinion you express is not necessarily shared by all the citizens of this state. Ultimately, the protection of Tier III waters will require a cooperative effort by local government, citizens, Tribes, and state and federal agencies. Just listing a water body in the standards for Tier III status is not sufficient to achieve the protection desired.</p> <p>Making it easier for those so motivated to block Outstanding Resource Waters designations is clearly a step backward. (Audubon Washington)</p> <p>RESPONSE: See previous response.</p> <p>RE: (1)(c), Departmental nominations. Include as process for Ecology to use to make nominations. Should not rely on public nominations. (American Rivers)</p> <p>RESPONSE: The language allows Ecology to also propose waters for coverage, as could other state and federal agencies and Tribes.</p> <p>Would a significant social or economic impact to a community be allowed if there were significant public support for such. I don't think the constitutional limits within Washington on taking of private property can be amended by popular vote, either the greater State community or even within a local community. I think recognition of those</p>

	<p>constitutional limits directly in the WAC is necessary and, in fact, has been proposed in the new shoreline guidelines by the same agency. (Harrison-Bryan) RESPONSE: The standards do not take public property but only restrict the ability of the individual to pollute public property.</p>
<p>(52c) 201A-330(3) Tier III Process</p> <ul style="list-style-type: none"> • Tier III nomination process should involve legislature 	<p>339(3)(b): the last sentence should be changed to read: The department <u>may take information on nominations to legislative environmental committees to measure their support and will weigh...</u>” (Everett) RESPONSE: In many cases Ecology will be briefing legislators as part of our responsibility to carefully weigh the level of support, but whether the issue is appropriate for a committee briefing will be determined on a case-specific basis.</p> <p>The approval process really needs to be looked at. I think just Ecology just being able to approve something like that is very, very risky. I think it should be really based on legislative approval rather than just approval by Ecology because these would be a classification that would have extremely highly restrictive uses. (VanderPloeg) RESPONSE: See previous response. We also note that the legislature gave Ecology the authority and responsibility to administer the federal Clean Water Act programs, and we cannot choose to give it back.</p> <p>Your proposal directs Ecology to consider the economic impact to local communities when considering tier III classification. However, I feel that this balance should not be done by the enforcement agency, I think it should be done either by the state legislature or the Governor who can objectively weigh protection benefits against the economic impacts. This creates enormous uncertainty for timberlands owners on the Olympic Peninsula. (Bell) RESPONSE: See previous responses.</p>
<p>201A-330(4) Tier III Allowance for Temporary Pollution</p>	
<p>(53) 201A-330(4) Tier III allowance for temporary pollution</p> <ul style="list-style-type: none"> • Clarification 	<p>Ecology must clarify the meaning of temporary actions necessary to protect the public interest. Such actions should only include those necessary in emergencies and necessary to protect health and welfare. (WPIRG) (NEA) RESPONSE: We believe the language is adequate as written, and your suggestion would rule out many actions that are necessary to support the public use and enjoyment of such waters and as such is inconsistent with the program. Roads need to be repaired, culverts replaced, invasive species eradicated, etc. We believe it is essential to have a mechanism to allow such actions to occur if we are to be successful in gaining support for placing waters into Tier III.</p> <p>(4) - The language “maintained and protected” begs the obvious – at what level will it be maintained and protected? We suggest that clarifying the nondegradation approach of the Tier III status is required here. (NEA) RESPONSE: We have clarified that Tier III includes a non-degradation level of protection.</p> <p>(4)(b) - We note that the bypass language has been greatly abused to the point where it has been rendered meaningless in some states and with some sources . (NEA) RESPONSE: Comment noted.</p> <p>330(4)(d): Subsection (d) should be reduced to only say “Constituents of atmospheric deposition.” The reason is that application of this provision needs to be limited to just the water pollution control program authorized by the department. Consider for example the PAHs in sediments associated with forest fires. They are present and measurable, but the department has no control options available. (Everett) RESPONSE: Good suggestion. We have exempted atmospheric deposition as suggested due to the overriding complexity of linking the sources and needed controls to the degradation of Tier III waters.</p>

PART IV Tools for Application of Criteria

<p>(54a) PART IV</p> <p>Tools for application of Criteria</p> <ul style="list-style-type: none"> • Support 	<p>Each of these tools for refining the applicable uses or criteria in a water body is recognized by EPA and it is appropriate that Ecology is incorporating allowance for use of these tools into the Washington water quality standards. Use of any of these tools to change an applicable criterion or use for a water body requires EPA review and approval and ESA consultation. Ecology needs to make sure these expectations are clear to the users of these standards. (EPA)</p> <p>RESPONSE: <i>We have added clarifying language to that effect.</i></p> <p>We like the inclusion of alternative tools, such as variances, water quality offsets and site-specific criteria. (Seattle Port)</p> <p>RESPONSE: <i>Your support is noted.</i></p>
<p>(54b) PART IV</p> <p>Tools for application of Criteria</p> <ul style="list-style-type: none"> • Concerns about applicability 	<p>Any of the provisions in this section that provide less than full support for CWA section 101(a)(2) uses require the Department to re-examine these use designations every three years to determine if new information has become available that would indicate the uses could be attainable and the rules revised accordingly. 40 C.F.R. §131.20(a). (NEA)</p> <p>RESPONSE: <i>The standards will be implemented and revised in conformance with the federal rules.</i></p> <p>Tier II allows degradation if there is a justified economic or social benefit. Exemptions may also be obtained by the already existing short-term modification, which is up to five years and renewable; or the newly proposed variance, also up to five years and renewable; removal of a use by the use attainability analysis; the provision of site-specific criteria; or water quality process. I have just listed six ways a water body can be degraded under these new rules. These do not serve the intent to prevent water quality degradation. (Steffensen)</p> <p>RESPONSE: <i>We believe that implementation tools are a very necessary part of the water quality standards if they are to be appropriately implemented. Variances are used to maintain uses in the standards that could otherwise be removed by using a UAA. Short-term modifications allow important human actions to occur that violate numeric criteria but otherwise protect the beneficial uses of the waters, such as supporting habitat restoration efforts and integrated pest management programs. Site specific criteria can function in two directions, but even where criteria are made less stringent it is done to reflect the actual needs of the uses. This is similar to UAAs which are used to ensure that the uses and criteria targeted for protection reflect the actual needs of the water body and serve as much to ensure uses remain protected as to remove them.</i></p> <p>Ecology should specifically state whether the criteria assigned through variances, site specific criteria, and UAAs are temporary or permanent. (Spokane County)</p> <p>RESPONSE: <i>Variances are temporary as stated. Site-specific criteria and UAAs result establish specific criteria and uses to a water body and therefore replace those in the standards. We cannot say any standards are permanent. Further clarification in the rule seems unnecessary because of these national programs being used in very specific ways.</i></p> <p>The short-term modifications, variances, site-specific criteria, UAAs and offsets are merely rationalizations to allow increased water pollution. (Scarvie) (Hadley) (Kelly)</p> <p>RESPONSE: <i>We believe that implementation tools are a very necessary part of the water quality standards if they are to be appropriately implemented.</i></p>
<p>(54c) PART IV</p> <p>Tools for application of Criteria</p>	<p>We are concerned that under the proposed changes loopholes would be created by which polluters will continue to find exemptions to pollute. (Rowe)</p> <p>RESPONSE: <i>These tools exist whether we include them in the standards or not. We appreciate your concerns, but believe it is important to include legitimate pathways that exist for ensuring the water quality standards set the most appropriate criteria for protecting the state's waters.</i></p>

<ul style="list-style-type: none"> Concerns about creating loopholes 	<p>We know that polluters will operate at the lowest water quality they are allowed, and the new regulations appear to provide new tools for polluters to lower our shared water quality. (Peterson-M)</p> <p>RESPONSE: <i>We believe that implementation tools are a very necessary part of the water quality standards if they are to be appropriately implemented. Variances are used to maintain uses in the standards that could otherwise be removed by using a UAA. Short-term modifications allow important human actions to occur that violate numeric criteria but otherwise protect the beneficial uses of the waters, such as supporting habitat restoration efforts and integrated pest management programs. Site specific criteria can function in two directions, but even where criteria are made less stringent it is done to reflect the actual needs of the uses. This is similar to UAAs which are used to ensure that the uses and criteria targeted for protection reflect the actual needs of the water body and serve as much to ensure uses remain protected as to remove them.</i></p> <p>Another troubling thing about the regs is that there are a number of loop-holes for getting around them. You've got the overriding public interests. You've got short-term modification. You've got variances. You've got site specific criteria. You've got use attainability analysis. They're all mechanisms for kind of short-circuiting the standard and providing industry, in essence, a way to pollute without penalty. (Squaxin Tribe)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Ecology should eliminate exemptions and loopholes through which polluters, including dam owners, can avoid compliance with the standards. (American Whitewater) (Belzer) (CRC) (Clifford) (Hensley) (Maxwell) (Sierra Club) (Hollingsworth) (Suter) (Edwards) (NSBK) (Pech) (Lindholdt) (KRCG) (758 commenters, see Appendix 1)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>One thing I wanted to point out is that we should ensure against there being large loopholes through which developers are able to walk because it's hard enough to try and ensure and hold developers to a standard. Citizens are really the bottom line, the last holdout, and the last way for -- to really ensure that the standards are upheld. And our experience is that the cities will seem to find a way to help developers get away with murder, to be blunt. (Way)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Loopholes should only be allowed for public health emergencies. (Kiver) (Kelly) (Hughes) (Hill-J) (Gaither) (Woodmansee) (Patterson-J) (Morgan) (Rimbos) (Frisk) (McLaughlin) (McCluskey) (Mielke) (Kraus) (KRCG) (Bottles) (Espenhorst) (Mazetti) (Miller-B)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>By creating loopholes such as overriding public interest, short term modifications, variances, site-specific criteria, use attainability analysis, and offsets the focus shifts from compliance to the goal of getting around the standards. These loopholes should be eliminated or tightened up. (KRCG) (Mazzetti) (Luster)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Recommend Ecology withdraw these proposed standards and develop a new proposal that will actually result in clean water. If that is not acceptable then at least remove the loopholes that will result in the continued decline in water quality. (Luster)</p> <p>RESPONSE: <i>See previous response. Further, we believe this is a beneficial rulemaking.</i></p>
<h2>201A-400 Mixing Zones</h2>	
<p>(55a) 201A-400 Mixing zones</p>	<p>Persistent bioaccumulative toxins should not be allowed in mixing zones to protect human health and wildlife. (NSBK) (Raisler) (Umatilla Tribe) (American Rivers) (Sierra Club)</p> <p>RESPONSE: <i>Ecology's rulemaking does not include a revision to the criteria for</i></p>

<ul style="list-style-type: none"> Persistent Bioaccumulative toxins (PBTs) 	<p><i>bioaccumulative toxins and it would be inappropriate to alter the criteria or how they are applied at this point in time. Similarly we have not explored issues surrounding the elimination of mixing zones for other pollutants. We explored these issue years ago and dropped them from the rulemaking for numerous reasons; prominent of those was the agency's decision to embark on a multimedia strategy to control bioaccumulative toxins. That effort is targeting mercury at this time and will expand to other pollutants over time. Denying dilution for these compounds may be one approach but it does not adequately consider the technological limitations for either measuring these pollutants or the limitations for controlling them.</i></p> <p>Do not allow discharges of toxic substances into waterways, which include phasing out "mixing zones" for extremely hazardous toxics. (758 commenters, see Appendix 1) RESPONSE: <i>See previous response.</i></p> <p>We are disappointed that Ecology has abandoned the limited proposal to set a timeline to eliminate mixing zones for persistent bioaccumulative toxics (PBTs or persistent pollution). Mixing zones have absolutely no capacity to mitigate the impact of persistent pollution in the environment. Permittees should not be allowed to discharge persistent pollution at levels that exceed water quality standards. It took Ecology 10 years to complete this triennial review. We cannot afford to wait another 10 years to phase out mixing zones. (WPIRG) RESPONSE: <i>See previous response.</i></p> <p>In allowing Ecology to regularly adopt the maximum-sized mixing zone as the de facto mixing zone, the proposed mixing zone rules ensure that a host of toxic pollutants continue to be discharged into surface waters with no limits and limited to no monitoring. (CRK) RESPONSE: <i>See previous response.</i></p>
<p>(55b) 201A-400</p> <p>Mixing zones</p> <ul style="list-style-type: none"> Clarification 	<p>No mixing zone should be allowed for waters that exceed the criteria, and Ecology should develop and enforce compliance schedules. (Umatilla Tribe) RESPONSE: <i>See previous response. Further, mixing zones require that the standards be attained at the downgradient boundary.</i></p> <p>Does the mixing zone provision apply to powerhouse and spillway releases from a Dam? (USACE) RESPONSE: <i>Mixing zones require that the standards be attained at the downgradient boundary. There is no language that limits the application of the mixing zone allowances where they fit a particular situation.</i></p> <p>Could a new NPDES permit that allowed for the creation of acutely and chronically toxic conditions through the proposed mixing zone regulations be consistent with the state's anti-degradation policy? (CRK) RESPONSE: <i>Permits can authorize exceedances of the acute and chronic numeric criteria within the specified limits of mixing zones as described in the existing rule. Mixing zones are a part of the standards and thus compliance with the mixing zone provisions would generally be consistent with compliance with the antidegradation provisions.</i></p> <p>Does Ecology acknowledge that the size of mixing zones for proposed permits is regularly assumed in the NPDES permitting process to be the largest mixing zone size allowable for major dischargers and possible others? (CRK) RESPONSE: <i>The regulation requires that the size of mixing zones be minimized. The purpose is to minimize the ability to allow dilution and thus minimize the concentrations of pollutants. It is not uncommon to minimize the concentration of pollutants allowed and thus the actual dilution that occurs, while still writing the full mixing zone dimensions into permits. This approach unfortunately gives the appearances of unnecessarily utilizing the receiving waters dilution capacity.</i></p> <p>Does Ecology recognize that the Congressional goal in adopting the CWA was to</p>

eliminate water pollution by 1985? How are the proposed mixing zone regulations consistent with this purpose behind the CWA? (CRK)

RESPONSE: *There is nothing that we recognize about mixing zones that in and of itself is inconsistent with the goal of eventually eliminating the discharge of pollutants. Until a source can be removed it may be necessary to authorize dilution zones.*

Existing and designated uses would not be protected within mixing zones in violation of the CWA and ESA. When the cumulative size of possibly over a hundred mixing zones along both the Washington and Oregon sides of the Columbia River is considered, it is clear that mixing zones represent a significant percentage of the Columbia River. (CRK)

RESPONSE: *Mixing zones are an accepted part of state water quality standards programs. The size of our mixing zone was set to limit the period of exposure for organisms. While not characterized as healthy habitat the common misnomer that they are zones of death is quite incorrect.*

Given that designated uses are not protected in mixing zones and water quality is knowingly managed to be acutely or chronically toxic, how are mixing zones practically different from a designation of waste assimilation? (CRK)

RESPONSE: *Waste assimilation may not be established as a designated use for water bodies under the federal regulations. This does not prohibit or conflict with the concept of allowing limited areas adjacent to an outfall for pollutants to be diluted to meet criteria that were designed to apply to large portions of waterways. Designated uses are still protected in the requirements for mixing zones in Washington.*

How can Ecology's mixing zone rules assure protection given the cumulative and synergistic effects of toxics? Does Ecology believe that the proposed rules requires Ecology to consider the direct, cumulative and synergistic effects of toxics within the mixing zone on existing uses? (CRK)

RESPONSE: *Ecology has employed whole effluent toxicity testing to assist in identifying any potential synergistic or unforeseen effects. Ecology does not believe that any of the proposed rule changes alter the nature of how uses are to be protected from toxic effects.*

It is clear from discussions with Ecology staff at various levels, that the protective requirements of the mixing zone rules are not being applied and that the protections in the rules themselves are inadequate. (CRK)

RESPONSE: *We are not aware of those conversations. We are also unclear about what protections the comment refers to that are inadequate.*

Please explain what legal basis Ecology relies on for the assumption that it does not have to protect existing uses in areas that it decides to designate as a mixing zone. (CRK)

RESPONSE: *Ecology does protect existing uses in mixing zones, but the overall quality of the habitat may not be as high as surrounding waters. Mixing zones are a permissible element of state water quality standards programs. Ecology included language on the need to protect uses in its regulation.*

Under the proposed regulations does Ecology intend to require AKART level treatment for any pollutant which the mixing zone regulations would allow to be discharged in excess of water quality standards? If so, please explain in light of current practices. If not, does Ecology acknowledge that it would be allowing mixing zones for pollutants that are not treated to AKART levels? (CRK)

RESPONSE: *Ecology's mixing zone regulations have been in effect since 1988 and no changes have been proposed to that section of the regulation.*

What are the anticipated effects of chronic and acute mixing zones on ESA-listed salmonids and other existing uses? Does Ecology have any approximation of many individual salmonids and of what species will be injured or killed as a result of acute and chronic mixing zones? Does Ecology acknowledge that salmonid spawning and rearing cannot not occur in acute mixing zones? (CRK)

RESPONSE: *Ecology does not anticipate any harm to ESA listed species due to our long-term use of mixing zones. Mixing zones can be authorized for many different*

	<p><i>parameters and it is inappropriate to assume that even spawning cannot occur in a mixing zone and not be protected.</i></p> <p>What criteria does Ecology plan to use to identify sensitive or important habitat? Would critical habitat for salmonids fall outside this definition? (CRK) RESPONSE: <i>As noted previously, the existing rule language has not been discussed as part of the public process for this rulemaking, and no changes are being proposed.</i></p> <p>Would 400(5) allow Ecology to permit mixing zones for a given pollutant in a water body despite the fact that water body was already water quality limited for that pollutant? Does Ecology recognize that the proposed mixing zone rules are inconsistent with EPA's position on the use of mixing zones for pollutants that are exceeding water quality standards? (CRK) RESPONSE: <i>We are not proposing mixing zone rule changes. The existing rules require water quality criteria not to be exceeded outside of the mixing zone.</i></p> <p>Section (7)(b)(i) seems like an arbitrary limit that is not sufficient to protect water quality and beneficial uses. Some chemicals are more toxic than others, some are more likely to drift and persist. Protecting beneficial uses should limit size of mixing zones accordingly. One size mixing zone does not fit all pollutants. (Warnberg) RESPONSE: <i>See previous responses on the existing regulations for mixing zones above.</i></p> <p>400(7) (d and e) The lake detention times are identical but the standards vary. Something appears to be wrong with the text. (WDOT) RESPONSE: <i>See previous responses on the existing regulations for mixing zones above.</i></p> <p>400(8). The requirements fails to address or consider any impacts an acutely toxic mixing zone may have on ESA-listed species and does nothing to promote the conservation of such species or ensure that listed species will not be put in jeopardy. (CRK) RESPONSE: <i>See previous responses on the existing regulations for mixing zones above.</i></p> <p>400 (16) is very unclear. It seems to imply that this regulation is superceding the existing WAC 173-204 provisions on sediment impact zones. Please clarify. (Boeing) RESPONSE: <i>See previous responses on the existing regulations for mixing zones above.</i></p>
--	--

201A-410 Short Term Modifications

<p>(56a) 201A-410</p> <p>Short term modifications</p> <ul style="list-style-type: none"> Clarification 	<p>The short-term modification provisions should be refined so that they are applied and function appropriately. (EPA) RESPONSE: <i>We agree and believe the language adopted is appropriate.</i></p> <p>Ecology has made some significant changes to this provision that may warrant dividing the activities into categories, some of which don't easily fit the concept of a short-term modification. (EPA) RESPONSE: <i>We believe the program is appropriate and no need for father division is warranted.</i></p> <p>Weyerhaeuser supports this section as amended. (Weyerhaeuser) RESPONSE: <i>Your support is noted, however, please note that changes have been made to the proposed language.</i></p> <p>The rule seems to allow modifications first and then analyze their impacts after the fact (FOGH) RESPONSE: <i>Short term modifications are in the existing rule and have been used successfully to allow short term excursions from the criteria without causing harm to</i></p>
--	--

the environment.

Will the changes make it hard for us to apply herbicides to our lake or require new water testing? Do the new standards for copper eliminate its use? (LLIC)

RESPONSE: The new language will not make it harder than it was previously.

Ecology should more rename this section according to a heading more descriptive of what is being proposed. "Allowances for short-term violations of water quality standards" or "The short-term removal of designated uses," would be more appropriate. (CRK)

RESPONSE: We believe the current heading remains an appropriate title.

How could Ecology allow the type of degradation contemplated in 410 without violating its proposed anti-degradation policy? Would Ecology plan to prepare an anti-degradation analysis to justify the lowering of water quality standards or its other rules? (CRK)

RESPONSE: We believe the changes that we have proposed for this section will strengthen the program as a whole. The program is consistent with antidegradation so no analysis is required.

How could Ecology lower an applicable water quality standard necessary to protect a given use without this reduction in water quality being injurious to designated uses? (CRK)

RESPONSE: Often it reflects the duration of the activity and its limited aerial scope.

Short-term modifications are inconsistent with the requirement that water quality standards ensure protection of designated uses. (CRK)

RESPONSE: The program is commonly used to remove culverts that block fish passage and remove exotic invasive species that harm designated uses. For these reasons, we think it is helpful in meeting the goals of the Clean Water Act.

What authority does Ecology have to allow the degradation of water quality through short-term modifications outside processes through which such degradation could arguably be approved under the CWA and its implementing regulations? (CRK)

RESPONSE: Short-term modifications are used to protect beneficial uses and support human projects that are conducted consistent with the use-protection requirements of state and federal requirements.

This identification of Short-term Modifications is poorly defined, allowing too many exceptions to WQS. What is a short-term basis? What are essential activities? Carbaryl has been used in Willapa Bay and Grays Harbor for nearly 40 years. Is that short-term? Only a minority of shellfish growers use carbaryl – are they engaged in essential activities? Can a SWQM be used to temporarily suspend Sediment Management Standards? Ecology should be more precise in the definition of SWQM, and this exemption to the proposed WQS should be more restricted. (Warnberg)

RESPONSE: Short-term refers to the length of the period of time the numeric criteria would be exceeded, not to how many years the action has been authorized. The use of carbaryl was authorized only after the effects to other uses were weighed under an EIS and public review process. Short-term modifications apply to the water column.

Would any biologists be involved in the determination that a given modification of standards would not significantly interfere or become injurious to designated uses? (CRK)

RESPONSE: Not necessarily, but they are commonly involved directly or through consultation. Modifications for herbicide use, for example, are typically conditioned based upon the input from WDFW reviews.

The public should be able to review short-term modifications, and they should not be allowed to extend five years without yearly public review opportunities. (NSBK)

RESPONSE: There are opportunities for public involvement associated with the SEPA review and where applicable in association with any discharge permit obtained.

Short-term modifications should require consultation with the Washington Department of

	<p>Fish and Wildlife. (NEA) RESPONSE: Washington Fish and Wildlife staff are typically involved in the program.</p>
<p>(56b) 201A-410(1)</p> <p>Short term modifications</p> <ul style="list-style-type: none"> • Restriction of time 	<p>The proposed revision drops the parenthetical statement which illustrates the concept of “short-term.” EPA recommends that the time period examples be reinserted into the short-term modification language. (EPA) RESPONSE: We have added the clarifying example back to the section.</p> <p>We suggest substituting the word “temporary” for “short-term.” Some of the activities for which lower water quality is allowed, including stream restoration, may extend over several years. (PacifiCorp) RESPONSE: We are not proposing to change the name of this long-standing program.</p> <p>We suggest that paragraph (1)(c) be revised to read as follows: “Allow degradation of water quality if the degradation does not cause permanent harm to designated water uses.” (PacifiCorp) RESPONSE: We do not concur that any harm short of permanent should be acceptable.</p> <p>Restoration action should not have to go through periodic review. We suggest “The department in appropriate cases may approve a restoration plan that, at the completion of restoration activities, relies on the natural recovery of the watershed to return it to compliance with applicable water quality standards. In such cases, the department shall not require additional restoration activities once the initial restoration activities have been substantially completed.” (PacifiCorp) RESPONSE: Five years is not in our view an unreasonable burden for review when such an exceptional situation is involved.</p> <p>What time period does Ecology intend to include within the subjective definition of “short-term?” Is there any limit on the frequency with which short-term “modifications” could be allowed under the proposed rules? (CRK) RESPONSE: We provide a general example of what we are considering as short-term but do not believe a legal limit is appropriate given the wide variety of projects that are involved.</p> <p>(1)(c) - Existing uses should be added to designated uses in this section, (NEA) RESPONSE: We have.</p>
<p>(56c) 201A-410(2)</p> <p>Short term modifications</p> <ul style="list-style-type: none"> • Longer duration 	<p>Because of the variety of contexts in which activities requiring criteria modifications arise, 410(2) should not dictate the specific procedures for approving the modification. We suggest: “After an opportunity for public and intergovernmental review and comment, the department may authorize activities that extend for longer than one year if the activity is part of an ongoing or long-term operation and maintenance plan, integrated weed management plan, water body or watershed management plan, or restoration plan. The approved plans may be renewed or modified by the department after providing for another opportunity for public and intergovernmental review and comment.” (PacifiCorp) RESPONSE: It appears you are asking that the public involvement process be consistent with that specified in state law and that the modification be in compliance with SEPA. These are important issues to clarify as they are what we will be requiring.</p> <p>“Longer duration” should be defined so that the scope of activities subject to this section is clearer. (PacifiCorp) RESPONSE: We have made it clear that it is in comparison to the first part of the section.</p> <p>The added programmatic requirements in 410 (2) are in conflict with the currently established permit requirements under NPDES for aquatic noxious and nuisance weed control. Particularly the requirement for longer duration permits to be developed through</p>

a public involvement process goes beyond what is required in the established permit process. This proposed change to the WAC should be taken out or made specific to its intended purpose, such as for noxious weed control activities in lakes and estuaries. (WDOT)

RESPONSE: *The public involvement requirement for multi-year coverage (consistency with the Administrative Procedure Act Chapter 34.05 RCW) parallels the public involvement process outlined in national permit development (WAC 173-220-050). This requirement is not new, but was formally contained in WAC 173-201A-110 (I)(c).*

The proposed standard language concerning SEPA and other public involvement processes are duplicative and unnecessary. Permits and public involvement are tools for meeting the standards, not a part of the standards themselves. The proposed language overlaps and in some cases conflicts with actions already required by permitting processes. The current language does not provide the flexibility to deal with unanticipated events in conducting maintenance activities, which may expand the area of concern on a short-term basis. (WDOT)

RESPONSE: *Where a process is designed to serve multiple purposes, that is acceptable under the water quality standards. The allowance of a short-term modification is as much like a permit as it is a standard. The Clean Water Act, (3 USC Sec. 1251 (e)) states: "Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the administrator or any state under this chapter shall be provided for, encouraged, and assisted by the administrator and the states. The administrator, in cooperation with the states, shall develop and publish regulations specifying minimum guidelines for public participation for such processes." The current language applies to long term (multi-year) modifications of the standards rather than unanticipated events related to maintenance activities.*

Ecology is proposing to change the short-term modification provisions of the mixing zone section of the WQS which may create the possibility of authorizing such modifications for many years by one action. This section indicates that such a modification could be allowed for 5 years with unlimited renewals. We suggest that a limit on renewals be added. (King County)

RESPONSE: *Some programs are essentially permanent that need these modifications, such as with mosquito control and maintenance of catchment basins.*

Major watershed restoration would likely cause impacts to habitats and designated uses of indeterminate duration. "Short-term" is not a very clear concept in this context. (Arnold)

RESPONSE: *True, and we have made changes to the language to reflect this fact. We also added a supporting discussion in the antidegradation section.*

The allowance for long-term lowering of water quality standards or removal of designated uses is even more clearly inconsistent with the requirements of the CWA. (CRK)

RESPONSE: *We do not believe the loss of the uses that came about due to human pollution and alteration should be given the same level of protection as uses that naturally would occur or species native to the state.*

This apparently requires that we first develop a restoration plan pursuant to State administrative procedures for restoring Elwha River fisheries. This additional procedural requirement causes us some concern, imposing a redundant decision-making process, with attendant cost and delay. (LEK Tribe)

RESPONSE: *Duplicative analyses are not required. Where such a plan has already been developed, as it may have been as part of an EIS, it may serve to satisfy these requirements as well.*

Allowing longer term impacts for restoration is commendable, but need to consider the existing status of the stocks in the watershed and the long term benefits that result. Restoration should be clearing and carefully planned and implemented to avoid long-term impacts that affect productivity for multiple years. (CRITFC)

RESPONSE: *We agree and believe the language to be adopted is clear that the long-*

	<p><i>term benefits must be greater than any short-term losses.</i></p> <p>Allow modifications that will enable important river restoration projects and dam removals. (Raisler) RESPONSE: <i>We have added clarifying language.</i></p> <p>This section is a variance which requires EPA approval. (NEA) RESPONSE: <i>It is in our view that the allowance of a short term modification for longer term restoration projects is consistent with the federal Clean Water Act, especially with the goals for restoration.</i></p>
<p>(56d) 201A-410(3)</p> <p>Short term modifications</p> <ul style="list-style-type: none"> • Dam removal 	<p>These activities, such as dam removal may well last longer than hours or days, and can't be justified as a short-term modification. Watershed restoration activities could potentially be addressed under the variance provisions, relying on rationale #3 under 40 CFR 131.10 (g). (EPA) RESPONSE: <i>It is in our view that the allowance of a modification for longer term restoration projects is consistent with the federal Clean Water Act, especially with the goals for restoration. The variance provisions may not be consistent with the issues that surround many major restoration projects (for example, if a use that was created by an artificial structure will permanently be lost through restoration efforts, then a variance would not be an appropriate tool for the restoration activity to operate under). Similarly, variances are not consistent with the idea of conducting intermittent actions that protect beneficial uses and the public interest but cause water quality to fall below numeric criteria.</i></p> <p>Allow modifications that will enable important river restoration projects and dam removals. (Raisler) RESPONSE: <i>We believe that the rules will allow for important restoration projects as written. The language on this issue that was previously in the draft in the definition of full support was inadvertently removed prior to the proposed draft when simplifying the antidegradation policy language that used that definition. We acknowledged that oversight and have since reinserted the language needed in antidegradation to support restoration and to support the proposed language in the short-term modification section.</i></p> <p>(3) - Existing uses should be added to designated uses in this section. (NEA) RESPONSE: <i>They have.</i></p> <p>Ecology is proposing a double standard of lesser environmental protection for dam removal projects. Ecology is attempting to carve out an exception for dam removal that is inconsistent with how standards are imposed on the agricultural community and other businesses and industries in Washington. (FP&S) RESPONSE: <i>Ecology is looking beyond dam removal to the broader issue of long term habitat restoration efforts. Restoration efforts can include installing natural riprap that functions more naturally, replacing pool/riffle complexes, reconnecting old channel meanders, etc. All of these actions can result in substantial short term exceedances of water quality criteria, and yet are important for the restoration of habitat.</i></p> <p>The rule-making process was compromised by Ecology's collaboration with PacifiCorp. The SPA outlines a specific process where interested parties can participate in the rulemaking. Ecology failed to meet that standard and allowed a private corporation to influence this rule-making. (FP&S) RESPONSE: <i>As shown in the above comments and responses, the issue of dam removal and the standards goes beyond a single project in one area of the state. We have included this issue in public workshops held around the state in 2001 and then again in association with the hearing in 2003. We always work to ensure extensive public participation in our rule changes.</i></p> <p>The proposed language in WAC 210A-410(3) is inconsistent with minimal levels of water</p>

	<p>quality protection afforded by state regulation RCW 90.54.020(3). The proposed standards exempting watershed restoration projects and dam removal projects would allow a deterioration of water quality with no baseline level of minimum protection. No meaningful AKART measures have been proposed by the applicant to mitigate the release of over 2.4 million cubic yards of sediment. (FP&S)</p> <p>RESPONSE: <i>The benchmark is to provide greater benefits to the health of the aquatic system. This requires that the tradeoffs be carefully weighed and requires a plan that will be publicly reviewed.</i></p> <p>Ecology should delete the reference to dam removal as a de facto “watershed restoration activity” that “provides greater benefits to the public health of aquatic systems in the long term”. (FP&S)</p> <p>RESPONSE: <i>We have tried to make it clear that it is just one example of a restoration action.</i></p> <p>There are many dams that are approaching the ends of their lives and language must be in the regulations to enable their removal. Allow short and long-term modifications to allow for important restoration projects. Must allow for the loss of a non-native fishery that thrives in reservoirs behind dams (FOTWSR)</p> <p>RESPONSE: <i>We believe that the changes to the regulation will allow for such restoration.</i></p> <p>The rules should provide an exception for water quality impacts resulting from bona fide natural resource restoration projects. The rule must allow long-term impacts to certain uses which might occur in the case of a dam removal. (FOTCG)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Ecology should clarify that where necessary to benefit the river ecosystem and when in the public interest, long-term/permanent impacts to certain uses may be permitted (such as impacts to a non-native fishery that has thrived in a reservoir created by a dam). (American Rivers) (American Whitewater)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>Allow short and long-term modifications to water quality standards and uses in order to allow for important river restoration projects that are in the public interest, such as dam removals. (758 commenters, see Appendix 1)</p> <p>RESPONSE: <i>See previous response.</i></p> <p>The record shows that Pacific Corps itself has expressed concern that the phrase "major watershed restoration activity" may not describe their Condit proposal. Pacific Corps knows its decision to remove Condit Dam is a business decision first and foremost and not a Pacific Corps sponsored watershed restoration activity. (Struck)</p> <p>RESPONSE: <i>This comment is not relevant to the language of the standards.</i></p>
201A-420 Variance	
<p>(57) 201A-420</p> <p>Variance</p> <ul style="list-style-type: none"> Clarification 	<p>The use of variance should be disallowed (NSBK)</p> <p>RESPONSE: <i>Variances are permitted by EPA where a state chooses to keep a designated use that it could otherwise remove entirely from its water quality standards. This gives the state an option to keep the use and hope that conditions (economic or otherwise) change at some time in the future such that the use can be attained. A variance is authorized where the situation meets the Use Attainability Analysis rationale for removing a designated use in the federal rules.</i></p> <p>(3) - “Reasonable progress” needs to be defined. This is merely a loophole through which the Department will proceed to fail to make progress in reducing pollution . (NEA)</p> <p>RESPONSE: <i>See previous response. This is a reasonable requirement for the variance program.</i></p>

	<p>“Reasonable progress” is very subjective. Is there an alternative? (USACE) RESPONSE: See previous response.</p> <p>40 C.F.R. § 131.10(g) does not appear to be germane to variances, which are authorized by a separate EPA regulation, 40 C.F.R. § 131.13, and which do not require the removal of designated uses or use attainability analyses. (PacifiCorp) RESPONSE: Variances are only authorized where they meet the conditions established in 131.10(g) for removing a designated use. See previous comments above on variances.</p> <p>420 should be modified to reflect the requirements in 40 C.F.R. § 131.10(h), including the requirement that states can not remove a designated uses if it is an existing use. (CRK) RESPONSE: We have added the additional reference.</p> <p>The regulation should be revised to ensure that any variance is consistent with the protection and conservation of ESA-listed species and other requirements for variances in the CWA. (CRK) RESPONSE: All rule changes, which includes a variance, must go through EPA review and approval and the associated ESA consultation process.</p> <p>Variances should meet ESA standards and protect treaty rights. (Umatilla Tribe) RESPONSE: See previous response. Ecology recognizes the need to consult with the tribes on changes that would affect their treaty rights or reservation waters.</p> <p>This section of the rules should discuss the justification for providing criteria that are less than protective of uses on a temporary basis. Otherwise, the department is merely inviting abuse of the triennial review process to determine what criteria are protective for the waters of the state. In addition, the rules should state that compliance with Tier I antidegradation policy protecting existing uses is mandatory. Variances require review and approval or disapproval by EPA. Variances should be subject to consultation with Indian tribes. (NEA) RESPONSE: See the previous responses above on variances.</p> <p>Variances allow a five-year hiatus, renewable, from the standards if reasonable progress is being made towards compliance. Polluters will focus on this, or another loophole, rather than undertake efforts to reduce their pollution and comply with the standards. (Hollingsworth) RESPONSE: See previous responses above on variances.</p> <p>We have some concerns about the utility of variances– they are written to apply in only a very limited set of circumstances. (Seattle Port) RESPONSE: That is a proper interpretation of the program. They are allowed under a very limited set of conditions and Ecology cannot change the federal requirements and EPA guidance to expand them. See previous responses above on variances.</p>
<h3>201A-430 Site Specific Criteria</h3>	
<p>(58) 201A-430</p> <p>Site specific criteria</p> <ul style="list-style-type: none"> Clarification 	<p>This section limits site-specific criteria to circumstances in which the established water quality criteria cannot be met due in whole or in part to natural climatic or landscape attributes or irreversible human changes. It also limits site-specific criteria to those that are consistent with 40 C.F.R. § 131.10. These limits are inappropriate for site-specific criteria. The premise of a site-specific criterion is that it will protect the designated uses of a particular water body more appropriately than the generally applicable criterion. Whether the generally applicable criterion can be met, and, if not, the reasons why it cannot be met, are irrelevant. With respect to 40 C.F.R. § 131.10, that regulation governs the designation of uses, not the establishment of water quality criteria, which is governed by 40 C.F.R. § 131.11. (PacifiCorp) RESPONSE: We have built into the final language the more common terminology for applying site-specific criteria. Site-specific criteria do need to conform with the same</p>

directives as the originally established criteria.

The site-specific analysis tool apparently is the sole means available to obtain the “alternative criteria” for natural or irreversible human conditions. The current rules don’t do this – this radical change in approach sets up a major bureaucratic roadblock for every entity that discharges to those water bodies. (Seattle Port)

RESPONSE: We have clarified that the natural conditions clause and concept is still independent of establishing site-specific criteria.

430 is unnecessarily encumbered by reference to 40 CFR 131.10. Site specific criteria reflective of natural limitations and irreversible human actions can be established without treating the action as removal or downgrading of beneficial uses requiring a UAA. Regulations governing numeric criteria (40 CFR 131.11(b)(1) do not require a UAA in order to establish site specific criteria. (MC-PUDs)

RESPONSE: We do not believe we can avoid the UAA process when asserting that uses can be downgraded due to human actions. EPA uses the clause you have cited to explain that a UAA is not required when adopting more protective uses.

Opportunity should be provided to establish site-specific criteria for a water body segment, not necessarily the entire water body. (Weyerhaeuser)

RESPONSE: We will retain the terminology of water body. However, we would not assume that the term water body limits application such that it cannot be applied to large homogenous portions of a water body. Reach-level standards, however, may be problematic to defend since questions of aquatic life that should be considered in residency and transient sources of human materials that may mitigate any reduced toxicity will become central.

It is not clear what provisions of the proposed standards are superceded by site specific exceptions. (USACE)

RESPONSE: The numeric criteria are the element of the standards that are replaced, not superceded, by site specific criteria.

430 is too broad in that it would allow site-specific criteria for virtually any water of the state. There is no clear process or standards. (CRK)

RESPONSE: EPA guidance would need to be met. The change would need to be adopted by regulation. EPA would need to approve it as meeting the Clean Water Act and ESA. We see no reason that limits should be placed on the number of water bodies. If the approach is correct and would protect the uses, then application statewide would be acceptable. Ecology has used this approach to change the cyanide criteria for Puget Sound and the copper criteria in all marine waters.

What types of conditions would be considered an irreversible human change? A large dam? Concreted riverbed? (CRK)

RESPONSE: Those are both possible situations, but the key is to follow the requirements established in the federal regulations for making this determination. A dam or a highly modified system is not necessarily irreversible.

Also note that site specific criteria must follow EPA regional temperature project guidance which points out shortcomings of past EPA guidance on estimating protective water quality criteria. (CRITFC)

RESPONSE: We do not see a need to reference the guidance in our standards.

Further clarification on what demonstrations will be required is needed. (Umatilla Tribe)

RESPONSE: We expect to develop further guidance on how to implement tools such as site specific criteria after the rulemaking is done.

Site-specific criteria allow suspension of the standards when the stream cannot attain them due in whole or in part to human changes. Polluters will focus on this, or another loophole, rather than undertake efforts to reduce their pollution and comply with the standards. (Hollingsworth)

RESPONSE: It may indeed sometimes serve as a distraction, but it is allowed whether

	<p><i>or not we mention it in our standards and if the process is used correctly it results in changing the standards appropriately.</i></p> <p>Please rigorously revise 430, deleting subsection (2) and subsection (4). (Seattle Port) RESPONSE: <i>We have revised this section in numerous ways but see no reason to delete the two referenced sections.</i></p> <p>430(4) says that the approval decision must be “based on a demonstration that alternative criteria will protect the existing and attainable uses of the water body.” This requirement seems patently unachievable. If the water quality criteria have been set at a level necessary to protect the existing and attainable uses, how could one ever prove out of that presumption? (Seattle Port) RESPONSE: <i>The purpose of site-specific criteria is to establish criteria that, while different from the statewide or national criteria, are fully protective at an individual stream level, after considering the species and water chemistry specific to that stream.</i></p> <p>(5) - This requirement that the department authorize the development of site specific criteria suggests that some other party will be creating the criteria. As this authority has not been delegated to any other entity within Washington state, this rule language should be stricken. Site specific criteria require review and approval or disapproval by EPA. Site specific criteria should be subject to consultation with Indian tribes. (NEA) RESPONSE: <i>Anyone can do the work necessary to establish site-specific criteria, but Ecology must approve and adopt the results as revised criteria in the water quality standards, and then submit to EPA for approval.</i></p>
--	--

201A-440 Use Attainability Analysis

<p>(59a) 201A-440</p> <p>Use Attainability Analysis</p> <ul style="list-style-type: none"> Clarification 	<p>The UAA is designed to enable a downgrade or removal of the level of use protection designated in the state standards. How will this tool be implemented in conjunction with the antidegradation rule? (NMFS) RESPONSE: <i>UAAs also are used to ensure that all attainable uses, even where they do not exist, remain protected by state standards. UAAs modify the uses and criteria that are the subject of antidegradation protection. Further, even if the uses or criteria are downgraded Tier II protection applies to protect that water quality that is higher than the newly revised criteria.</i></p> <p>Include a section in the rule that allows an opportunity for administrative due process to challenge the beneficial use classification during the conversion process. After completing a screening, the department shall 1) issue public notice of the intent to conduct a UAA, 2) identify interim effluent standards via order that are reflective of the level of protection that is needed in those water bodies pending a UAA. (Boeing) RESPONSE: <i>All changes must be adopted by rule which means there is substantial process and opportunity for public involvement and challenge.</i></p> <p>This section appears to be inconsistent with EPA’s regulations in that, under those regulations, an existing use may be removed if a use requiring a more stringent criterion is added. See 40 C.F.R. § 131.10(h)(1). (PacifiCorp) RESPONSE: <i>We will implement this program consistent with the EPA regulations even though we have not cited every portion of the federal regulations related to adopting and revising water quality standards.</i></p> <p>There is a higher bar to make an exception (UAA) then there was to develop the standards (multiple lines of evidence). (WSHA) (WCA) RESPONSE: <i>That is correct and consistent with the EPA regulations.</i></p> <p>While UAAs have promise, the underlying problem is unrealistic inflexibility in the standards due to apparently selective treatment of the data used in developing standards. (WCA) RESPONSE: <i>We are going to make use changes in accordance with the authorities</i></p>
--	---

	<p><i>and limitations established under state law and federal laws and regulations.</i></p> <p>Notifications of any proposed changes should be sent to the Director of Natural Resources and to the Water Quality Policy Analyst. (Umatilla Tribe) RESPONSE: We have clarified that Tribal Consultation will occur and will ensure the Umatilla Tribe is included.</p> <p>Some off-river facilities such as large reservoirs have multiple purposes, applying aquatic life standards for indigenous warm water species is unrealistic. Reservoirs are large heat sinks. It seems a waste of time and resources to implement a UAA study. (SCBID) RESPONSE: A UAA would be required to change uses in the Columbia Basin Irrigation Project under federal water quality standards regulations.</p> <p>(2) - This should read, "After receiving a UAA request..." The department should not be receiving something it calls UAAs. (NEA) RESPONSE: We have made some modifications to the language.</p>
<p>(59b) 201A-440</p> <p>Use Attainability Analysis</p> <ul style="list-style-type: none"> • What is attainable? 	<p>We urge Ecology staff to use common sense in interpreting what is "attainable." Unfortunately, it appears that Ecology seems to be heading in the overly broad direction, in that char spawning or rearing has been assigned as a specific designated use, even when char are only suspected to be present. (Seattle Port) RESPONSE: We believe that the method for applying the char criteria is defensible.</p> <p>Application of the UAA needs to incorporate processes for both redefining the beneficial uses ascribed to a water body and the possible establishment of new reaches based on attainable uses. Add sections (2) to allow changing uses and section (3) to allow establishment of a water body with different uses than those adjacent using UAA. (Spokane County) RESPONSE: There is nothing in the proposed language that prohibits us from redefining the boundaries for water body segments as part of a UAA. Trying to explain how water body descriptions can be changed adds unnecessary complexity.</p> <p>Please provide an explanation of how Ecology would define a water body use designation as "not attainable." (NMFS) RESPONSE: We must follow the federal regulations at 40 CFR 131.10(g) which lays out six conditions under which a use can be determined not to be attainable.</p> <p>There must be general protection for all uses even if they are not attainable right now (KRCG) RESPONSE: Attainability examines what is likely to be attainable in the future not just right now.</p>
<p>(59c) 201A-440</p> <p>Use Attainability Analysis</p> <ul style="list-style-type: none"> • Concern that economics will drive UAAs 	<p>UAAs allow a polluter to petition to eliminate one or more of the already limited uses of streams. Polluters will focus on this, or another loophole, rather than undertake efforts to reduce their pollution and comply with the standards. (Hollingsworth) RESPONSE: Ecology will develop guidance to aid dischargers and others in evaluating the appropriateness/likelihood of success for a UAA. This will help minimize the potential wasted resources from trying in vain to change uses that cannot be legitimately removed under state and federal rules.</p> <p>It is our position that inclusion of the UAA provisions in Washington's rules is intended to encourage use of UAAs. Further, we believe that the state's resources are much better spent on attempting to remedy the vast and unsafe levels of pollution in the state's waters rather than trying to justify continuing and/or increasing those pollution levels. (NEA) RESPONSE: The intent is to make the entire standards program obvious to users of the standards.</p> <p>The Clean Water Act probably does not authorize the consideration of economics in classifying the state's waters for the purpose of applying water quality standards. (PAS) RESPONSE: We are following the federal regulations established by EPA to implement the Clean Water Act.</p>

	<p>The proposal allows polluters to use these UAAs to eliminate uses based on economics because the polluter does not want to clean up its effluent. The UAA process should be much more limited in accordance with the intent of the CWA. (Sierra Club) RESPONSE: See previous response.</p> <p>We have seen that public and tribal involvement in no way guarantees that the involvement has a meaningful impact on the outcome or that the spirit of the Clean Water Act is upheld. (PAS) RESPONSE: Comment noted..</p> <p>The UAA process should be much more limited and not allow polluters to use economics to eliminate uses. If economics is used it must include benefits/impacts of fisheries, clean water, and recreation. (Am Rivers) RESPONSE: Economics can only be used to eliminate uses that do not exist and the benefits of clean water can be brought up to counterbalance the economic benefits of pollution.</p> <p>Could an interest say that salmon do not and will never use a certain stretch of river that historically was a spawning area because the water is already too chemically polluted and it would be too expensive to clean the river? Ecology should more rigorously outline the process by which an interest could successfully petition to remove uses so that uses can be removed only in rare circumstances. Ecology should remove the economic consideration for UAAs. (PAS) RESPONSE: Yes, if the use does not exist and has not existed since 1975 and it would cause widespread social and economic impact to bring the use back, then it is possible to remove that use as a designated use from the state standards.</p> <p>This opens the door for special interests to undermine community programs to restore water quality and beneficial uses. Who decides the use is unattainable? (Menzies) RESPONSE: Ultimately Ecology decides what is attainable, but EPA must concur, and it can only happen through a public process that allows the public the opportunity to engage in the proposed use change.</p>
<p>(59d) 201A-440</p> <p>Use Attainability Analysis</p> <ul style="list-style-type: none"> Suggestions for stream-lining UAAs 	<p>The City urges Ecology to develop a streamlined procedure for UAAs to ensure that greater flexibility does remain a benefit of the use-based system. (Seattle City) RESPONSE: We note your desire to make removing designated uses a stream-lined process.</p> <p>Expedite the UAA process by allowing the consideration of previously prepared evaluations, such as approved Biological Evaluations, rather than requiring that the information be generated just for this purpose. (Seattle Port) RESPONSE: UAAs do not require duplicating satisfactory efforts that already exist.</p> <p>We encourage the department to find reasonable approaches for future UAAs that will be able to work smoothly and efficiently with the new approach. (GAC) RESPONSE: That is indeed a goal that we share as well. Please remember all UAAs must go through a public process in order to be approved.</p>
<p>201A-450 Water Quality Offsets</p>	
<p>(60a) 201A-450</p> <p>Water Quality offsets</p> <ul style="list-style-type: none"> Clarification needed 	<p>We recommend that you insert language into the provision to clarify that the offset needs not only to precede the discharge that it is offsetting, but also remain in place so that the reductions continue to occur at the same time as the discharge they are meant to offset. In addition, the offset and discharge need to be related spatially in such a way that the water body condition and uses aren't being degraded in the water body as a whole between where the discharge occurs and where the offset takes place, nor create any adverse localized impacts. (EPA) RESPONSE: We believe the proposed language is clear enough on all these points. It</p>

says it must remain for the life of the project it is offsetting and discusses attenuation of the benefits between as the water travels to the activity being offset. Uses can only be improved in the waters above the project being offset.

Adding the concept of offsets is a great idea. Greater net environmental benefit can often be achieved when flexibility is provided. We would like to see Ecology expeditiously develop guidance and processes for approving strategies using offsets for stormwater. What is the required relationship of the offset to balance the assimilative capacity to allow for new or expanded discharges? Will this be a one for one relationship? (WDOT)

RESPONSE: *We agree that more guidance would be helpful for implementing offsets. We specify that there must be a net environmental benefit but do not give a specific level.*

It seems to say that offsets are not only to offset the new and expanded discharges but a proponent would also need to provide a net environmental benefit. (USACE)

RESPONSE: *Yes, we agree with your interpretation.*

The concept of offsets is not clearly defined. Would structural TDG abatement measures qualify as a component of a water quality offset? How does pollution trading fit? (USACE)

RESPONSE: *Pollution trading - out of place or out of kind - does not qualify as offsetting under the state standards. TDG abatement technology could apply at least in theory if it meets the requirements in the standards as described. If a dam can't meet TDG criteria but helps pay for controls for upstream dams above what they are required to do, and this results in water quality at that downstream dam meeting the TDG criteria then in that case the offsetting provision would apply.*

Does the statement that "all other applicable criteria must be met" mean that each water body or facility can get only one variance? Does this mean that a water body must have some sort of pre-assignment of variance potentials before an individual facility can apply for a variance? (Seattle Port)

RESPONSE: *It is not a variance and there is no limit to the amount of offsetting arrangements that can occur on a water body. Offsets only provide another means for meeting the water quality criteria, they do not create a variance from those criteria.*

(1) - We concur that a net environmental benefit should arise from application of this section. We do not agree that a source seeking to use water quality offsets should be able to avoid Tier II antidegradation provisions. The offsets will be an appropriate part of the antidegradation review. (NEA)

RESPONSE: *We note your disagreement but find no basis to support removing this provision.*

In 450(2) the introductory sentence, 'it' should be 'they.' (King County)

RESPONSE: *Comment noted.*

(2)(a) - As written this provision, in its use of the phrase "would not meet," contemplates restricting the use of offsets to only waters that are currently high quality rather than those that are impaired but for which assimilative capacity could be created. That does not appear to be the department's intent. (NEA)

RESPONSE: *You are correct and we have changed the language.*

(2)(b) - We strongly support advance creation of assimilative capacity. (NEA)

RESPONSE: *Your support is noted.*

We support the requirement (2)(b) that water quality improvements must be demonstrated in advance of the proposed action and that offsets meet anti-degradation and anti-backsliding requirements. (CRK)

RESPONSE: *Your support is noted.*

(2)(d) - The rule language should include the requirement that such offset controls must be included in the NPDES permit for the proponent and that compliance with those

	<p>controls must be fully enforceable as with any other permit condition. Offsets must have sufficient clarity in both description of actions and follow-up implementation and effectiveness monitoring and reporting as to be both measurable and enforceable. (NEA)</p> <p>RESPONSE: <i>We agree that there should be some acknowledgement that an offset was used to achieve compliance so that the arrangement can be tracked over time and changing staff, but we do not agree that it should be enforceable as a permit condition. We believe the arrangement needs to be a legal contractual agreement between the person seeking the offset and the person providing it. If the offset is eliminated then the discharger must take some other action to come into compliance with the standards. So we don't enforce the offset arrangement but only the compliance with standards.</i></p>
<p>(60b) 201A-450</p> <p>Water Quality offsets</p> <ul style="list-style-type: none"> Concerns about application 	<p>The ability to use offsets should be linked to the actual demonstration of mitigative capacity, before any permits or degradation is authorized. (NSBK)</p> <p>RESPONSE: <i>We agree and have stated so in the proposed rule.</i></p> <p>We have some concerns about the utility of offsets – they are written to apply in only a very limited set of circumstances. (Seattle Port)</p> <p>RESPONSE: <i>We believe that this is the appropriate way to use pollution offsetting for the purpose of complying with the state standards.</i></p> <p>We are happy to see a trading program with fairly strict requirements. (Normandy Park)</p> <p>RESPONSE: <i>Your support is noted.</i></p> <p>Concerned this will be difficult to measure, monitor, and enforce particularly in waters without TMDLs. (Menzies)</p> <p>RESPONSE: <i>We recognize the need to develop supplemental guidance and that we will learn more about how to use offsetting as we gain practical experience.</i></p> <p>If an offset is being allowed there should be a significant environmental benefit and the significance of that benefit should be disclosed to the public as a part of a public-review process not currently envisioned in the proposed rules. (CRK)</p> <p>RESPONSE: <i>It would be part of the permitting process and the public review thereof. We believe that offsetting is an appropriate tool to help balance the future growth requirements of the state with the need to meet water quality standards. Establishing significant thresholds for improvement above that needed to address uncertainty seems inappropriate.</i></p> <p>Offsets are flawed since its evaluation of whether the effect of a discharge is “unmeasurable” is from the perspective of the edge of a mixing zone. (CRK)</p> <p>RESPONSE: <i>The language that you oppose restates what is required under Tier II as the threshold test for requiring a Tier II antidegradation review. What this means is that if a discharger arranges for upstream pollution controls sufficient to offset their activity such that they would not trigger the Tier II analysis test, then no Tier II test would be necessary. Offsetting is a significant undertaking and would not be expected to be chosen just to avoid the alternatives analysis and overriding public interest tests under Tier II.</i></p> <p>Although in some such circumstances it might be appropriate to revoke the offset or impose additional requirements, subjecting one party to an enforcement action because of the failures of another party would be unwarranted and would provide a strong disincentive for using offsets. (PacifiCorp)</p> <p>RESPONSE: <i>Someone needs to be responsible. We would hold the entity responsible for meeting the standards not upholding the offset arrangement. It should provide an incentive to ensure that the offsetting arrangements are legally binding and will remain in effect, which is what we intend happen.</i></p>

201A-5150(1) Implementation

(61a) 201A-510(1)

Implementation

- Permitting

We are pleased to see the inclusion of the “permit shield” language in 173-201A-510(1)(a), a concept that has always existed in federal law but which until now has been vague under state regulations. (Seattle Port)

RESPONSE: Comment noted.

The 'which' in the last sentence of (1) should be a 'that.' (King County)

RESPONSE: Comment noted.

Change 510(1)(a) to “Persons discharging wastes in compliance with the terms and conditions of permits are still subject to civil and criminal penalties if they knowingly and intentionally discharge wastes which violate state water quality standards. Persons writing and issuing permits are subject to civil and criminal penalties if they knowingly issue permits which authorize discharges of wastes which violate the applicable state water quality standards. (SLS)

RESPONSE: Your concern should be covered by the inclusion of the requirement that the discharge be in compliance with the permit.

A subsection 510(1)(c) is necessary: "Permits for discharges from municipal separate storm sewer systems shall be deemed to meet water quality standards when they control pollutants to the maximum extent practicable using appropriate best management practices that are available and capable of being designed, constructed, and implemented in a reliable and effective manner, including consideration of cost." (King County)

RESPONSE: A change as suggested above would be outside the scope of this rulemaking. Further, we would have reservations about extending this language to a program that uses adaptive management and includes considerable applicant choices in the BMPs that are selected for use.

Revise 510(1) to read “No waste discharge permit can be issued which would permit discharges of water that violate the state water quality standards for the applicable receiving water.” There is no reason to issue a permit which results in violations. (SLS)

RESPONSE: There are errors in estimation that can occur.

Does Ecology intend to require attainment plans as a substitute for requiring compliance with applicable water quality standards? If so, what is the statutory or regulatory basis? (CRK)

RESPONSE: Compliance schedules are an existing program. They recognize that a facility cannot change overnight and some time needs to be allotted for them to come into compliance with the standards. They are not allowed for new facilities.

What statutory authority in the CWA permits Ecology to allow compliance schedules for existing discharges? (CRK)

RESPONSE: EPA permits the use of compliance schedules and the issue has been litigated in court. This is a nation-wide practice that we believe makes good sense. There is nothing that prohibits the state, either in state or federal statute, from allowing reasonable time to come into compliance.

(1) - The last sentence that discusses issuance of a permit “which results in a violation” should be changed to “causes or contributes to a violation.” (NEA)

RESPONSE: This is an appropriate change and has been made. It is not necessary that the entity be the sole cause of the violation of standards to warrant corrective changes under the standards.

(1)(a) - If, as they should, permits issued in the State of Washington include a narrative condition prohibiting the permittee to cause or contribute to the violation of water quality standards, notwithstanding other restrictions in the permit, this provision has the effect of gutting that condition. The department should not attempt to create additional permit shields to those that already exist. (NEA)

RESPONSE: Ecology believes that permittees should be protected from lawsuits where

	<p><i>they are operating under legally established water quality permits.</i></p> <p>(1)(b) - “Violates” should be changed to “causes or contributes to a violation.” (NEA) RESPONSE: <i>We agree and have made the change.</i></p> <p>(4) - We urge removal of this provision. The department should establish what water quality studies are necessary in advance of permit reissuance and the permittee should complete those studies. To allow compliance schedules because neither the regulator nor the regulated party are unable to anticipate that actions must be taken to ensure the protection of public waters is contrary to the goals of the Clean Water Act. (NEA) RESPONSE: <i>What you suggest would mean that every time a criteria is changed or added, Ecology would have to immediately get all dischargers in the state at one time under individualized plans to collect the needed information and develop viable control options. Even if that were possible, those with permits being reissued that year would not have time to due the necessary studies and would be placed out of compliance without the ability to issue a compliance schedule.</i></p> <p>(4)(c) - No compliance schedule longer than five years may be included in a five year permit . (NEA) RESPONSE: <i>This is existing rule language. We generally do issue only five year or less compliance schedules. The ten year clause is for special situations as is noted.</i></p>
<p>(61b) 201A-500</p> <p>Implementation</p> <ul style="list-style-type: none"> Nonpoint Sources 	<p>While BMPs are an accepted approach to managing water quality from non-point pollution sources, historically there has been too little emphasis placed on whether the BMP actually produces the benefit assumed. This rule would be strengthened by requiring that the efficacy of a BMP be verified either by its inclusion as a tested protocol in a preexisting document, egg., a stormwater manual, or that there be monitoring requirements applied to programs that use unverified BMPs as tools for achieving water quality goals. (Spokane County) RESPONSE: <i>We agree, however this comment is outside the scope of this rulemaking. While a sound concept, this is an existing section of the regulation and no proposed changes have been discussed during the public involvement process. We are therefore unable to make your suggested change at this time.</i></p> <p>In subsection (c) it is not clear what process will be used to determine the BMP and whether it they are applicable. On what criteria will Ecology approve BMPs? (USACE) RESPONSE: <i>See previous response. Ecology does not have a specific process for evaluating or approving BMPs.</i></p> <p>How does Ecology plan on handling “Natural Conditions” in terms of implementation of the proposed rule? (Island County) RESPONSE: <i>It depends upon the situation and why we need to determine what natural conditions are. Generally, we use it to supercede numeric criteria that cannot be naturally met at some site.</i></p> <p>Section 3(b): The department must be rigorous in requiring additional BMPS where the standards are not being met (CRITFC) RESPONSE: <i>Your concern is noted.</i></p> <p>I'm very concerned with the potential impacts for enforcement actions in the WRIA as it relates to rural communities, towns, cities, businesses and farms in terms of compliance with the standards that are being proposed. (Baldtree) RESPONSE: <i>Your concern is noted.</i></p>
201A-510(5) Compliance Schedules for Dams	
<p>(62a) 201A-510(5)</p> <p>Compliance schedules</p>	<p>The proposed rules outline a useful approach towards reconciling hydro operations with water quality standards. (Avista) RESPONSE: <i>Your support is appreciated.</i></p>

<p>for dams</p> <ul style="list-style-type: none"> Support 	<p>This section provides a thoughtful and appropriate mechanism for addressing water quality standards issues related to dams and hydroelectric facilities. Paragraph (5)(a) should be revised to clarify that a dam's compliance with water quality standards will be evaluated only in the context of relicensing, a section 401 certification, or other proceeding in which compliance with water quality standards is an issue. (PacifiCorp) RESPONSE: Your support is appreciated. We do not believe it to be appropriate to limit the opportunities to identify problems with compliance even though in practice we would focus on the opportunities that you have noted.</p> <p>We support this section (Kalispel Tribe) RESPONSE: Your support is appreciated.</p>
<p>(62b) 201A-510(5)</p> <p>Compliance schedules for dams</p> <ul style="list-style-type: none"> Concerns 	<p>Ecology's approach to environmental analysis on the Box Canyon Dam re-licensing clearly shows a willful disregard for state and federal laws and regulations and is unacceptable. (KRCG) RESPONSE: This comment does not relate to the proposed standards.</p> <p>Ecology should not issue 401 certifications until the applicant has submitted evidence, data, and modeling that its proposed measures will provide a reasonable assurance that water quality standards will be met. (Sierra Club) RESPONSE: Comment noted. These rules do not establish procedures for processing 401 certifications.</p> <p>We believe that the costs and benefits of dams, especially as they come up for re-certification, must be weighed very carefully. We encourage Ecology to continue to pressure dams to really do all that they can to meet water quality standards, even if it increases electricity rates to some extent, and to severely limit the use of variances. (PAS) RESPONSE: Thank you for your concern. We established these requirements with the intent to implement them seriously.</p> <p>Dams should not receive special exemptions from the standards. The ability to impose conditions on dams in order to protect water quality via 401 certifications is very critical. Many dams have been operating for 50 years and have had plenty of time to get into compliance. Ten more years is too long. Certifications should not be issued until the applicant has submitted evidence, data, and modeling that its proposed measures provide a reasonable assurance of meeting water quality standards. The certification should be denied unless such assurance can be provided. (American Rivers) (American Whitewater) RESPONSE: Regardless of how many years they have been operating, it may not be reasonable or rational to expect that dams or other existing facilities can come into compliance immediately at the time a certification is issued. Achieving standards in the near term may be very difficult and require significant investments of resources and time. Language in the new sub-section of the implementation section allows compliance schedules for dams under a controlled set of circumstances described in the standards. Ecology believes that this explicit language will provide assurances and clarity to the regulated community and the public on how dams are required to comply with the standards.</p> <p>The proposed rule would grant a special exemption for dams that do not meet water quality standards. There's no reason why dams should receive this special treatment. The Clean Water Act does not provide such an exception and Ecology should not provide this either. Ecology should not be diluting its ability to implement this authority under 401 by allowing dams to escape the requirement to meet water quality standards. (American Rivers) RESPONSE: Schedules to come into compliance for existing facilities are a common element of state standards. We believe that ultimately this recognition and the requirements that go with it will result in more meaningful and thought out efforts to improve water quality.</p>

<p>(62c) 201A-510(5)</p> <p>Compliance schedules for dams</p> <ul style="list-style-type: none"> Clarification needed 	<p>The City suggests some changes to clarify that water quality attainment plans apply only to federal hydroelectric relicensing. (Seattle City) RESPONSE: That is not consistent with the intent. All dams must comply with the standards, and thus all would be eligible for this compliance schedule program.</p> <p>We suggest that section 510(5)(g)(ii) also include a cross-reference to WAC 173-201A-450, water quality offsets, in addition to site-specific criteria, and use attainability analysis. (PacifiCorp) RESPONSE: That is appropriate and we have made the change.</p> <p>How do you put together a plan when background water quality conditions exceed the standards or you don't know with certainty whether the standards have been exceeded? The water quality attainment plan presupposes that it is possible to attain the water quality criteria. How does this provision fit into permanent human modifications? (USACE) RESPONSE: It presupposes that there are at least some actions that can be taken to improve the level of protection for water quality, but it clearly recognizes that in some cases the criteria cannot be met. We expect that studies will be necessary if the dam operator doesn't already know the effects they are having on water quality.</p> <p>We have suggested revised rule language for the section granting compliance schedules for dams. These are based on the concerns that: 1) the rule should not apply outside of the dam relicensing process. 2) The proposed WAC rule is overly narrow in describing methods to develop site specific standards. 3) Compliance plans should only be subject to formally established water quality standards and criteria. Program should be modeled after Oregon's long term management plan process for temperature. (MC-PUDs) RESPONSE: We believe that it is important to address problems with compliance outside the relicensing framework if needed. The long-term nature of the licenses is not amenable to such guarantees. We believe that our approach to compliance is consistent with the federal water quality standards regulations and better meets the intent of state laws directing Ecology to set standards that provide for the highest quality of water. We have broadened the options to include offsets, variances, site specific criteria, and use attainability analyses, since all of these tools have potential relevance and are legitimate pathways for any entity.</p> <p>Ecology should define the state's expectation of reasonable and feasible improvement or specify that feasible improvements are not restricted to highly specialized and restrictive definitions that may be applied by other agencies. Needed improvement have been excluded by the Corps and Bureau of Reclamation according to narrow definitions. Improvements that are complex, long term, expensive, or that require new governmental approval, change or priorities or authorizations are not necessarily unreasonable or infeasible. Such evaluations must also be specific to each dam as opportunities and costs vary from dam to dam. (Umatilla Tribe) RESPONSE: We do not believe the language allows for other entities to determine what is reasonable and feasible. This determination is to be made by Ecology and generally we would agree they would need to recognize the individual capabilities and limitations of each project.</p> <p>Benchmarks in (5)(b)(vi) should require check in no less than on a yearly basis. This is necessary to ensure the plans will actually be followed. Plans must be a tool to implement water quality standards and not an indefinite allowance to exceed standards. How will Ecology determine progress will be made – loose definitions allow operators to make little or no progress. (Umatilla Tribe) RESPONSE: The language includes the phrase "sufficient for the department to track the progress" which should be adequate to get at your issue. It does not allow the operators to make this decision, the decision is part of the agreed upon plan. It is not clear that mandating a 1-year makes sense for all elements of such a plan. We recognize your concern, but believe the proposed language will allow operators to make progress.</p> <p>In section (5)(g) there needs to be an outcome of dam removal as in some situations this</p>
---	--

	<p>may be an appropriate action. (Umatilla Tribe) RESPONSE: That is part of the considerations in conducting a UAA.</p> <p>(5)(b)&(c) - The word “criteria” should be changed to “criteria, uses, and antidegradation policy,” or just “standards.” (NEA) RESPONSE: We agree and have used the term “standards” which covers all the issues.</p> <p>(5)(d) - The reference here should be an application for “re-certification.” Otherwise, this section should not apply to new dams. (NEA) RESPONSE: We have left the language as just certification. When a certification expires, it is not re-certified; a new certification is issues.</p>
--	--

201A-520 Monitoring and Compliance

<p>(63) 201A-520</p> <p>Monitoring and compliance</p> <ul style="list-style-type: none"> Clarification 	<p>It is unclear why this section does not include the department’s job in reading reports submitted to the agency and requiring studies to be performed by permittees. (NEA) RESPONSE: This is an existing section that we have not proposed changes to other than simplifying the title. While you note some valid possibilities for addition we are not making changes to this section since we have not provided an opportunity for public discussion on such changes.</p>
---	--

201A-600 Use Designation

<p>(64a) 201A-600</p> <p>Use designation</p> <ul style="list-style-type: none"> For char waters 	<p>Although the methodology for designating char use is sound, we have concerns that there may be some isolated stream segments that should be added. We recommend that Ecology’s char use designations be consistent with the U.S. Fish and Wildlife’s bull trout spawning and rearing critical habitat areas. (EPA) RESPONSE: Ecology will amend the rules where appropriate and based upon information that bull trout spawning is occurring in areas not specifically covered in the Ecology’s overlay. We will also consider application to areas that are designated as critical for spawning but only on a site-specific basis where the rationale for the designation can be discussed with the public as part of the rulemaking. While we do not want to distance ourselves from USFWS determinations, the standards program is a regulatory program and the documentation with the critical habitat designations was not clear enough to understand the reasons behind the inclusion of many areas. Ecology is not aware of any streams with documented spawning or early tributary rearing not identified in the final rule. As more streams are identified in the future as known bull trout or Dolly Varden spawning or early tributary rearing streams, Ecology is mandated to automatically protect them under WAC 173-201A-310(1). In addition, we have added narrative criteria to protect spawning for char.</p> <p>Specific use designations for char need to include protection of waters that are designated critical habitat for bull trout and areas necessary for bull trout recovery as identified in the recovery plan. Ecology’s proposal and their “alternative proposal” (modified from what was submitted by the Service) do not completely capture known waters for bull trout spawning and tributary rearing. Until the Service has finalized bull trout critical habitat designation and the recovery plan, the Service continues to support its November 30, 2001, draft proposal “Char Spawning and Early Rearing--A coarse filter approach to determining distribution”, previously submitted to Ecology. (USFWS) RESPONSE: See previous response.</p> <p>The USFWS bull-trout expanded “footprint” should not be included in the standards. (WSPC) RESPONSE: See previous response.</p> <p>We do not believe that the department’s designation of bull trout habitat is sufficiently broad. (NEA) RESPONSE: Ecology attempted to craft a system that would protect all known</p>
--	---

spawning and early juvenile rearing areas, as well as all stream segments in watersheds used by char that have the basic physical characteristics of those known spawning and early juvenile rearing streams. As more streams are identified in the future as known bull trout or Dolly Varden spawning or early tributary rearing streams, Ecology is mandated to automatically protect them under WAC 173-201A-310(1). See previous response for further detail.

The char definition should be changed to make it clear that lake trout and brook trout are not included. "For the first years of life" should be changed to "for the first two years of life." (Seattle City)

RESPONSE: We combined the term native char with specific listing of bull trout and Dolly Varden and do not understand where confusion would occur that would expand it to non-listed non-native char. We changed the definition so that it specifies the "first year juveniles" since where they occur is where the criteria should be applied..

We commend Ecology for efforts to develop a credible approach to designating areas where the bull trout spawning and rearing temperature criteria apply. (WFPA) (Plum Creek) (Bjorklund)

RESPONSE: Your support is appreciated.

The designated char areas still warrant further scrutiny, because some designations do not appear to fit the stated criteria. There must be allowance for a field survey override to the char habitat designations. (Plum Creek)

RESPONSE: The standards can always be potentially changed on a site-specific basis. After this rule making, the designated use of char can be removed for a stream, like any other use, by completing a UAA.

The alternative method for designating waters for native char protection is unnecessary. (Plum Creek)

RESPONSE: Comment noted.

In nearly every WRIA the default criteria for streams is salmon and steelhead spawning and rearing. If the default use is not applicable the use almost always becomes char habitat. (WSPC)

RESPONSE: Char is not a default use under the proposed standards.

All waters that are known or suspected to have historically included bull trout should be included in protection at 13C. The WDFW data base was developed with improper protocols and should not be relied upon. We are also concerned with a lack of maximum temperature for spawning. (Lands Council)

RESPONSE: We used the data base as a tool for developing a method for applying char criteria to the watersheds in Washington within which spawning populations are known, or expected to exist based on finding adult char. We have added a narrative provision that will apply spawning protection where and when needed. But we oppose the use of statewide default criteria and seasons for application for spawning criteria. The criteria are too cold to apply as defaults, and doing so complicates the implementation of the standards and risks overregulation and wasting limited resources without clear cause.

Char Classification. We recommend that, at a minimum, your char designations include all known and presumed bull trout habitat from the latest WDFW bull trout mapping revision, plus all critical habitat as defined by USFWS. (SSC)

RESPONSE: Ecology attempted to craft a system that would protect all known spawning and early juvenile rearing areas, as well as all stream segments in watersheds used by char that have the basic physical characteristics of those known spawning and early juvenile rearing streams. As more streams are identified in the future as known bull trout or Dolly Varden spawning or early tributary rearing streams, Ecology is mandated to automatically protect them under WAC 173-201A-310(1). Ecology used the latest WDFW bull trout mapping revision that was available at the time.

	<p>There are areas of documented char habitat that are not included in Ecology's map. Instead of using the information demonstrating spawning and rearing temperatures in the 9-12C range are preferred, Ecology used lack of information on migratory requirements to rationalize applying the less protective salmon spawning and rearing designation at 16C. (SSC)</p> <p>RESPONSE: <i>See previous responses above on char designations.</i></p> <p>All higher elevation streams above a third order are defined as bull trout habitat. The attainable use should not be the use that would be realized in the water predisturbance condition. (Farm Bureau)</p> <p>RESPONSE: <i>See previous responses above on char designations. We believe that we should protect habitat that has the potential to be degraded due to human activity, and that this is the intent of both state law and the federal Clean Water Act. There are legitimate ways to adjust the uses and criteria assigned to waters so that they represent the attainable uses. But such approaches include an analysis of how much improvement can be made with changes in human activities such as the full use of best management practices.</i></p>
<p>(64b) 201A-600</p> <p>Use designation</p> <ul style="list-style-type: none"> • For salmonid and fish migration 	<p>The salmonid and other fish migration use is no longer listed specifically under aquatic life uses being protected (provision WAC 173-201A-200) and use designations for waters of the state (provision WAC 173-201A-600). We recommend reinserting this use. (EPA)</p> <p>RESPONSE: <i>We have specifically listed migration as a use as exists in the existing standards.</i></p> <p>Another standard is needed for waters that do not contain fish such as the ditch that our WWTP discharges to. While we exceed the warm water fish criteria at first we meet it before the ditch drains to the wasteway. We are concerned the criteria will be applied to the effluent. I am concerned that if there is not a category specifically mentioned in the temperature criteria, which might lend itself to a more general catchall for drain ditches, ponding on shoulder of roads, artificial drainage swales, which mimic wetlands, but are not classified as wetlands then all water bodies not mentioned by name would be defaulted to one of the five temperature categories. This situation is similar with dissolved oxygen. (Sunnyside)</p> <p>RESPONSE: <i>We understand your concern. While we attempted to allow a more technology-based approach in ditches earlier in this rulemaking, it became apparent that EPA would not approve it as designed. We may try again in the future to develop some alternative approach, but we recognize that it will need to be more cognizant of all the different categories of ditches and their associated habitat values. Were the ditch you refer to part of a treatment system, then we have proposed language that would exempt the water in the ditch from needing to meet the aquatic life and human health criteria values. Otherwise we need to apply the rules and allowances as the currently exist for all waterways.</i></p> <p>We recommend that Ecology account for differences for low-elevation and high-elevation streams, as well as for eastern and western Washington streams (as it already did for the char use-based temperature standards!) While not perfect, it is scientifically defensible and consistent with the spirit of the Clean Water Act. (PAS)</p> <p>RESPONSE: <i>We have added a second level of protection for salmon and trout spawning and non-core rearing waters that better recognize the altitude effects. We proposed warm water aquatic life and redband trout uses that are predominately an eastside use type. Thus we believe we have addressed the issues appropriately during this review.</i></p> <p>The department needs to assure the public and reviewing agencies that no changes in use designations have taken place in the conversion to a use-based system. (NEA)</p> <p>RESPONSE: <i>Please rest assured that Ecology has not dropped any uses in changing to the use-based approach. We have added the char use to some waters as a more clear expression of the existing salmonid protection needed in those waters. Ecology has fixed some omissions and errors that were in earlier drafts. The revised format of Table 602 should help the public and reviewing agencies determine the uses for each</i></p>

	<p><i>water body.</i></p> <p>The new standards must define a workable process for identification of fish use area distributions, and for update of those known distribution areas periodically. This process must include tribes, WDFW, USFWS. (Nooksack Tribe)</p> <p>RESPONSE: <i>We do not believe the process must be included in the standards regulation, but the purpose of conducting periodic review of the standards is to make changes such as those suggested. Changes to the rules include a broad range of stake holders, but changes to the uses will absolutely include by design the governmental entities that are focused heavily on fish protection and management.</i></p> <p>The use based designations do not incorporate tribal information on all fish species and their unique life history strategies. Ecology should consult with each tribe about use based designations before finalizing the rule. (Squaxin Tribe)</p> <p>RESPONSE: <i>We have provided numerous opportunities for consultation and have considered all of the comments that have been provided, and we will continue to do so.</i></p> <p>Ecology does not have the authority to change fish distribution and/or periodicities. The co-managers make those determinations. Ecology only worked with WDFW to determine Bull Trout distributions. This is unacceptable. Ecology appears to have unilaterally determined that spawning does not occur during periods of elevated temperature. In WRIA 1 spring Chinook start spawning in late July and early August. In WRIA 1, the co-managers have identified fish distributions and periodicities that should be used. This information has been previously provided to Ecology, apparently to no avail. (Lummi Tribe)</p> <p>RESPONSE: <i>Ecology is charged with establishing the standards, and that includes the uses, for the state of Washington. We have sought Tribal comments and corrections on the char overlay in many different forums including a special meeting with the tribes to focus on that issue. We have not been informed of any examples where the coverage is inadequate. We have, however, added specific language that directs the department to ensure that spawning is protected where and when it occurs. This was done in recognition of the need to protect the summer and early fall spawning populations of char and other salmonids. The narrative spells out the need to protect char spawning with a 7DADMax of 9C and salmon and trout using a 7DADMax of 13C.</i></p>
--	--

201A-602 Table for Uses and Waters

<p>(65a) 201A-602</p> <p>Table of uses and waters</p> <ul style="list-style-type: none"> General clarification 	<p>The uses of Redband trout and Warm Water Fish should not be added to all waters. (Seattle City)</p> <p>RESPONSE: <i>We have not added them to any waters during this rulemaking.</i></p> <p>We feel it is extremely important to define the uses for site-specific water bodies instead of merely converting the old classifications to the new use-based system. Otherwise, communities may be forced to conduct UAAs. (Longview)</p> <p>RESPONSE: <i>We cannot change the uses to less stringent ones without doing UAAs. We cannot do UAAs for all the state's waters as part of this rulemaking.</i></p> <p>Defining all segments by river mile unless an entire, unbroken stream is included in the designation can enhance clarity. (Spokane County)</p> <p>RESPONSE: <i>We try to use river miles wherever it makes sense, but actually it often causes confusion because of different estimates of rivers miles and where a physical feature exists such as a junction in the river or a named side stream they form in some cases more clear boundaries.</i></p> <p>A major short fall in the current rule is the lack of a clearly defined process for modifying table 602 in light of future studies or beneficial use needs. Though the UAA could be used for this purpose, as currently conceived the UAA misses this mark. (Spokane County)</p> <p>RESPONSE: <i>We must use the tools authorized under the federal regulations and meet</i></p>
--	--

the established tests for changing uses.

Publicly available, peer-reviewed data should be used to determine fish distribution in streams. (Campbell Group) (Simpson Timber) (Roderick) (Weyerhaeuser)

RESPONSE: *The basis for all changes needs to be defended in a rulemaking when changing uses, but limiting data to only that which has been peer-reviewed seems inappropriate for this topic. This seems to suggest that most of the fish population and redd surveys done by the state Department of Fish and Wildlife would not be acceptable for use. We agree, however, that not all sources of information should be used as a basis for a rule change.*

It seems that natural conditions may not support uses in Table 602 in all places. (CNF)

RESPONSE: *We agree. Natural conditions can range from very healthy to exceedingly poor. But natural conditions are not a violation under the standards, and where natural conditions actually are significant to warrant a use change the ability exists to change the regulation appropriately.*

Primary Contact seems inappropriate in streams where complete submergence, skin diving, swimming and water skiing are not feasible. (CNF)

RESPONSE: *The risk comes from exposure to the eyes, ears, nose, and throat. It is not from swimming only. If primary contact is truly not feasible as a use, a UAA may be conducted to determine if secondary contact is a more appropriate use.*

This is the first time I have seen “fish harvesting” listed as a use. It looks like fish propagation might be what is meant. It is listed in some places but not others under “miscellaneous.” (USACE)

RESPONSE: *Harvesting is a use under the existing state standards.*

The Use Designation Criteria (WAC 173-201A-602) table seems to apply a blanket classification to areas not previously classified. This blanket approach may be an acceptable start, however, it would seem more appropriate to request another level of review before establishing concrete use classifications. One suggestion would be to delegate this task and allocate funding to the local planning units as part of their continued work in watershed management. (CBP)

RESPONSE: *It is used also to avoid creating an unworkably long list of every water body and major segment of water bodies in the state in the tables. It is not just a reflection of only the streams that have been directly considered. Evaluating uses sufficient to change the standards is not something that can be easily done, but it is possible for any entity to do or contract out the work. Ecology will be improving it's current draft guidance for doing UAAs after this rulemaking and that will hopefully serve as a tool to assist jurisdictions that want to undertake such investigations. Statewide, however, the uses assigned are typically appropriate and a major effort to review the uses would appear to risk wasting considerable resources.*

CWA section 101(a)(2) uses require the department to re-examine these use designations every three years to determine if new information has become available that would indicate the uses could be attainable and the rules revised accordingly. 40 C.F.R. §131.20(a). (NEA)

RESPONSE: *We understand the federal regulations and recognize the need to review waters that do not meet the goals of the Act. It is important to point out, however, that the mandate focuses on very broad “fishable/swimmable” goals and a wide range of levels of use-support categories fit those broad goals.*

Some uses are not specifically protected in moving to the new system. Wildlife habitat, recreational activities such as fishing, and migration have all been eliminated as protected uses. (NCAS) (Pech) (Raisler) (PTCC) (Marquardt)(Holt)(Newman-L)(Brimm)(Turner)(Royer)(Lawton)(Herman)(Johnson-LaTour)(Buttmer)(Lodzinski)(Vandergriff)(Eller)(Ostlund)

RESPONSE: *They were intended to be covered in the proposed standards through other pathways, but we agree it is better that they just be listed directly as protected uses. This will make it more clear that they must be protected.*

<p>(65b) 201A-602</p> <p>Table of uses and waters</p> <ul style="list-style-type: none"> • Specific suggestions 	<p>A natural geologic barrier falls is located on the South Fork Tolt River and permanently precludes the upstream passage of any fish. Char and salmon have never been observed in this area. The area above this barrier should not be designated for char. (Seattle City)</p> <p>RESPONSE: <i>Char exist above natural barriers and in some instances still exist because natural barriers have precluded brook trout and other competitors. So the existence of a barrier in itself does not justify a change. Without additional information, Ecology can not change char designated use distributions at this time.</i></p> <p>Table 602 wrongfully assumes that the water uses for the Longview Ditches are the same uses as the Columbia River. Especially when the Longview Ditch system is controlled by pump stations and it is impossible for salmon to migrate, rear, or spawn in the Ditches. (Longview)</p> <p>RESPONSE: <i>With the exception of char, the final rule package does not change any existing uses. The uses mentioned exist under the existing standards. Under federal rules, only a UAA can remove a designated use.</i></p> <p>The entire reach from Long Lake Dam (RM 33.9) to Nine Mile Bridge (RM 58.0) is within WRIA 54. Remove Spokane River from RM 33.9 to RM 58.0 from WRIA 57 in Table 602. (Spokane County)</p> <p>RESPONSE: <i>We have fixed this error.</i></p> <p>The Middle Spokane (WRIA 57) lists the Spokane River from Long Lake Dam to Nine Mile Bridge; it should reference the River from Hangman Creek to the Idaho Border (RM 96). (Avista)</p> <p>RESPONSE: <i>We have fixed this error.</i></p> <p>The Lower Spokane (WRIA 54) does not include a reference for the River from the Nine Mile Bridge to the mouth of Hangman Creek. (Avista)</p> <p>RESPONSE: <i>We have fixed this error.</i></p> <p>We have concerns regarding the designation of several river mouths that are marine estuaries as “fresh water” in Section 602 of Chapter 173-201A WAC. This designation is in direct conflict with Section 260(3)(e) and with several other state regulations, and will cause conflict and confusion in the implementation of these regulations. Section 602 lists the mouths of rivers, such as the Duwamish, Puyallup, Snohomish, etc. as fresh water. However, based on the criteria in Section 260(3)(e), the mouths of these rivers would be considered marine and not fresh waters. (FSMI) (NBC) (NSIA)</p> <p>RESPONSE: <i>For estuarine areas, criteria are applied on the basis of the salinity present at the site of interest rather than based upon whether the water body is listed in the section of freshwaters or marine waters. This is a existing situation that is not altered by the rule change. The changes, however, will enable the department to better separate out freshwater versus marine water uses for individual water bodies in future rule revisions.</i></p> <p>The classification of the Little Klickitat River as a Class A or Salmon spawning and rearing, especially that portion upstream of river mile 6.1 is inappropriate. It is geologically and physically impossible for wild salmon to migrate past the falls on the Little Klickitat River at river mile 6.1. (Goldendale)</p> <p>RESPONSE: <i>The classification, and the associated uses, was determined during a previous rule making. With the exception of char, the final rule package did not propose to change any uses for specific waters. The uses from the existing standards were transferred directly to the new rule. Use changes can be made in the future, once a UAA has been conducted to justify the change..</i></p> <p>There should be a specific exemption for this reach of the Cowlitz River. No temperature related mortality has been observed at the juvenile fish collection facility that was built for the Cowlitz Falls salmon and steelhead reintroduction program. The Cowlitz River should be divided into the following four reaches: (1) Lower River – from the mouth to Tacoma’s Salmon Hatchery Barrier Dam. (2) The reservoir reach – from the Barrier Dam</p>
---	--

to the upper end of the Cowlitz Falls Project reservoir. (Rearing Only) (3) The tributaries associated with the reservoirs. (4) The upper Cowlitz River and its tributaries. (Lewis County PUD)

RESPONSE: *Under federal rules, only a UAA can remove a designated use. The temperature criteria are intended to fully protect aquatic life, not just prevent mortality.*

For the Columbia River, the proposed standards has 20°C up to Priest Rapids dam, and 16°C above that. We question the removal of the 18°C. It does not seem logical to combine the Mid Columbia River with the Upper Columbia River in terms of a temperature criterion. We question why the separate Class A criterion for the Mid Columbia River has been removed and that the Mid Columbia and Upper Columbia are propose to be combined under the same criterion. (USACE)

RESPONSE: *With the change in the temperature criteria, the Columbia River's temperature criteria change. Part of the river falls under the special condition in Table 602, part is in non-core salmon/trout (7-DADMax of 17.5°C), and part is core salmon/trout (7-DADMax of 16°C). These breakpoints are described in WAC 173-201A-Table 602.*

The Mid Columbia River Dams appear to have trouble meeting the 18°C condition. They will be unable to meet the proposed 16°C temperature standard. That will greatly impact writing a 401 certification for FERC relicensing, even with the new dam section. (WDFW)

RESPONSE: *With the change in the temperature criteria, the Columbia River's temperature criteria change. Part of the river falls under the special condition in Table 602, part is in non-core salmon/trout (7-DADMax of 17.5°C), and part is core salmon/trout (7-DADMax of 16°C). These breakpoints are described in WAC 173-201A-Table 602.*

Pend Oreille River: since there is a special provision for temperature, what is the logic for maintaining the stricter (90DADMin = 9.5 mg/L) dissolved oxygen criterion? (USACE)

RESPONSE: *Ecology has decided to keep the existing dissolved oxygen criteria, so there is no longer a 90-DADMin.*

The special fish passage exemption which existed previously for the Columbia River from the Washington-Oregon border to Grand Coulee Dam is now proposed for the Columbia River from the Washington-Oregon border to Priest Rapids Dam. (WDFW)

RESPONSE: *We have fixed this error.*

The WRIA boundaries for Vashon Island changed recently from WRIA 15 to WRIA 8. Table 602 shows the older map. (Tetra Tech)

RESPONSE: *The map adopted into the standards is the most current map available.*

There are other creeks in WRIA 62 besides those listed that have had recent (last 10 yrs) sightings/capture of Bull Trout: Slate creek and all tributaries, Sullivan Creek and all tributaries, Mill Creek and all tributaries, Cedar Creek and all tributaries, Indian Creek and all tributaries, Sweet/Lunch Creek. The following creeks can be deleted from the listing due to either not having any recent observations or the subwatershed is covered under the entire Sullivan Creek listing: Harvey Creek and Paupac Creek Kalispell and Small Creeks Pass Creek Sullivan Creek and Gypsy Creek The South Salmon River should read South Fork Salmon River. (CNF)

RESPONSE: *Without additional information, Ecology can not change char designated use distribution at this time.*

The Yakima and both the South Fork and main stem Ahtanum Creek were included in the Yakama Reservation as boundary waters in the Treaty of 1855. The Yakama Nation has the jurisdiction to regulate the water quality of our own waters. (Yakama Nation)

RESPONSE: *Ecology has added a new subsection in WAC 173-201A-600(2) to address this issue. Ecology agrees that the state's water quality standards do not apply to waters on Indian reservations.*

The Mid-Columbia PUDs recommend that the criteria notes in Table 602 be modified to

	<p>state “From Washington-Oregon border to Chief Joseph Dam (river mile 545.0). Temperature shall not exceed 20.0C...”. The department should retain flexibility to establish additional Criteria Notes in Table 602 to reflect the natural limitations of a particular water body. (MC-PUDs)</p> <p>RESPONSE: Ecology is not making any substantive changes, such as the one proposed, to the special conditions in Table 602 during this rule making. Ecology may, in the future through a rule making, add additional notes as suggested.</p> <p>Two streams listed in this section for WRIA 62 are apparently misspelled. There is no South Salmon River; this is probably South Salmon River. The reference to Kalispell Creek flowing into Idaho is correct but the reference to the confluence of Kalispell and Small Creeks is correctly spelled Kalispell; this is a different stream than Kalispell. Small is sometimes spelled. Smalle (Kalispel Tribe)</p> <p>RESPONSE: We have fixed these errors.</p>
<p>(65c) 201A-602</p> <p>Table of uses to waters</p> <ul style="list-style-type: none"> • Special Conditions-general clarification 	<p>Where there is 20°C or 21°C temperature Special Conditions assigned, these waters should also be assigned a narrative provision to protect and restore other aspects of the natural thermal regime aside from maximum thermal temperatures, including cold water refugia and diurnal and seasonal temperature patterns. (EPA)</p> <p>RESPONSE: Ecology is not making any substantive changes, such as the one proposed, to the special conditions in Table 602 during this rule making. Tier I requirements may be used if existing uses are not being protected.</p> <p>Are the grand-fathered specific variances 7-DADMax’s? (USACE)</p> <p>RESPONSE: No, the special conditions are to remain 1-DMax, unchanged from the existing standards. We have added this clarification to all of the special conditions to reduce confusion.</p> <p>Ecology needs to clarify the applicable metrics for these Special Conditions. We assume Ecology will want to harmonize these criteria with what is adopted in this triennial review. This could be done as Ecology takes up the questions of use designation that it has tabled until completion of this triennial review. (EPA?)</p> <p>RESPONSE: The special conditions are to remain 1-DMax, unchanged from the existing standards. We have added this clarification to all of the special conditions to reduce confusion.</p> <p>Salmonids will not be protected at 20°C. (CRK)</p> <p>RESPONSE: Ecology is not addressing substantive changes to the special conditions during this rule making.</p> <p>The special temperature conditions should be maintained as proposed. (Avista)</p> <p>RESPONSE: They have been maintained, with clarification language added.</p> <p>Who assigns uses to stream reaches and what is the process to change those designations? And that must include a lot of local involvement. My concern is having to approach Ecology to start a rule-making process to change something that we feel was inaccurately assigned a beneficial use is going to put a burden on local communities. A statewide rule change, is that going to happen every five years and we’ll throw all the little water stretches in together? And we have to comply with the old standard until that rule change can be made. (KCWP)</p> <p>RESPONSE: The existing standards have already assigned uses to water bodies in the state. Only a UAA can remove those uses. UAAs involve going through a rule making process, with the associated public notice and public involvement requirements.</p> <p>Allow for future fine tuning of beneficial uses in the water sheds, including more realistic numerical criteria to match the existing uses. It seems there are a fairly limited number of use choices when considering the actual diversity of current uses in our region. (Storey)</p> <p>RESPONSE: Under federal rules, only a UAA can remove a designated use. While there are a limited number of choices of numeric criteria (ranging from 12-20°C), the temperature criteria for many watersheds will be driven by the natural condition clause</p>

	<i>(WAC 173-201A-200(I)(c)(i)), which does not have a limit in the water quality standards.</i>
<p>(65d) 201A-602</p> <p>Table of uses to waters</p> <ul style="list-style-type: none"> Special Conditions—specific waters 	<p>It is unclear how the incremental allowances function in protecting the lower Columbia River and that it won't allow temperatures much higher than 20C. (CRITFC) RESPONSE: <i>Ecology is not proposing any substantive changes to the special conditions in Table 602. The special condition allows a total of 1.1°C above natural conditions from the mouth to the Washington-Oregon border when natural conditions are less than 20°C and allows a cumulative increase of 0.3°C when natural conditions are above 20°C. From the border to Priest Rapids Dam, the allowance is about 1.1°C, depending on the formula which is tied to the natural condition temperature.</i></p> <p>When applied to the Snake River (p.80) if the 20C standard is exceeded, it is unclear whether the temperatures attributed to human structural changes is to be considered separate from the 0.3C allowance. Because temperature increases are allowed with temperatures are <20C permission is granted for sources to contribute substantial heat loads to the river when the river is within the temperature limits. Ecology should limit temperature increases from all sources to <1C above natural background at all times and locations. (CRITFC) RESPONSE: <i>Ecology is not proposing any substantive changes, such as the one suggested, to the special conditions in Table 602. When natural river temperatures are less than 20°C, the formula limits cumulative temperature increases.</i></p> <p>The special temperature conditions for the Columbia and Snake Rivers should be retained. (MC-PUDs) RESPONSE: <i>Ecology has kept the special condition. Clarification language on the metric has been added.</i></p> <p>G-P supports Ecology's intention to retain the existing temperature standard for the lower Columbia River. (GPC) RESPONSE: <i>Ecology has kept the special condition. Clarification language on the metric has been added.</i></p> <p>Ongoing evaluations may indicate that different uses should be determined for specific reaches of the Spokane River based on natural attributes. (Avista) RESPONSE: <i>Under federal regulations, any removal of a use requires a UAA.</i></p> <p>I'm a little puzzled by the use listed in 602 due to the natural barrier of Palouse Falls, which prevents any movement of any fish, anadromous or otherwise, up river from that point. The aquatic-life-use criteria and WRIA 34 should be based on nonanadromous trout and perhaps only on indigenous warm water species. (Baldtree) RESPONSE: <i>The uses listed in 602 for WRIA 34 were converted directly from the existing standards. While another use may be more appropriate, under federal regulations, any removal of a use requires a UAA.</i></p> <p>Upon viewing the proposed rule I question the proposed designation of salmon rearing and spawning within the Palouse Basin. I'd like to see the science behind that one. (Buchert) RESPONSE: <i>The uses listed in 602 for WRIA 34 were converted directly from the existing standards. While another use may be more appropriate, under federal regulations, any removal of a use requires a UAA.</i></p>
Switch to Use-Based	
<p>(66a) Switch to use-based</p> <ul style="list-style-type: none"> Support switch 	<p>The following comments were received in general support of the switch to use-based standards. The department appreciates the support:</p> <p>We support Ecology's change from a class-based system to a use-based system, where specific salmonid uses are defined. (EPA)</p>

	<p>We support the change to a “use-based” system. (Dunlap) (Schwartz) (Grette) (Campbell Group) (Raschko) (Holmes) (Green Crow) (Olson) (Pierson) (Ploeg) (Weyerhaeuser) (Malsch) (Garratt) (Dahl) (Williamson) (Holman) (Jack Nicpon) (VanderPloeg) (Seattle Port) (Nicpon) (Arnold) (CRC)</p> <p>Moving to a use-based system seems to be a step in the right direction. (WCAPC)</p> <p>The switch to a use-based approach makes sense. (GAC)</p> <p>We strongly support the conversion from the classification system to the use-based system of water quality standards. In addition, we think this draft of the standards accomplishes the task with a minimum of redundancy. (NEA)</p> <p>We support Ecology’s proposal to assign uses based on scientifically defensible methodologies. We support the proposed used based criteria as long as this assignment is made using publicly available scientific data that exhibits the viable populations contributing to the biological community. (Crow) (Gabriel) (WFPA) (Plum Creek) (NOTAC) (Ploeg)</p> <p><i>RESPONSE: We appreciate your support. It is important to note that the standards also serve as a vehicle for restoration, and proof of biological importance is a higher test than contained in state or federal laws and regulations governing the water quality standards. We will certainly use valid sources of information and ensure you and other stakeholders have the opportunity to comment on any proposed changes.</i></p>
<p>(66b) Switch to use-based</p> <ul style="list-style-type: none"> Concerns with switching to use-based 	<p><i>The following comments were received regarding concern about the switch to use-based standards. Concerns were expressed over eliminating protection for some uses; Ecology has reexamined the existing rule and added back in uses that were inadvertently left out (such as migration and boating). Concerns were also expressed about the ease in dropping uses; Ecology assures the public that uses will not be dropped without going through a use attainability analysis, which is scientific in nature and must be approved by EPA. The new standards still apply the same sensitive range of uses that the existing classification system does as a default. The major difference is that the uses are individually listed with each water, as opposed to being grouped together in a “class”. The department notes the following comments:</i></p> <p>We do not believe the new system will make it easier to adopt more appropriate uses. (QCBID)</p> <p>We are concerned that the loss of the narrative classification system eliminates a way to address issues like fine sediment and stream flow that cannot be easily encompassed in numeric criteria. (Squaxin Tribe) (NMFS)</p> <p>Overall the Tribe concurs with the change to a use-based system, but we are concerned that the new standards may eliminate protection for migration. (Chehalis Tribe)</p> <p>While we support the move to a use-based system that is based on the needs of the animals and the ecosystem, there appear to be several areas where this theoretical protectiveness is not achieved. (WDFW)</p> <p>The new standards should provide the strongest broadest protections, and the use-based system limits the general protection for rivers and streams. (KRCG) (Mazzetti)</p> <p>If the narrow use-based approach is adopted the standards should state in no uncertain terms that fish and wildlife, water supply and other uses of our state rivers are protected. The antidegradation standard is not enough. There must be general protection for all uses, even if they are not attainable right now due to existing pollution. (Kelly)</p> <p>It is our opinion that the “use-based” approach is only as good as the information gathered on the water body as to whether the use exists or not. It is assumed that constant monitoring and research would be required to justify uses/non-uses at another escalating</p>

	<p>cost to local government. (Island County)</p> <p>The change from class to use-based must result in the protection of all uses. The new standards must be written in a way that fully protects all uses as they were under the original standards. (Mazzetti)</p> <p>The fact sheet for restructuring the standards says we aim at making our waters clean and then it says why is Ecology restructuring the standards -- to make the standards less complicated and to make it easier to change. Those two bullets don't go anywhere to protect the resources. Simplifying the rules is not what we feel should be going on and making them easier to change uses. (Jamestown Tribe)</p> <p>While we think that water quality standards from a use-based system should be more realistic, it will do us no good if the standards cannot be achieved. So we believe the use-based system is better, but we cannot accept the standards that are being proposed. (Bordsen)</p> <p>We believe the conversion of the state's water quality standards from a class-based to a use-based system may prove to be a distinction without a difference. Industry has commented verbally to staff that the proposed revisions may require just as much effort to characterize and to remedy (if needed) as the existing class-based system, particularly for large main-stem rivers such as the Columbia River. We remain skeptical that the expenditure of government and private resources necessary to make this transition is justified, however, we stand ready to assist Ecology in making this transition. (GPC)</p> <p>The change is less protective. Maintaining water quality is considered desirable on its face and accomplishes many goals, such as: protection of all the species, the recreational health and aesthetics for children and adults, the potential for drinking water with minimal costs. There is no reason to downgrade quality based on the presence or absence of certain fish species. (NSBK) (Pech)</p> <p>Although the Tribe generally supports the use-based system, it is easier to drop beneficial uses because they are not lumped categorically together. All UAAs should include collaboration with tribal co-managers. (Puyallup Tribe) (Tulalip Tribe)</p> <p><i>RESPONSE: All UAAs will include Tribal consultation as directed in the regulation. You are correct that it would be easier to drop specific uses in the new system, as that is one of the benefits of it. It allows better tailoring with the actual water body's uses and so sets a more appropriate target for control actions.</i></p>
<p>(66c) Switch to use-based</p> <ul style="list-style-type: none"> Do not support switching to use-based 	<p><i>The following comments do not support the switch to use-based standards. Concerns were noted that the use-based system does not provide numeric criteria for some uses. Ecology notes that the current classification system did not provide numeric criteria for those uses either. The new standards still apply the same sensitive range of uses that the existing classification system does as a default. The major difference is that the uses are individually listed with each water, as opposed to being grouped together in a "class". Ecology notes the following comments:</i></p> <p>Retain the classification system that provides general protection for Washington's waters. (Miller-B) (Buffalo Mazetti) (Cronin) (Edwards) (Belzer) (Rowe) (Herdsman) (Kiver) (Hughes)) (Gaither) (Woodmansee) (Patterson-J) (Morgan) (Rimbos) (Frisk) (McLaughlin) (McCluskey) (Mielke) (George) (Kraus) (Menzies) (Herman) (KRCG) (PAS) (Steffensen) (Aagaard)</p> <p>Our local AA creeks are supposed to "markedly and uniformly" exceed the requirements for all uses. Under the proposed amendments the classification system is abolished. The proposed standards would eliminate the general protections afforded by the classification system, as well as the specific categories of recreation and salmon migration. (Normandy Park)</p> <p>Changing from a classification to a use system is clearly a step backward. (Audubon Washington) (CELP) (Clifford) (Hensley) (Maxwell)</p>

	<p>The use-based system does not reflect reality. Stick with the class-based system that was designed to fit the natural conditions of the water body. (WSPC)</p> <p>There are no numeric criteria associated with many uses: domestic water supply; wildlife habitat; migration and harvesting of salmonid and other fish; clam, oyster, and mussel rearing, spawning and harvesting; crustacean and other shellfish rearing, spawning and harvesting; recreation, including fishing, boating, and aesthetic enjoyment; and commerce and navigation. Since it is not practical to instate numeric criteria for each use we request that the Class system be retained. At the least, guidance is needed to ensure that all uses are protected and that protective criteria are developed and followed. (NSBK)</p> <p>By allowing the removal of a use the opportunity will exist to not meet water quality standards for reasons of convenience. Remove the ability to remove uses (NSBK)</p> <p>Oppose the loss of protection that occurs in the elimination of the narrative classification system. Under the existing rule salmon are protected in general and through the numeric criteria for temperature, metals, etc. Under the proposed rules the general protection is eliminated. (Normandy Park)</p> <p>The proposed use system is very utilitarian. It does not protect water quality as an end but as a means. This is a wrong-headed approach and will drive our water quality down to the lowest common denominator as allowed by the regulations. (Steffensen)</p> <p>The use-based criteria appears to be a politically charged concept that would move Water Quality Standards from scientific scrutiny to one dictated by those who hold power at the moment. (Peterson-M)</p>
<p>(66d) Switch to use-based</p> <ul style="list-style-type: none"> Clarification needed 	<p>How will Ecology monitor under the use based system and how will it handle situations where standards are not met? How would Ecology determine the causes of the failure and how would liability be assigned? (Baldree)</p> <p>RESPONSE: <i>There is no difference in monitoring or enforcement under the use-based system, as opposed to the existing class-based system..</i></p> <p>In the currently class-based system, the anti-degradation section states that existing beneficial uses shall be maintained. In the proposed new use-based system, designated uses means “aquatic life” uses. This appears to mean that other water resource uses no longer are applicable. Each time uses are listed - navigation and commerce should be included. (USACE)</p> <p>RESPONSE: <i>The new use-based system does not only include aquatic life, but all the other uses as well. Navigation and commerce is a specific use, not part of the aquatic life use.</i></p> <p>Please provide an explanation of how Ecology would define a water body use designation as “not attainable.” (NMFS)</p> <p>RESPONSE: <i>We would follow the procedures established for Use Attainability Analyses in the federal rules (40 CFR 131.10(g)).</i></p> <p>Concerned this approach will not adequately consider historical cold water fish populations. We are concerned with the use designations for the Walla Walla and Snake Basins and want the opportunity to discuss our concerns. Some include: Why is there a demarcation point below the Clearwater River for applying 20C yet above it the standard is 16C? Why is the standard based on a 7-day average above and only a 1-day minimum below this point? How would the standard’s package influence the operations of the reservoirs to protect temperature standards? Why distinguish between primary and secondary recreation in the mainstem of Walla Walla (27 miles) and Mill Creek (6 miles, in Walla Walla)? Why change Water Supply Uses at this boundary. For WRIA 33 Lower Snake, how would the standards be implemented with the notes language and how does it differ from the standards implementation in the reach immediately above? (Umatilla Tribe)</p>

	<p>RESPONSE: <i>The differences in use demarcation reflect the way the classes are currently assigned in the standards. The 7-day average better reflects the biological requirements with less sensitivity to triggering exceedances of the standards from minor non-biologically significant fluctuations. The existing criteria notes will be retained in the new standards, but may be readdressed as part of conducting UAAs for these waters. Any change would need to go through rulemaking.</i></p> <p>What will Ecology do to help rivers and streams that fall outside of the proposed criteria and will the recommendations change? (WDOA)</p> <p>RESPONSE: <i>We conduct the studies necessary to establish water quality clean up plans (TMDLs) and to identify and differentiate where the cause is natural.</i></p> <p>DOE has not analyzed how the new standards will actually change the percent of streams exceeding the standard. (Farm Bureau)</p> <p>RESPONSE: <i>The standards are set based upon what the uses require for protection, not on avoiding non-compliance. We have examined the data that we have and find the changes in compliance will be quite minor. We do not provide that assessment as it is based on only a small proportion of state waters – most waters are not monitored – and so are inappropriate for citation.</i></p> <p>Is there any consideration for ephemeral streams? When we have to meet criteria for temperature at all times, it won't be met when these streams are going dry. (KCWP)</p> <p>RESPONSE: <i>Guidance on applying the standards to ephemeral and intermittent waters would be valuable, but does not exist at this time. The standards as written would recognize the natural excursions from the standards, but would be demand that any human effects be strictly controlled (0.3C increase allowed above the natural condition).</i></p>
<p>(66e) Switch to use-based</p> <ul style="list-style-type: none"> • Correct use designations on waters during this rule-making 	<p>Water bodies with no use documentation are automatically classified in the highest use category, irrespective of the previous class in the class-based system. (Farm Bureau)</p> <p>RESPONSE: <i>This is not the case with the adopted standards. Two levels of support are provided for both human contact protection from bacteria and for protecting salmon and trout spawning and rearing waters. The transition to use-based system will identify the same uses for the water that were carried in the class system, with the exception of waters specifically identified with char (bull trout) as a use.</i></p> <p>Does Ecology have the resources to re-write the designations for the water bodies across the state at this time? (NWPPA)</p> <p>RESPONSE: <i>Ecology does not have the resources to go through a Use Attainability Analysis for all the water bodies in the state, which would be required to change the uses. Many of Washington's waters are capable of supporting the uses that have been designated, and would not need to be analyzed. Ecology expects that those waters that are in need of reexamination of uses will be identified or brought forward by parties most interested in having the uses changed.</i></p> <p>Prioritize those water bodies whose uses are not attainable due to their location in urban areas or similar visible and obvious conditions, and conduct a UAA on those water bodies prior to their conversion to the use-based system. (Seattle Port)</p> <p>RESPONSE: <i>We believe making the switch to use-based as a whole is the most efficient way to transition, rather than keeping some waters in classes and others in use-based. As mentioned earlier, the change to use-based from the class system should be transparent since the same uses will still be applied, with the exception of waters identified for char use.</i></p> <p>Allow for future fine-tuning of beneficial uses in watersheds, including more realistic numeric criteria to match existing uses. It seems there are a fairly limited number of use choices when considering the actual diversity of current uses in our region. (Whitman County)</p> <p>RESPONSE: <i>We can add further refinements as part of future rule revisions, and expect that through water body recovery plans (TMDLs) we will be doing more fine tuning of specific waters.</i></p>

Our primary concern with the proposed rule focuses on the blanket designation of salmonid spawning/rearing and primary contact recreation uses for the many unnamed tributaries on Reclamation irrigation projects, particularly in the Upper and Lower Yakima, Naches, Upper and Lower Crab Creek, Moses Coulee, Esquatzel Coulee, and Okanogan resource inventory areas. We feel that salmonid spawning/ rearing and primary contact recreation uses are overly protective of many of the irrigation conveyances and drains that are tributary to the major streams in these areas. (USBOR)

RESPONSE: *The time frame for this rulemaking and the complexity of issues did not allow us to also conduct the necessary studies and reviews needed to conduct a UAA to evaluate which of the designated uses are attainable. We believe having the new rules in place will better facilitate UAAs and the ability to make any appropriate changes.*

We believe it would be of benefit to determine the correct Clean Water Act uses for irrigation project facilities prior to promulgation of final rules, particularly in light of the increased emphasis that total maximum daily load planning will have in the coming years. Reclamation is willing to work collaboratively with Ecology to define appropriate uses for irrigation conveyances and drains within our project areas prior to rule promulgation, if Ecology is willing to participate and delay rulemaking until the necessary discussions and work can be completed. (USBOR)

RESPONSE: *See previous response.*

Recommend Ecology not adopt proposed revisions until the proposal incorporates features that will solve CBP water quality problems. Protection should only be included for uses that actually are appropriate in the Basin. The proposed standards should not be adopted until a well defined, state controlled procedure for carrying out reasonably achievable UAAs is available (ECBID)

RESPONSE: *See previous response.*

Practical application of use-based standards will require detailed knowledge of the fisheries utilization at each life stage in each of the waters of the state. While the state of knowledge is increasing, these data are sparse throughout much of the state. For the most limiting proposed use-based standards, those for char, the knowledge of the biological use is imperfect. PSE contends that applying standards based on poorly understood biological use criteria would result in costly efforts to develop agreement on the specific use of a particular water body. (PSE)

RESPONSE: *The new system is still superior to the class system in that it allows the use of the information when it is available to make the necessary changes to uses. The class system did not allow this.*

Support the revision to use based system and believe the ditch we discharge to should not have any fish or recreation uses. (Sunnyside)

RESPONSE: *Support noted, but we would need to assess the water body and make a change to the rule to remove any designated uses.*

Lowering the standards based on existing or non attainability will allow continued degradation of rivers that were historic habitat for native fish species. Recovery will not be possible if water quality is allowed to continually be degraded. (Lands Council) (KRCG)

RESPONSE: *We do not agree with the premise that the change will allow waters to be continually degraded.*

What is the process for questioning the assignment of a use criteria on a given water body? (Baldree)?

RESPONSE: *The department will need compelling information that a use legitimately does not exist in order to proceed with a use attainability analysis assessment..*

The proposal should define how boundaries between protected uses are to be established. It is not right that recreation uses in a reservoir should drive the uses and criteria assigned to the water courses that feed and drain that reservoir. (ECBID)

	<p>RESPONSE: <i>We believe it is appropriate to control pollution upstream to protect downstream uses.</i></p> <p>The basin's waters do not fit well into the categories that have been designated in the use-based changes or the current system. Irrigation facilities are not constructed to support aquatic life. Why therefore is it so imperative to regulate them using standards that are not designed to address the actual conditions that exist by their creation? Operation and maintenance activities required to ensure a reliable water supply are at direct odds with the standards, whether class system or the proposed use based. (SCBID)</p> <p>RESPONSE: <i>To change the standards requires a UAA. We support doing a UAA for the basin, and we recognize the unique relationships that exist between water supply and other beneficial uses of the waters.</i></p> <p>I would suggest that Ecology set up a time line to look at identified uses, get lots of public involvement, and go from regional area to regional area, and make an effort to try to get the uses identified as the public perceives them. (McKenzie)</p> <p>RESPONSE: <i>We expect that adjustments will be forthcoming after this rulemaking is complete. Exactly how we will apportion our resources and the degree to which we try to facilitate such reviews has not yet been determined.</i></p>
<p>(66f) Switch to use-based</p> <ul style="list-style-type: none"> One size fits all approach doesn't work 	<p>These standards represent a blanket, one-size-fits-all approach to water regulations and conditions that in reality vary greatly across the state due to differences in elevation and geography. (MBarr5) (Stemilt Management) (McCart) (WSPC) (Schauer) (Island County) (Gilda)</p> <p>RESPONSE: <i>In fresh waters alone there are five levels of protection for aquatic life, three for water contact, and numerous other uses with specific criteria. While not tailored to every site condition, we don't believe it characterizes a "one size fits all" description.</i></p> <p>So when you make a blanket rule, this stream, this stream, this stream, this stream all have to meet that standard and maybe some of them never did meet that standard, then you're creating an impossible standard to meet. (Reisland)</p> <p>RESPONSE: <i>The criteria are not just numeric criteria but also include narrative provisions that recognize the natural limitations of the water body.</i></p> <p>This rule assumes that everyone along a stream or river, are all guilty of a possible water quality problem. (Jenkins)</p> <p>RESPONSE: <i>The rule sets criteria to gauge whether problems have developed and to ensure the uses are appropriately protected.</i></p>
<p>(66g) Switch to use-based</p> <ul style="list-style-type: none"> Criteria in use-based system is not attainable 	<p>The following comments were received that the criteria in the use-based system is not attainable. Concerns were noted that the use-based system cannot be met under natural conditions. Ecology notes that natural conditions are incorporated into the standards, and criteria can be adjusted to reflect the natural conditions. We also note that the uses already exist for the water bodies in our state standards and can only be removed or modified to be made less stringent after completing a Use Attainability Analysis consistent with federal regulations and adopting the change directly into the water quality standards regulation. The assignment of uses and associated criteria must comply with state laws and federal laws and regulations pertaining to the water quality standards and use protection. These laws and regulations set a high goal for protection and do not permit Ecology to choose not to protect uses that are existing or attainable. The failure to meet established numeric criteria is not directly relevant to determining whether or not a use is existing or attainable. Ecology notes the following comments:</p> <p>Needs of aquatic species will not be met, even under natural conditions. Targets must reflect the natural background of the watershed. I suggest further additional leeway for agricultural and grazing uses. Monitor natural conditions of at least a sampling of the local waters to determine what realistic goals are for the watershed. (Whitman County)</p> <p>Recent discussion with local Idaho and Washington Fish and Wildlife biologists suggest</p>

	<p>that in the Palouse River watershed the DO and temperature criteria would not be attainable under natural conditions, and the few salmonids in the system were introduced. (Whitman County)</p> <p>Current measurements in our local streams suggest the criteria for temperature and dissolved oxygen are unattainable, even under natural conditions. So does it really make sense to arbitrarily assign a use rating of salmon spawning and rearing or even salmon rearing only to any of the water within WRIA 34? A more scientific approach would be to perform some minimum level of monitoring prior to arbitrarily assigning use based criteria independent of the natural watershed characteristics. (Storey)</p> <p>Standards currently assigned to Whitman County under the class-based system are unattainable. So while we like the new system we cannot accept the criteria. (Whitman County)</p> <p>In assigning the designation of aquatic life use, it should be based on scientifically derived and publicly available data and that it also demonstrates that there are viable, self-sustaining populations of fish that makes significant contributions to a biological community. (VanderPloog)</p> <p>It is highly unlikely that drainages in Whitman County will ever be swimmable or wadeable because most of them are too shallow and mud lined. These kind of uses should not be imposed upon these waters. (Bordsen) (Whitman County)</p> <p>Low flow in the summer would normally cause many drainages to dry up or cease to flow, except those that are fed by legally, treated sewage plant discharges. There is a dilemma here: Keep that poor quality water in the creek or dry it up completely. (Bordsen) (WCA)</p> <p>RESPONSE: See previous response. Further, a Use Attainability Analysis can take into consideration whether maintaining the wastewater, even if not meeting established criteria, creates a net ecological benefit.</p>
<p>(66h) Switch to use-based</p> <ul style="list-style-type: none"> Switch is fish-centric 	<p>The following comments were received that believe the switch to use-based is fish-centric. Ecology notes that uses are also established for recreation, water supply, commerce and navigation, and many other uses. Even the aquatic life criteria, while using key fish to describe the habitat type, must protect all aquatic life and apply even if fish are absent. We also note that currently, almost every water body in the state has salmonid uses established under the current water quality standards along with primary contact recreation and many other uses. The question is to what extent those uses will be changed over time. Ecology notes the following comments:</p> <p>The new use-based approach is fish-centric. If fish use a stream, then it is set to the respective use standard irrespective of its previous class. (Farm Bureau) (WSHA) (Jenkins) (Meenach)</p> <p>There is no certainty for the human users of a water body since as the salmon species' actual or possible range extends into new areas, those water bodies will become subject to the higher standards. (WCA)</p> <p>The standards put fish before people. (MBarr5) (Stemilt Management) (McCart) (Schauer) (Meenach) (SCCA)</p> <p>We commissioned an analysis of the proposed WQS and submitted this analysis with our comments. This analysis indicates the proposed WQS are biased toward fisheries interests and not based on science. They use species that are not even present as a tool to set a regulatory level. (YRBCC)</p> <p>The temperature and dissolved oxygen standards are perceived to favor fish and more specifically salmonids. Does this not imply that salmonids are the most important species? It may be difficult for Ecology to gain general public acceptance with the public</p>

	<p>perception that the value of salmonid usage is higher than humans or other species. (CBP)</p> <p>Please change the water quality standards to ensure the salmon come first. (Belzer)</p> <p>Billions of dollars have been spent so far in failed attempts to preserve the long-term slide of the wild salmon. Even more sobering, it's not exclusively a money issue. If it was, we could simply spend our way out of decline by either buying off political losers or buying the things necessary for restoration. (WRCRL)</p> <p>Yes, we need clean water. But what standard are we using? Fish cannot live in a bottle of Culligan water. They die. They don't have anything to eat. It's too sterile for them. Drinking water standards are different than what rivers need to be. (Pacific County BOD)</p> <p>Why do we need fish-centric water quality standards when we've had record runs for many species of salmon? Near record returns of salmon in recent years have led credible researchers to believe that improved ocean conditions is the major factor in the turn around of wild and hatchery salmon. (Forde) (VanderVeen)</p> <p><i>Record runs are only for some rivers and some stocks and reflect greater than average quality ocean conditions over the last couple of years. The record runs are also greatly influenced by the enormous quantity of hatchery fish that are released as smolts and do not need to rely on rearing in the rivers of Washington. The standards are necessary and required for the state and must establish criteria to protect all the beneficial instream uses and aquatic life habitat is one of those uses.</i></p>
--	---

DRAFT Environmental Impact Statement

<p>(67) DRAFT Environmental Impact Statement</p> <ul style="list-style-type: none"> Clarification 	<p>Because of the significant difference in allowable activities between Tier II and Tier III waters, many states have adopted a Tier II ½ provision that allows some very limited degradation, but offers much of the Tier III protection. We would support the State adopting in addition to the Tier III category, a Tier II ½ as mentioned in the Draft EIS. (EPA)</p> <p><i>RESPONSE: We have included the concept of a Tier II ½ into the Tier III waters. We are establishing the ability to chose between two levels of protection as part of the Tier III process. The highest Tier III level would provide non-degradation protection and the second Tier III level would allow for de minimus degradation from actions, using state of the art pollution control methods.</i></p> <p>We support Ecology in recommending alternative 1. (EPA)</p> <p><i>RESPONSE: We appreciate your support.</i></p> <p>The APA analysis was not made available through the proposed rule notice and it has not been incorporated in the DEIS for the proposed guidelines. This analysis (including an implementation plan) should be completed and made available for public comment before adoption of the guidelines. (Farm Bureau)</p> <p><i>RESPONSE: Such advance release is not required under state law but Ecology voluntarily provided a draft Cost Benefit Analysis as part of this rulemaking.</i></p> <p>Westslope cutthroat trout are overlooked on p. 6 under the Temperature Criteria. We recommend the substituting the phrase “eastern redband trout” with “cutthroat trout and redband rainbow trout of the interior Columbia River Basin...” (Plum Creek)</p> <p><i>RESPONSE: We agree calling them eastern makes it sound like they are from the Eastern part of the US. In the regulations we refer to them as interior redband trout.</i></p> <p>Redband trout are often referred to (here and elsewhere in supporting materials) as “non-indigenous”, when we believe Ecology means “non anadromous.” (Plum Creek)</p> <p><i>RESPONSE: You are correct it should say non-anadromous.</i></p> <p>Alternatives are not presented (pp. 11, 41) or discussed further in the DEIS for the</p>
--	---

salmon and trout rearing only, redband trout, and warmwater species groups. (Plum Creek)

RESPONSE: *The DEIS contains 3 alternatives to protect Salmon, Steelhead and Trout Spawning and Rearing Criteria. The analysis that was done for salmonids in general captured the appropriate range of numbers for rearing only. We did not think the setting of rearing only criteria was an area that merited specific analysis in the EIS. It has not been an area of discussion or controversy over the many years that we have been working to refine this proposal. Therefore, in an effort to meet the requirements of WAC 197-11-408 we kept the scope of this EIS to those items that were related to the changes we were proposing and ones where there was significant debate. During the scoping period we did not receive any response that developing alternative temperature requirements for rearing only should be included in this EIS. Currently there is not enough scientific information available to propose a warm water species rearing only criteria*

Use of simplicity, usability, and environmental protection as evaluation criteria for each rule alternative is appropriate and important (p 16). (Plum Creek)

RESPONSE: *We appreciate your support.*

We recommend including forest practices as an example situation where Tier II analysis would not be needed (p. 26). (Plum Creek)

RESPONSE: *This would not quite be correct. Tier II compliance does not have to be determined for individual forest harvest actions but the forest practices rules must use adaptive management to build in the components central to the Tier II analysis. This seems consistent with the approaches being taken and agreed upon in the Forest and Fish agreement.*

Discussion regarding the Tier II½ alternative to Tier III designations suggests this is actually Ecology's preferred alternative. Also, for the environmental characteristics of the alternatives (p. 35), the proposed alternative should have a "high" rating (owing to high expected protection), and the No Action alternative should receive a "low" rating (because currently no Tier III designated water bodies). (Plum Creek)

RESPONSE: *We really do not expect more waters would be placed in Tier III under the proposed language than under the existing rule language. Tier II ½ is recognized for the benefits it provides in terms of a greater likelihood of being supported by communities, but it was not our proposed approach.*

For Adaptive Management of General Permits (p. 36), Ecology should cite forest practices as an example of how continuous improvements are made. (Plum Creek)

RESPONSE: *Forest practices are a great example of the adaptive management approach but we do not want to single out any actions in our general descriptions.*

How designated uses are to be assigned to lakes and reservoirs is not identified. (Plum Creek)

RESPONSE: *This is because there is no difference with how the uses are assigned to all other water body types. Where uses are designated now, they will be designated in the new regulation. Uses would be changed based on a use assessment and future modifications to the rule and be based on a determination on what the attainable uses are.*

As with temperature criteria, implementation of dissolved oxygen criteria is problematic and probably infeasible or inappropriate for the Alternative with Lower Environmental Impact. When does the standard apply? To a single spawning pair? At the start of the run? The peak? (Plum Creek)

RESPONSE: *We have expressed that the focus is on the typical dates of initiation and completion.*

We are disappointed that Ecology did not consider the environmental community's alternative for consideration in the EIS. Our alternative, dated August 16, 2002, is a reasonable alternative that would significantly enhance environmental quality by

	<p>implementing more stringent standards for temperature and dissolved oxygen, an antidegradation policy that ensures high quality waters will not be degraded, and a ban on mixing zones for persistent bioaccumulative toxics (PBTs or persistent pollution). We again, urge you to consider the proposal in its entirety. (WPIRG)</p> <p>RESPONSE: <i>We appreciate the effort that was put into rewriting the whole Water Quality Standards rule as you would want to see it. As was explained in the response to scoping this was a very detailed alternative that we tried to use where we could and still meet the intent of WAC 197-11-408. We used portions of this alternative when your alternative was: 1) relevant to the scope of proposed changes Specific to the significant alternatives that were being analyzed; 2) technologically feasible; and 3) a viable option that Ecology could consider or implement</i></p> <p>While I can support many of the proposed change, I can only support the lower environmental impact alternatives identified in the EIS for temperature and dissolved oxygen (Jack Nicpon)</p> <p>RESPONSE: <i>Comment noted.</i></p> <p>I do support increased scientific monitoring on the ground as part of the mitigation. (Nicpon)</p> <p>RESPONSE: <i>Thank you for your feedback. Ongoing monitoring is crucial to all aspects of protecting and maintaining water quality.</i></p> <p>Many comments and references were previously entered into the EIS scoping process that met the criteria for best available science criteria listed under the WAC 365-195-900 through 925. These references were not considered in these documents. (Good)</p> <p>RESPONSE: <i>All information that was submitted as part of the scoping process was considered for inclusion in the final EIS. In an effort to be clear about what comments we were not going to include we wrote back to all that submitted scoping information. Without any specific references to which comments or references it is hard to answer your concerns more specifically.</i></p> <p>It is not clear how NPDES phase II cities will be affected, and how the best management practices BMPs will be regulated under the proposed standards. The DEIS says there will not be substantive changes, but 160 suggests otherwise. (Lakewood)</p> <p>RESPONSE: <i>There is no change to how stormwater and nonpoint sources are regulated as a consequence of the changes to the regulation. The comment is referring to existing provisions in the state standards for nonpoint source controls.</i></p>
Administrative Procedures Act (APA)	
<p>(68a) Administrative Procedures Act (APA)</p> <ul style="list-style-type: none"> • General clarification 	<p>The new regulations are biased in favor of salmon and char protection. (Farm Bureau)</p> <p>RESPONSE: <i>The regulations under the federal Clean Water Act are required to protect salmon and char from the effects of human caused pollution.</i></p> <p>DOE did not quantitatively establish that the existing regulations do not fully protect the health of wildlife. Nor did DOE quantitatively establish what improvement will be achieved with the new regulations. (Farm Bureau)</p> <p>RESPONSE: <i>Ecology has used both quantitative and qualitative information. Fish populations are clearly affected by existing water quality issues. Ecology has attempted to model impacts on a run basis for the Cost Benefit Analysis.</i></p> <p>The possibility that new water quality regulations may impact water rights regulations should be considered. (Farm Bureau)</p> <p>RESPONSE: <i>We have thoroughly considered the likelihood of impacts to water rights and have included a greater discussion of the findings in the final Cost Benefit analysis.</i></p> <p>The primary contact use criterion should be 126 E.coli organisms/100ml geometric mean value, not 100 organisms/100ml. The agency suggests that the difference between 100 and 126 E. coli organisms/100ml will somehow result in a 40-150 percent increase in</p>

	<p>actual bacterial levels in state waters. This conclusion is apparently based on a correlation study and many assumptions that have not been adequately verified or field-tested. EPA data demonstrate that the illness risk to swimmers at exposure levels of 126 E. coli organisms and the current fecal coliform standard is equivalent. We suggest that Ecology's support for a 100 E. coli/100ml geometric mean criteria does not achieve the statutory (APA) criteria. (Weyerhaeuser)</p> <p>RESPONSE: <i>We acknowledge that Washington has stricter standards than EPA recommendations for E. Coli, however these numbers are based on risk, and a state has the option to choose more stringent risk levels for its population. Further, it should be noted that EPA found no statistical correlation between the illness rates and the concentration of fecal coliform but chose to use it anyway to estimate illness rates. The draft cost benefit analysis for bacteria found that increasing the risk of illness by higher limits resulted in potential costs to consumers who get ill from swimming and recreating in waters at higher levels. This cost in increased illnesses offset costs associated with the regulated community.</i></p> <p>The rule-making procedures in the APA outline a specific process whereby interested parties can effectively and equitably participate in the rule-making process. Unfortunately this case, Ecology has failed to meet that standards, and has allowed -- in the case of Condit Dam -- a private corporation, Pacific Corps, to influence this rule-making process to further, not only, Pacific Corps' agenda, but Ecology's own agenda. I am referring to specific proposed changes to the water quality standards that were developed and negotiated behind closed doors between Ecology, Pacific Corps, and other dam removal supporters. It is clear that Ecology has prejudged the outcome of the Condit Dam project, prejudged the outcome of the SEPA process, and prejudged the outcome of the related 401 and MPDES permit processes. The documents clearly show that Pacific Corps' own attorney drafted proposed rule changes and met with Ecology staff extensively to refine the proposed language. (Struck)</p> <p>RESPONSE: <i>This comment is not relevant to the language of the proposed rule.</i></p> <p>The alternative DOE uses to demonstrate that its new regulations are not burdensome is inappropriate. (Farm Bureau)</p> <p>RESPONSE: <i>Ecology has incorporated many alternatives into its final burden review.</i></p> <p>Arbitrary selection of a Margin of Safety (e.g. the IGDO factor) should be replaced with an uncertainty analysis as a base for the MOS determination. The DOE process consistently made conservative judgments in setting regulations and resulted in overly stringent regulations. The DOE single criteria system is a burden because it regulates rivers for periods of time when fish may not be present. (Farm Bureau)</p> <p>RESPONSE: <i>Ecology has revised the single criteria system to allow some increases in temperature but to reduce temperature criteria in spawning areas. The use based system allows changes in use determined from data indicating where fish spawn at different times of year.</i></p>
<p>(68b) Administrative Procedures Act (APA)</p> <ul style="list-style-type: none"> Implementation Plan 	<p>The agency missed an opportunity in the "Draft Implementation Plan for Revisions to Chapter 173-201A," to elaborate on the agency commitment to make the needed water body/use changes. We suggest adding information on the number of water body/use combination which need to be adjusted, the view of the priority of this work, level of people/budget, timeframe, targeted outcomes, and initiatives Ecology will pursue with EPA and the Services to simplify and expedite the necessary regulatory processes? (Weyerhaeuser)</p> <p>RESPONSE: <i>Ecology recognizes there will be workload issues associated with use attainability analyses. We first plan to focus on UAA guidance, which is further described in the Implementation Plan. We do not, at this time, have readily available information such as your comment suggests for estimating what UAAs are needed, where they are, and who will be working on them. Work on use changes will be prioritized with other important work that the department is obligated to do, and will be based on resources and staffing available to cover those priorities. Ecology is aware that EPA also is working on guidance for UAAs, and has encouraged EPA to strive to simplify and expedite the process where possible.</i></p>

	<p>Implementation Plan. A complete implementation plan must be available to the tribe prior to finalization of the rule and approval by EPA. The draft plan that is now available is woefully insufficient and incomplete. For example, how does the state determine the overriding public interest test? Determination of this threshold must include tribal co-managers. (Puyallup Tribe)</p> <p>RESPONSE: <i>The implementation plan was developed in accordance with the Administrative Procedures Act. Ecology has identified areas of the new rule where further guidance will be necessary to assure the regulations are implemented in a consistent manner throughout the state. Further antidegradation guidance, such as determining overriding public interest, will become a part of Ecology's Permit Writer's Manual. Staff will begin working on additional guidance as soon as work to get the new rule adopted has been completed.</i></p> <p>We believe that the implementation plan should be included with the Administrative Procedures Act material prior to finalization of the rule approval by EPA because implementation of the standard or of the criteria are key to understanding if they're protected or not. (Tulalip Tribe)</p> <p>RESPONSE: <i>See previous comment. We will be submitting an implementation plan as part of the Administrative Procedures Act, however it may not provide the level of detail you are seeking. Further guidance will be developed and provided to Ecology staff and others as soon as staff have completed obligations to get the new rule adopted and approved by EPA.</i></p> <p>It was really difficult to provide substantial comments today because we're missing the implementation guidance. And we feel it's really important to have the implementation guidance prior to the final rule being adopted. (Tulalip Tribe)</p> <p>RESPONSE: <i>See previous comments.</i></p> <p>Ecology needs to demonstrate willingness not only to sit down with tribes, but to also act upon a recommendation. Few other parties or governments have as much as experience or understanding and data that the tribes do regarding water quality, the fisheries, or shell fisheries. (Tulalip Tribe)</p> <p>RESPONSE: <i>Ecology has, and will continue, to meet and consult with tribes on water quality and related beneficial uses.</i></p>
<p>(68c) Administrative Procedures Act (APA)</p> <ul style="list-style-type: none"> • Cost Benefit Analysis 	<p>DOE did not prepare a cost-benefit and legal cost effect alternative analysis for public comment and review as is required under the Regulatory Reform Act of 1995. The rule should be postponed. (Farm Bureau) (WSHA)</p> <p>RESPONSE: <i>Like the other Regulatory Reform Act materials, the cost benefit analysis must be completed and in the rule-making file when a rule is adopted. The law does not require an agency to circulate for public comment its preliminary determinations regarding benefits and costs. However, several people expressed the desire to have the cost benefit analysis available for public review. We did provide a draft cost benefit for public review. The agency realizes there is new legislation signed into law that will now make this a requirement for future rules.</i></p> <p><i>In addition the state's Regulatory Reform Act Chapter 34.05 RCW, requires the following set of issues state agencies must address to demonstrate they have carefully weighed these important considerations before formally adopting or revising state regulations. Like the Cost benefit Analysis, these issues are required to be answered prior to final rule adoption and placed in the rule file. Ecology provided its preliminary thinking on these issues as part of the draft rule package prior to rule adoption. We thought it would be helpful for the public to see our draft thinking on this analysis.</i></p> <ol style="list-style-type: none"> <i>1. Clearly state the general goals and specific objectives of the statute that the rule implements.</i> <i>2. Determine that the rule is needed to achieve the goals and objective of the specific statute, and analyze alternatives to rule making and the consequences of not</i>

adopting the rule.

3. *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.*
4. *Determine, after considering alternative versions of the rule and the analysis above, that the rule being adopted is the least burdensome alternative for those required to comply with it.*
5. *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.*
6. *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.*
7. *Determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, determine that the difference is justified.*

A Small Business Economic Impact Statement was also part of the rule package that went out for public review

The proposal fails to provide the cost of these regulations. (SCCA)

RESPONSE: The Small Business Economic Impact Statement and a draft Cost benefit analysis were provided. See response above.

DOE has not yet completed the cost benefit analysis, so the public is unable to comment on it in relation to the proposed rules. (Farm Bureau) (Schauer) (Meenach) (MBarr5) (Stemilt Management) (McCart) (Island County) (WGCA)

RESPONSE: A draft Cost Benefit Analysis and a Small Business Economic Impact Statement were provided for public review. See responses above.

To better evaluate the impacts of the revisions to the standards, the cost benefit analysis should have accompanied the draft revisions and should have shared the same public comment period. Ecology should consider extending the public review period to coincide with the public review period for the cost benefit analysis. (CBP)

RESPONSE: See responses above.

We want an opportunity to review and comment on a Cost Benefit Analysis for the farming community before any changes to the standards are made. (Skagit County)

RESPONSE: A draft Cost Benefit was provided for public review. See responses above.

The Squaxin treaty rights require the protection of water quality, yet in the rulemaking over the past couple of years economics has risen above safe clean water as the priority for the rulemaking. This is unacceptable. Further the economic benefits of clean safe water are not adequately addressed. (Squaxin Tribe).

RESPONSE: In developing the Water Quality Standards the agency has to meet the federal Clean Water Act along with Washington's Regulatory Fairness Act and Washington's Water Pollution Control Act. Our goal under the Pollution Control Act is "maintain the highest possible standards to insure the purity of all waters of the state" and our goal under the Administrative Procedures Act is to achieve the Water Pollution control goal by: Determining that the probable benefits of the rule are greater than its probable costs and determining the rule being adopted is the least burdensome alternative for those required to comply with it.

Consideration of our economic well-being of our fishermen, both tribal and non-tribal, is not included in an economic criteria that evaluates economic burden of the function of the cost borne by those responsible for compliance only. The economic losses that the fishermen have sustained across the state are not used in estimating economic evaluation of specific water quality compliance or enhancement action. And the economic liability of fishing and fishermen has deteriorated in direct proportion to the reduction of water quality with the direct consequence of economically advantaging those entities responsible for compliance. (Nooksack Tribe)

RESPONSE: *The Cost Benefit Analysis considers the value of the fish and it is also a consideration in the rule making. Ecology understands that tribes are highly likely to have much higher values for the fish than non-tribal groups. This is true because for religious and cultural reasons, the tribes have no substitutes and because of legal rights the appropriate measure is “willingness to accept” or “willingness to sell” rather than the traditionally used “willingness to pay” value. “Willingness to pay” is limited by income, where the other measure is not. Further no tribe has indicated any willingness to sell off fishing rights.*

We don't believe that we have economic tools capable of quantifying the effects of degradation of water quality and the range of natural resources functions as before. (Nooksack Tribe)

RESPONSE: *Ecology agrees. Please see the section on difficulties with quantification.*

The guidelines used to justify the new regulations should be used as guidelines for cost benefits analysis when variances are required for water bodies that are out of compliance. (Farm Bureau)

RESPONSE: *Ecology does not understand this comment. Only federal guidelines generate new regulations and these federal guidelines are not subject to the cost benefit analysis.*

DOE should use specific rivers as examples. (Farm Bureau)

RESPONSE: *This was done for the cases in the Small Business Economic Impact Statement and for both the draft Cost Benefit Analysis and the final Cost Benefit Analysis.*

DOE should compare relative and absolute change in growth rate, survival, and other factors for changes in water quality variables under the new and old regulations. (Farm Bureau)

RESPONSE: *This was done for the final Cost Benefit Analysis.*

The effects of regulating summer period levels to protect rearing and spawning should be considered quantitatively and separately. (Farm Bureau)

RESPONSE: *This was done for the final Cost Benefit Analysis.*

DOE needs to evaluate the impact of its 0.3 °C temperature variance and the 0.2 mg/L O₂ variance in terms of expected effects on spawning and rearing. (Farm Bureau)

RESPONSE: *This is in the existing water quality standards and is not a part of these amendments to the standards.*

Migratory corridors, classified as spawning and rearing habitats, should be evaluated. (Farm Bureau)

RESPONSE: *This was done for the final Cost Benefit Analysis using Washington Department of Wildlife's Salmon and Steelhead Stock Inventory (SASSI) data. This information is not perfect but it is the best comprehensive data available. The reader should note that there will be a process for determining where these waters are in greater detail after rule adoption.*

The cost of compliance by the water/sewer providers and their customers will be a significant impact that should be studied. The revised rules will be disproportionately more expensive to smaller systems. (Goldendale)

RESPONSE: *The impact will be limited to specific entities. However, for those affected a disproportionate impact on small systems is likely. Ecology is developing guidance for how to work with these smaller systems to meet these new standards.*

Even a small fraction of the "Worst Case Cost" will be devastating to businesses. (PABA)

RESPONSE: *The final rule has been adjusted to make this outcome less likely. Ecology expects this worst case cost will be very rare. There are conditions in the guidelines that limit what is reasonable cost for the permit.*

The cost to implement these new proposed rules could be back breaking, especially to small business. (Forde)

RESPONSE: The final rule has been adjusted to make this outcome less likely. There are conditions in the guidelines that limit what is reasonable cost for the permit.

There is one area in my county where we are supposed to lower the temperature by one degree. How much money, how much buffer, how many set-asides are we to make to lower it by one degree when those dissolved oxygen and temperature levels are normal and accustomed to our river? Where is the cost-benefit analysis? Salmon are adaptive. Let's go back to the Mount St. Helens disaster in the eighties. Now, I think that's an extreme case. I don't think we'd ever want to go out and engineer something like that. But it gives us a little bit of an idea just how adaptive these creatures are. (Hamilton)

RESPONSE: The regulations allow natural conditions of a water body to be used for compliance with the standard. Where the water does not meet criteria due to human influences that have lowered the water quality, it is our responsibility to bring the water back up to a healthy condition. Each situation is unique and must be considered on a site or watershed specific basis. A cost benefit analysis has been conducted and is a part of the final rule package and a draft was provided earlier.

These standards could ultimately lead to the loss of agricultural use of lands adjacent to drainages. If so, the landowners must be compensated for the loss of these lands. Local governments must also be compensated for the loss of tax revenue historically generated from these lands. (Bordsen)

RESPONSE: Buffer potential was evaluated in the Cost Benefit Analysis. The value of the rents for land includes the present value of all future net product and local government losses.

One cost I hope you include in your cost/benefit analysis is the cost of monitoring equipment changes to logging type devices for temperature and dissolved oxygen. (TCEHD)

RESPONSE: Both the existing and proposed criteria are based on the daily maximum temperature and the annual maximum daily maximum temperature. Data loggers for continuous monitoring of temperature now go for approximately \$100 dollars each. They can be deployed in the spring and collected later in the fall. The use of data loggers is actually less costly than the resources needed to measure daily maximum temperatures by hand, and particularly to try and capture the annual maximum temperature. This technology has reached the point where it is now regularly incorporated into monitoring programs. Grab samples for temperature seldom capture the daily maximum temperature and tend to produce bias data that is not useful for gauging the true thermal health of a water body.

The proposed water quality standards are too onerous and too expensive to implement. The economic impacts to property owners and homeowners has not been adequately addressed and considered. (Smith-P)

RESPONSE: Ecology has tried to weigh these in the cost benefit analysis. The economic literature indicates that property values tend to be higher on shore when water quality improves. It is also important to remember these amendments to the existing water quality standards are incremental changes. Most Best Management Practices you would use to meet the existing standards will meet these changes.

Can you let me know the estimated costs for your water changes? (Renzetti)

RESPONSE: The Cost Benefit Analysis looks at the estimated costs of meeting these amendments.

It will impact the economy here when people like me and my taxes leave the state or others don't visit and bring their money with them because the whole state starts to smell like the Spokane River and there's no place to fish or recreate. Don't screw up water for anyone's business because it's just plain not right. It is bad business for the majority and in the long run to abuse waters. (Belzer)

	<p>RESPONSE: Ecology has used the value of fish to estimate the value of the rule change.</p> <p>Use of economic criteria to override protection required for fish survival is not acceptable. The economic value of fishermen has not been considered overtime as water quality has deteriorated. The Washington coastal fishery once supported the largest Salmon cannery on the west coast of North America. These are the benefits that should be taken into account. An economic assessment of non-market goods and services done for WRIA 1 is included. (Nooksack Tribe)</p> <p>RESPONSE: Ecology has used the value of fish to estimate the value of the rule change.</p> <p>The Tribe is very concerned about the process of developing a cost-benefit analysis. The natural resources of our tribe are priceless. The tribes should be involved in developing a CBA that properly values tribal resources. We have also spent tens of millions of dollars over the past 15 years on salmon recovery efforts and are currently working on 16 restoration projects in the watershed. Over 20 million dollars will be expended to complete these tasks. This money will be wasted if the state does not propose revisions that protect the goal of salmon recovery and water quality protection. (Puyallup Tribe).</p> <p>RESPONSE: Ecology believes the rule change is protective of fish. Ecology understands that tribes have much higher values for the fish than non-tribal groups. This is true because for religious and cultural reasons, the tribes have no substitutes and because of legal rights the appropriate measure is “willingness to accept” or “willingness to sell” rather than the traditionally used “willingness to pay” value. “Willingness to pay” is limited by income, where the other measure is not. Further no tribe has indicated any willingness to sell off fishing rights.</p>
<p>(68d) Administrative Procedures Act (APA)</p> <ul style="list-style-type: none"> Code Reviser 102 (CR-102) 	<p>The corrected CR 102 was filed and an extension of time for comments should have been allowed due to the error in the original CR 102. (Farm Bureau)</p> <p>RESPONSE: The supplemental CR-102 was filed only to correct a typo in the statutory authority that was listed on the original CR-102. No changes were made to the content of the proposed rule language. Therefore, no additional time was provided for comments.</p>
<p>Small Business Economic Impact Statement (SBEIS)</p>	
<p>(69) Small business Economic Impact Statement (SBEIS)</p> <ul style="list-style-type: none"> Clarification 	<p>Many farm lands are downstream, and these habitats are typically used as migratory corridors. These waters will more often exceed the spawning and rearing temperature criteria. As a result, the new regulations are more likely to over classify use in private lands. (Farm Bureau)</p> <p>RESPONSE: The final rule has been revised to allow some increases in temperature but to reduce temperature criteria in spawning areas.</p> <p>The SBEIS mentions that “cost minimizing features” for agriculture are the Conservation Reserve and Enhancement Programs and the Environmental Quality Incentives Program. These programs are not available to all qualifying farms because of lack of funds, therefore they are not valid cost minimizing features. (WGCA)</p> <p>RESPONSE: Comment noted..</p> <p>We believe that DOE has not met the requirements of the act in determining the economic impact to small farmers and ranchers. (Farm Bureau)</p> <p>RESPONSE: Ecology has evaluated impacts to agriculture in the Cost Benefit Analysis.</p> <p>Mr. Peeler’s 12-19-02 Memo on the Forestry SBEIS is incorrect in the second bullet. The Legislature is currently considering legislation (HB 1095) to accomplish what he has outlined. Today all NIPF landowners are still required to follow the current WAC 222-24 RMAP’s requirements. (RSR)</p> <p>RESPONSE: Thank you for this clarification.</p> <p>Mr. Peeler’s conclusion on page 5 Appendix C 12-19-02 for the agricultural lands is</p>

incorrect in that “the affect of the standards on change on agricultural lands will be minimal...” The same assumption is being made with this SBEIS as was made with the Forest and Fish legislation; “On the average the impact will not be significant for a farmer” but all farmers and farmland are not created equally. (RSR)

RESPONSE: Comment noted. Ecology has evaluated impacts to agriculture in the Cost Benefit Analysis.

The mitigation measures considered under CREP and EQIP are for a voluntary federal program with funds subject to congressional appropriation. They do not make any compensation for the loss of crop income. (RSR)

RESPONSE: Ecology agrees.

DOE’s 12-19-02 list of “Mitigating measures” of forest practice rules on small forest landowners is ridiculous, wishful thinking that does not reflect reality.

RESPONSE: Comment noted.

The SBEIS states that Ecology’s proposed changes will not require any substantive changes because the currently accepted practices represent the best available methods for managing urban stormwater. Why make the changes if nothing will change? (PABA)

RESPONSE: There will be changes on some watersheds for some non-stormwater entities. Stormwater management practices represent current best practices and, given current knowledge, would not be changed based on the standard changes.

Can DOE explain in layman terms what marginal is? \$500? \$5000? (Marble)

RESPONSE: A marginal analysis looks at the change that occurs as you move from one situation to a new situation. When examining the national debt the marginal change may be a lot of money, when examining chocolate it may be the price of a chocolate bar. In this case it is the change created by the rule amendment, neither the average cost of the rule nor the total cost of the rule but the change when adding the new requirements to old requirements.

Can Ecology explain the model basis for the Monte Carlo run for sensitivity tests and the cost of \$40,000 per employee to small businesses? (Marble)

RESPONSE: The model basis is in the appendix. The dark cells have assigned distributions that feed into the calculations. The number in that cell varies based on the distribution and generates a range of final values. The cost per employee is one of the ways of measuring whether there is a disproportionate impact on small business. The cost to a modeled small business scenario was divided by average employees. Note: Further review indicates this worst case scenario may have been high. Unless the discharge water itself has value, there are cheaper options.

Federal requirements are exempt from analysis and so if they are-- if the publicly owned treatment works are also under the federal requirements, I just want that clarified a little bit. (Grover)

RESPONSE: The exemption applies to federal requirements. Ecology has analyzed requirements that are state requirements and those that meet federal requirements but also allow some flexibility to the state.

For industrial permits, Ecology doesn't know which mechanisms permit use will choose since DOE signs off on many permits what mechanisms are really available. (Marble)

RESPONSE: Ecology agrees.

I'd like to see what some of the lower cost mechanisms are. (Grover)

RESPONSE: Lower cost mechanisms are considered in the cost benefit analysis.

In the SBEIS on page one I'd like it to be explained the disproportionate impact on small business, exactly who the small businesses are and won't these costs ultimately pass through to end users? (Grover)

RESPONSE: The cutoff for a small business is 50 employees, under the law. Yes, businesses pass costs on to their customers.

	<p>On page 2, I'd like an example to be cited of a proposed change that would trigger one of the two points. (Grover) RESPONSE: <i>Ecology believes you are referring to paragraph 4: Each of the changes from the end of page 2 through the beginning of page 5 was a change that would trigger one of the two points.</i></p> <p>On page 4, does that pertain to all lakes or only the lakes that have been identified and listed as being impaired. (Grover) RESPONSE: <i>Ecology believes you are referring to diagram 2: No. It refers to lakes, both listed and not listed as impaired .</i></p> <p>On page 6, it says some POTWs will be affected by the proposed amendment, which begs the question can DOE explain who decides which ones and what criteria will be addressed to determine that process. (Marble) RESPONSE: <i>If a water body is listed for a TMDL and the TMDL sets limits on a specific criteria, all contributing POTWs for that criteria on that water body would be affected.</i></p> <p>On the bullets on page one, I'd like examples of businesses that actually reflects those criteria questions, how that would it affect those businesses and why there's this disproportionate impact. (Grover) RESPONSE: <i>Please see the cases. The cases were designed based on actual business impacts. Ecology cannot give the names of the companies to you. The disproportionate impact is based on estimated costs per employee for large and small companies. In this case the cost per employee is higher for small than for large business.</i></p> <p>Permit limits are set by government and normally like the storm water manual, ecology gives guidance to those government agencies on what those guidelines should be, so they're not really chosen by businesses. (Grover) RESPONSE: <i>Setting a permit limit is different from the question of "how to meet the limit." There are many ways to achieve a limit. This is where the business can be creative and use the technology that costs them the least and still meets the limit.</i></p> <p>We have some concerns about the financial impacts and we are looking for some type of explanation as to the stated figure of for small businesses of \$40,000 per employee. We need a type of explanation to that so that we might either offer input or look at-- help you look for some alternatives. (Kitchens) RESPONSE: <i>Please see appendix B, Tables 2, 3, and 4. These tables lay out explicitly the underlying assumptions for the calculations.</i></p> <p>Were the anti-degradation costs not addressed because the updates are mandatory? (Grover) RESPONSE: <i>Ecology believes the specificity of the revised antidegradation are clarifications of the existing language, and are either neutral costs or decreased costs from the existing rule language. Antidegradation is discussed further in the Cost Benefit Analysis.</i></p> <p>With the problems we are having in the economy right now our state can not continue to add to the burden of industry. (Marble) RESPONSE: <i>Ecology has strived to reduce the burden of the rule while meeting the requirements of the law.</i></p>
--	--

General Comments

(70a) General Comments

The following comments were received in general support of the rule change. The department appreciates the support:

The Boeing Company compliments the Department of Ecology on conducting a complete,

<ul style="list-style-type: none"> Support changes 	<p>fair and extensive public process during the development of these comments. (Boeing)</p> <p>We wish to express appreciation for the process conducted by Ecology to inform stakeholders and address concerns over the past several years. (NWPPA)</p> <p>The proposed standards are scientifically based and arrived at with data and documentation widely available to the public. (Sheppard) (Davis) (Williams) (Fox) (Lonngren) (Meyer) (Stauffer) (Anonymous) (Walogan) (Nesbit) (Churchill) (Throup) (Goedhard) (Ucheler) (Herman) (Vaaye) (Keller) (Henton) (Parent) (Hill-L) (Mohr) (Longer) (Natapoc Resources) (Murphy) (Kraus) (Clinkenbeard) (Woodhurst) (Favius) (Mengel) (Bass) (Snow) (Theoe) (Wallow) (Kraft) (Tecca) (Beach) (Webster) (Jackson) (Scott-B) (Hackett) (Uusitalo) (Paladeni) (Davis) (Christofferson) (Burke) (Hoffman) (Elder) (Campbell Group) (Padilla) (McEwen) (Scott-N) (Holmes) (Verlander) (Longview Fibre) (McDonald) (Waddell) (Pierson) (McKee) (Zettle) (U.S. Timberlands) (Ness) (Hohendorf) (Ritchie) (Merritt) (Hansen) (Witter) (Hatfield) (Powell) (Bibby) (Goedhard) (Benson) (Ritchie) (Nelson) (Bye) (Childers) (Oberg)(Wasson)(Schaaf)(Fink)(Boyd) (Gabriel) (MC-PUDs) (Peach) (McDonell)</p> <p>The tribes, federal agencies, utilities, local governments and private industry have all been actively protecting habitat and native salmon. Ecology's standards support this work in a positive way. (Williams) (Sheppard) (Bead) (Walogan) (Throup) (Merlit) (Stauffer) (Wasson) (Buker) (Greenblatt) (Wintcrowd) (Walker) (Clark) (Cain) (Richards) (McDougall) (Jone) (Swanson) (Callig) (Stroble) (Verlander) (Kraus) (Virden) (Smith) (Mitchem) (Gilbertson) (Parent) (Mallon) (Wallace) (Lester) (Paladeni) (Kenney) (Miller) (Lundberg) (Frost) (Tracy) (Weston) (Smith) (Webster) (Carlson) (Fox) (Masterson) (Potter) (Uusitalo) (Peterson) (Anonymous) (Harrison-Ben)</p> <p>Our state has worked hard to protect habitat for salmon. Ecology's proposed standards are another step in the right direction. (Evans) (Stauffer) (Backstrom) (Walogan) (Throup) (Wasson) (Monahan) (Anonymous) (Armstrong) (Burke) (Eichentoph) (Paren) (Eberhart) (Bales) (Malone) (Pobst) (Kraus) (Misner) (Hartley) (Beach) (Rogers) (Clark) (Weston) (Fox) (Green)(Fink)</p> <p>The proposed water quality standards complement other recent efforts for an unprecedented effort to restore native salmon runs. (Fink)</p> <p>The standards are based on objective data, attainable, protective of salmonids, fair, and able to be implemented. (Green Crow) (Longview Fibre) (Simpson Timber)</p> <p>It is imperative that Ecology formally recognizes FFR commitments as meeting the proposed water quality standards. (Campbell Group)</p> <p>It concerns me as I see our population growth how important good stewardship of our water supply is to all of us. I want my grandchildren to not only enjoy all that I have had the pleasure of enjoying but to support the people we elect to use all of our resources wisely. (Schneider)</p> <p>It is good to see the improvement and effort done by Ecology and I hope to see more good work done to improve the natural fish runs in our streams. (Bassett)</p> <p>I salute you for your diligence in protecting this important resource. (Chrisholm)</p> <p>I am pleased that Ecology is keeping water as clean as possible for the wild fish as I like to fish to help on my food bill. (Keverline)</p> <p>It sounds like the overhaul is pointed in the right direction. (Cox)</p> <p>I thank you for all the good hard work you're doing. (Moore) (Glasgow) (Lomer) (Smith) (Henderson) (Dunn) (Olson) (Leach) (McCarty) (Potts) (Fernandez) (Hubbard) (Hoehne) (Witt) (Wasmiovicd) (Duncan) (King) (Douke) (Fowler) (Warfle) (Muller) (Zuvela)</p>
---	--

	<p>(Koch) (O’Leary) (McAninch) (Amundson) (Shink) (Tolles) (Lapic) (Gee)</p> <p>The North Olympic Timber Action Committee supports the Department of Ecology proposed standards of aquatic life use based on best scientifically derived data; water temperature criteria, and acknowledgement that forest practice, like Forest and Fish, anticipated changes in water quality standards and already address the goals of anti-degradation as described in the Clean Water Act. (Johnson- C)</p> <p>These standards can be implemented in the field. (Peach)</p> <p>My compliments and support for the openness of the process and data available for the public. You appear to be reducing duplicative review processes by exempting activities that previously have gone through public review. Your focus paper indicates a desire to prepare a balanced proposal. (Samuel McKee) (Rob Verlander)</p> <p>NOTAC would like to thank the Department of Ecology to allow open discussion with a variety of groups and especially for bringing this public meeting to our community. (Johnson-C)</p> <p>Hats off for providing a chance for the public to be heard before establishing current water temperature standards. The new standards are compatible with those of other governmental departments. (Light-J)</p> <p>We believe the draft rules will better protect our cold water species. (CCTU)</p> <p>Except for this tier III issue, there's some good things in your proposal and I urge you to adopt the rest of them. (Bell)</p> <p>Through cooperation between small landowners and Ecology we will have a better environmental. (Harrison-Ben)</p> <p>RESPONSE: That is indeed an important partnership if we are to maintain a healthy environment and economy.</p> <p>While we generally support the proposed revisions, reasonable application will get us to a better result faster than a hard nosed approach. The ability to meet targets based on the natural conditions must stay in the proposal as well as UAAs, SSC, and Variances. (SVID)</p> <p>RESPONSE: All the issues remain part of the package adopted.</p>
<p>(70b) General Comments</p> <ul style="list-style-type: none"> Do not support changes 	<p>The following comments were received from entities that do not support the rule change. The department notes the comment:</p> <p>I oppose the proposed standards. (American Gardens) (Bentham) (CCLA)</p> <p>I feel the current standards provide enough protection. (Wallace) (Suter) (Carole Woods) (SSC) (Cronin) (Edwards)(Belzer) (Scarvie) (Hadley) (Lindholdt) (Lands Council) (Rowe) (American Rivers)</p> <p>The water quality standards are not lacking, only the enforcement of current regulations by Ecology is lacking. Additional regulations are not necessary. (YRBCC)</p> <p>We'll not support any change in Water Quality Standards that do not protect recreation, human health or fish. We request that DOE consider creating subsistence lifestyle standards and also transboundary contamination standards. (Beaver)</p> <p>I urge you to protect our precious resources to the high standards this legacy deserves. To keep the water flowing in the streams and not to greedily use it for all other purposes. We need to protect and not use up and degrade this most precious inheritance to pass it on in good condition to future generations. (Kaald) (Herman)</p> <p>I am distressed by the allowance of more reduction in water quality. Retain protections for</p>

	<p>all classes of water, maintain connection with quantity, and allow exemptions for only the most pressing circumstances. (Karen Hyvonen) (Hill-J) (John Corr) (Herman)</p> <p>Do not do anything that will compromise water quality. (Hughes)</p> <p>I am concerned about the toxic mining waste that washes into Eastern Washington and about the survival of salmon in our rivers. (Hughes)</p> <p>It is regulations which you are attempting to impose which help to insure the demise of the domestic food supply and at the same time create a back lash against reasonable environmentalist policies. (Tennessee)</p> <p>Waters flowing into the state must meet state standards. (Lands Council) (KRCG) (Mazzetti) RESPONSE: We agree and express the same position with neighboring states</p> <p>We urge Ecology to either accept the changes proposed in the joint environmental community letter or, failing that, withdraw the proposal and let the current standards prevail until a revision can be put forward that is based on best available science. (Audubon Washington) RESPONSE: Comment noted. Our changes do represent best available science.</p> <p>The proposed criteria have really loosened in many instances from the December 2000 draft, like the dissolved oxygen criteria and the antidegradation plan. That's a concern to us. (Puyallup Tribe) RESPONSE: We have made some changes to all of the issues in response to public comments. Hopefully, you will prefer the draft that is being adopted.</p>
<p>(70c) General Comments</p> <ul style="list-style-type: none"> Changes to standards are too stringent or unattainable 	<p>The following comments were received from entities that the standards are too stringent or unattainable. Ecology's objective is to have a rule that protects water quality, is reasonable to achieve and attainable. The rule contains many additional notes to implement the criteria in a reasonable manner. Tools are included in the rule to implement the standards. Exceptions are built into the rule for situations such as accounting for natural conditions. The department notes the comments:</p> <p>There's a concern in having this much information and so many standards that we argue are possibly not attainable or applicable to only very specific circumstances. (Houston)</p> <p>I feel that our time can be better spent making improvements in all areas of the proper natural function instead of striving for zero tolerance. (McIntosh-R)</p> <p>I think the potential impacts which appear minor, but when you apply them to the actual river it widely or potentially could widely increase the areas subject to TMDLs and then severely impact restrictions within those expanded areas. (Harrison-Bryan)</p> <p>If we have failed the standard coming out of pristine conditions what incentive is there for doing a lot of planting? I think that if we are going to have a good incentive for land owners to do better it certainly needs to be attainable. (Gately)</p> <p>It's difficult at best to get land owners to relate to the current Water Quality Standards that have been set, not really believing that they can be met as they stand. Listing salmon rearing and spawning creates somewhat of an apathetic attitude as far as "why should we even bother trying to meet something that's unattainable." (Buchert)</p> <p>You need to redo these proposals, using reality, common sense, and establish levels that both include and work WITH the human race, not some unattainable and idealistic laboratory model. (Dan & Georgia)</p> <p>Farmers and ranchers cannot continue to withstand regulatory hits and still stay in business and be competitive nationally or internationally. (MBarr5)</p>

The proposed standards err heavily on the conservative, protective side, but with no obvious benefit to fish. (WCA)

Standards as written are going to create a nightmare. There is no good way to convey the information so it makes sense. It will create a revolt -- cannot cope with what Ecology is doing. Ecology needs to streamline the language specifically to streams. (ACD)

We question the need for more protection. (PABA)

What you are asking of Farmers, Ranchers, and Business is entirely Unrealistic, Unreasonable and Unattainable. Your decisions are based on dishonest science, misinformation and withholds information and consideration of the dire impacts these rules will have on property owners. (Postier)

The proposed water quality rules would require standards that cannot be met under natural conditions. I oppose the DOE making these rules that even Mother Nature cannot abide by. (American Gardens, Bentham) (CCLA) (Island County) (Gilda)

It would appear that the department has a separate agenda at work by setting unattainable standards. (WSHA)

Producers are being asked to meet standards that are not reasonable or attainable. We have not seen proof that the standards have ever existed. (McIntosh-R)

The proposed standards cannot be met under natural conditions. (Stueckle)

The proposed standards ignore natural variations in water quality, and restrictions on human activity will not mitigate that variability. (WSPC)

When the weather conditions and temperature change the fish and wildlife will migrate, regardless of our control. That is God's design, and He is able to control without our help. (Potter)

Some streams and water bodies are good producers of fish, etc., but could not meet your guidelines. (Gilda)

Kittatas County stands opposed to the draft regulations and would like to see a more effective way to capitalize on water conservation projects, and restoration and enhancement of streamside habitat with realistic and acceptable setbacks instead of applying more regulations. (Kittatas Co CDS)

Ecology has increased the water quality standards considerably in the new system. The water quality requirement for the previous class A stream increases significantly and the previous class AA stream also increases because the standards in general are stricter under the use-based system. (Farm Bureau)

RESPONSE: We have reduced the stringency for temperature in some waters in the final draft.

Changes in temperature and dissolved oxygen are a step in the right direction, but these standards are still not achievable in Eastern Washington. The criteria should be further modified to fit the climate of semi-arid, hot eastern Washington or the proposed rule needs to incorporate procedures and mechanisms other than UAAs or TMDLs exempting these water bodies from the 303(d) list (ECBID)

RESPONSE: It is not necessary to go through either a UAA or a TMDL to use the natural conditions clause in the standards that overrides the numeric criteria. But the determination of natural conditions must be supportable based on defined facts and assessments.

The Ellensburg Wastewater Treatment Plant may not be able to meet the dissolved oxygen and temperature criteria. It appears that ambient river temperatures may exceed the

	<p>minimums in the summer and the requiring of maximum increases in temperature is not practical for winter months. Mixing zones should be allowed to the full chronic mixing zone size for temperature and oxygen. (Ellensburg)</p> <p>RESPONSE: <i>After considering EPA guidance, temperature criteria being adopted for salmon rearing that are less stringent across most of the state than the existing criteria, and the incremental allowance for warming is the same that is currently in the regulations for the Class A waters. Mixing zones are allowed to meet the base criteria; although, protection within the zones against acute lethality and creating barriers to migration are included. These values typically would not be an issue, however, for municipal discharges.</i></p> <p>These water quality standards are increased in this new system therefore requiring farmers to improve natural streams to laboratory-defined optimal conditions. (Kittitas Co CDS)</p> <p>RESPONSE: <i>The criteria are not just based on laboratory studies. Most of the criteria are either equal or slightly less stringent than what are currently in the standards now, so if there is a change it is to generally make the standards easier to meet for farmers.</i></p> <p>Most of our ag streams are low-gradient streams. Flow is slow, so you have a hard time with dissolved oxygen. Temperature increases because the flow is so slow. I have concerns as I noticed that a lot of the ag streams are also salmon rearing and will be put into the Class AA, at 16 degrees C. That’s going to be pretty hard to achieve. (VanderVeen)</p> <p>RESPONSE: <i>In the final version almost all of the previous Class A streams would be assigned temperature criteria of 17.5C instead of the proposed 16C.</i></p> <p>The numerical standards cannot be met in Eastern Washington, especially within man made irrigation facilities where salmonids are not known to live. Ecology doesn’t seem concerned that this will ultimately cost Washington State and the public and private section unnecessary expenses in the development of TMDLs to prove natural conditions exist. Ecology elected to take a hard line approach which forces the engagement of the TMDL and UAA process to solve all of the state water quality concerns. (QCBID)</p> <p>RESPONSE: <i>Ecology’s objective is to set realistic standards and we also do not want to develop TMDLs where they have not benefit or would not be conducted if the uses better matched the potential of the water body. This is partly why we are changing to the new use-based system.</i></p>
<p>(70d) General Comments</p> <ul style="list-style-type: none"> Changes to standards are too weak 	<p>The following comments were received from entities that the standards are too weak. . Ecology’s objective is to have a rule that protects water quality and it’s beneficial uses, is reasonable to achieve and attainable. We used sound science and good policy to develop the final rule. The department notes the comments:</p> <p>Water quantity linkage with water quality should be strengthened not weakened. (Pech) (PTCC) (Marquardt)(Holt)(Newman-L)(Brimm)(Turner)(Royer)(Lawton)(Herman)(Johnson-LaTour) (Buttemer)(Lodzinski)(Vandergriff)(Eller)(Ostlund) (American Whitewater) (Aagaard) (Miller-B)</p> <p>It is incumbent upon Ecology to set standards that will adequately protect and promote clean water conditions. While earlier drafts were not perfect, they covered many of our concerns. We are disheartened by the weakening that has occurred in the current proposal. (Yakama Nation) (Miller-B) (Cole) (Squaxin Tribe)</p> <p>The rule should include stricter temperature and dissolved oxygen standards that will fully protect endangered salmon and other fish and wildlife species. (758 commenters, see Appendix 1)</p> <p>The new standards must of been conjured up by a group of polluting industries and large farms. It does nothing to protect water quality. The proposal should be named “the new reduced water quality standards.” Shame on Ecology. (Gerhart)</p>

This whole rewrite seems to be a back-sliding in protecting water quality. (Steffensen)

Things are bad enough now; don't add to the decline by weakening protection for our water and salmon. Guard salmon migration routes, eschew pollution swaps, stop non-source pollution. (Grathwohl)

The impact of sediment on fisheries, removal of canopy on temperature, late season flows and flooding all have tremendous impacts on water quality – yet are not addressed in the standards. (Lands Council)

We are concerned the rule does not appear to protect the critical elements of oxygen, pH, salinity, temperature, scouring, sediment and turbidity, and physical displacement. (FOGH) (Peterson-M)

The proposed standards will not adequately protect our rivers. At a time when Washington State is working to protect salmon and their habitat, weakening water quality standards is simply unacceptable. We encourage Ecology to adopt more protective standards as outlined by the environmental community numerous times in previous comments. (American Rivers)

Concerned that proposal significantly lessens Protection. (Herman) (Ianniello) (Mazzetti)

No environmental regulations should be weakened, and this should be proof from the citizens not the developers. (Julian Powers)

Proposal reduces protection.. (Parker) (Raisler) (PTCC)

Proposal will weaken water quality protections in the name of flexibility and ease, and move the state further away from the Clean Water Act's intent to restore and maintain waters (NSBK)

Normandy Park is concerned the proposed standards are too weak to protect Washington's rivers and streams. The proposed rules fail to protect endangered salmon and other fish and wildlife and contain loopholes that allow currently clean and healthy water bodies to easily be polluted. (Normandy Park)

We believe that Biological Criteria are needed. Preliminary adoption of narrative biological criteria is possible on the schedule proposed, and the state should commit to a process for designating specific numeric B-IBI-based criteria on a rapid schedule. The proposed criteria are inadequate to protect designated uses in many instances. (NWF)

The standards does not need rollbacks designed to make pollution more acceptable. (Miller-E)

I support more stringent rules to protect our precious waters. Industries, cattlemen and farmers will cry about it, but think about the great benefits of water and recreation and what it can do for the state. (Crawford)

I am opposed to any lessening of strict guidelines for Lake Chelan or the Columbia River. Our waters are already "in trouble" and water quality guidelines should be stricter, not eased. (Baker-P)

It is unacceptable to weaken any protections for recreation use. Many waters are used for fishing, recreating, and drinking water supply. (Artley)

More, and better paying jobs would be nice, but I'm not dumb enough to sacrifice my health to have it. Any new water quality standards you propose should only be stronger. We can't go backwards in this – that would be insane. (Bergeron)

Science-based water quality standards that respond to the pressures of population growth by using a precautionary approach to prevent water quality degradation will benefit

	<p>citizens and businesses alike. Cleaning up, recovering species that are pushed to the brink of extinction—these are the radical and costly outcomes of the weak prevention policies and lack of enforcement that are embodied in this proposed rule. (Audubon Washington)</p> <p>There appears to be no recognition of cumulative effects. (FOGH) RESPONSE: Cumulative effects are incorporated in the allowances for further human degradation associated with the temperature and oxygen criteria.</p>
<p>(70e) General Comments</p> <ul style="list-style-type: none"> Meeting federal rules and standards 	<p>The following comments were received from entities regarding the need to meet federal rules and standards. Ecology is directed by Chapter 90.48 RCW to participate fully in the programs of the Clean Water Act. State standards must be approved by EPA. EPA's approval of state standards is a federal action that must comply with the federal Endangered Species Act. Even without these federal overlays, the standards are supposed to provide the highest quality of water for protecting the states resources. The department notes the comments:</p> <p>DOE's goal of full protection exceeds the requirements of the Endangered Species Act -- beyond avoidance of jeopardy and the goal of recovery. (Farm Bureau)</p> <p>The guideline's inclusion of concepts and requirements to implement other state and federal statutes (e.g. the Endangered Species Act) are without legislative authority. (Farm Bureau)</p> <p>We need to adhere to federal standards. (Pacific County BOD)</p> <p>I am opposed to the department trying to set standards that far surpass the federal EPA standards. (Jenkins) (MBarr5)</p> <p>The proposed rules are a very serious attempt by the department to implement ESA through the back door. I am extremely concerned about this. (Jenkins)</p> <p>There is no justification for being more restrictive than the current federal standards. (RSR)</p>
<p>(70f) General Comments</p> <ul style="list-style-type: none"> Standards should be flexible and streamlined 	<p>The following comments were received from entities that standards should be flexible and streamlined. We recognize that statewide standards need to be flexible enough to work under various conditions, and streamlined so that the rule is clear and easily understood. Ecology believes the new rule is clearer to implement than the old rule and includes numerous changes that simplify the standards. For example, the standards directly include the concept of adaptive management and compliance schedules in numerous sections of the rule, they directly support consideration of natural conditions, and there are numerous tools that exist that can adjust standards legitimately to match site conditions. The department notes the comments:</p> <p>Your current proposal will complicate, confuse, and increase the amount of regulatory activity done by ecology. This does not follow legislative and executive decisions to streamline, simplify, and clarify regulations. (YRBCC)</p> <p>This is one more example of the expensive, excessive regulation that increasingly forbids locally tailored flexible management of our land. Only effective, flexible and reality-based objectives will save species and environments.</p> <p>Encouraged at attempt to simplify evaluation of standards, such as with a single year-round temperature criteria. (K.E. Jones)</p> <p>These proposed rules contradict the recommendations contained in the governor's Competitiveness Council Report, which were to streamline regulations not add more onerous environmental regulations. (Meenach)</p> <p>Standards should be written so that they can be flexibly applied to individual water bodies.</p>

	<p>(PacifiCorp)</p> <p>This rule completely ignores the recommendations to streamline regulations, suggested by the Competitiveness Council’s report. (Jenkins) (American Gardens) (Bentham) (CCLA) (MBarr5) (Stueckle) (Meenach)</p> <p>Any new standards should provide flexibility to consider background and site-specific conditions before confirming violations and proceeding with enforcement. (Skagit County)</p> <p>The proposed regulations do not allow for voluntary alternate methods of meeting the federal standards or a time frame to implement Adaptive Management procedures that will provide the landowner an opportunity to mitigate the cost of compliance and stay in business. (RSR)</p>
<p>(70g) General Comments</p> <ul style="list-style-type: none"> Water Quantity should be considered with quality 	<p><i>The following comments were received from entities that water quantity should be considered with quality. The department notes that while quality and quantity are linked, they are managed under two separate laws that have separate requirements. Water quality is one of many considerations in setting withdrawal requirements and instream flows, but it does not override the other factors.</i></p> <p>Given the dire status of instream flows in Washington, we are extremely troubled by the lack of protection for flows in Ecology’s proposal. The critical important of clean, flowing waters and our quality of life would be severely undermined by the proposed rules. Ecology should strengthen, not destroy, the link between quality and quantity. (CELP) (CRC) (Clifford) (Hensley) (Maxwell) (Sierra Club) (Lindholdt)) (Kiver) (Hughes) (McLaughlin) (McCluskey) (Mielke) (George) (Lands Council) (Herman) (Ianniello) (Osborn) (Nooksack Tribe) (Suter) (Cronin) (Edwards) (Suter) (Cronin)</p> <p>Ecology should include the maintenance of sufficient water quantity as a narrative or general criterion in 200(1), 210(1), and 261(1). (Sierra Club)</p> <p>Insufficient instream flows would result from the proposed elimination of narrative protections and complete reliance on numeric criteria. (Audubon Washington)</p> <p>Standards should be developed for instream flows, and which provide sufficient protection to aquatic resources. (Yakama Nation)</p> <p>The currently proposed regulations don’t adequately protect the use of white water recreation. Large water users should be required to maintain adequate in-stream flows. (Bagley-C)</p> <p>A big issue for Squaxin are stream flows and there’s absolutely nothing in here about stream flows. They are integral to water quality standards, yet they’re completely off the table here. (Squaxin Tribe)</p> <p>The Tribe supports changes that further protects salmon and discourages any degradation to existing water quality. We also strongly support changes that relate and preserve instream flows for fish and water quality. (Chehalis Tribe)</p> <p>We recommend that wording be added into the revised regulations to address and reaffirm the relationship between quantity and quality of water. We believe that protection for stream flows is not properly addressed in the revised regulations. (Mountaineers)</p> <p>Your standards should ensure that there is adequate water quantity as well as water quality in especially urban streams but any streams in the state, because in-stream flows are obviously crucial for fish migration. And nowadays with the vast amount of impervious surfaces and detention that is allowed by municipalities for development, the in-stream flows are becoming reduced so much that they can’t sustain the fish. (Way)</p>
<p>(70h) General</p>	<p><i>The following comments were received from entities on the use of best available science.</i></p>

<p>Comments</p> <ul style="list-style-type: none"> • Use of Best Available Science 	<p><i>Ecology used best available science in developing criteria proposals, and provided the public with discussion documents that provide described the science behind the proposal and provides references for that science. The following comments are noted.</i></p> <p>Most of the listed references in the documents do not meet the requirements of Best Available Science listed in WAC 365.195.900-925. There is no definition of science listed in the documents. (Good)</p> <p>The proposed standards are not based on best available science. (WBWRCC) (Stueckle) (Schauer) (Island County) (Howards) (Rose-R)</p> <p>The DOE is using assumptions and opinions from models without sound science, and this could cause an adverse impact of the environment. (Good)</p> <p>I've done some research on modeling and one of the statements that I have gotten from the US Geological survey, Mr. Bartholomew – he wrote a paper entitled Modeling Uncertainty; is that it is not sound science. (Forde)</p> <p>The assumption is made that pollution exists in our rivers, lakes and other water bodies and it's an assumption. This assumption is not scientific-sense based. (Forde)</p> <p>The documents themselves make statements addressing inadequate science data leaving us all wondering, how do you make regulations on that? Ecology must not use assumptions and opinions from models without sound science which could cause adverse effects to our environment. (Good)</p> <p>It's well established scientifically the basis of doing benthic invertebrate, macroinvertebrate inventories and setting aquatics standards. Washington State seems to be resisting this bit of science. I hope it ends. (Espenhorst)</p> <p><i>RESPONSE: It is likely that Washington will have biological criteria established at some time in the future.</i></p> <p>Not all the proposed changes are based on credible data. Standards for oxygen and temperature were set using statewide spawning dates based on laboratory studies. The exclusion of thermal refuges ignores an important way that fish avoid high temperature, therefore resulting in too conservative of standards. (Kittatas Co CDS)</p> <p><i>RESPONSE: Ecology notes that the proposal did not include any spawning dates and the criteria were set using a wide range of field and laboratory studies. We do not believe relying on refugia to protect aquatic communities is rational as a basis for water quality criteria.</i></p>
<p>(70i) General Comment</p> <ul style="list-style-type: none"> • Stormwater 	<p><i>The following comments were received from entities regarding stormwater and the use of stormwater manuals. A misconception developed during the rule proposal that stormwater manuals are becoming mandatory regulations because they are proposed in the AKART definition to be used as guidance, to the extent practical, to develop BMPs. This is not the case, however because the language did not appear to clarify the use of BMPs for stormwater, the sentence has been dropped from the final rule. Stormwater discharges to waters of the state must still meet the standards. The following comments are noted:</i></p> <p>We are concerned with the lack of a standardized stormwater manual. It is conceivable that one that is inappropriate and outdated may be used. (FOGH)</p> <p>The top priority to make our waters clean and safe for people, fish, and wildlife should be to stop surface run-off. Reservoirs could help lessen the heavy damage from flooding, if those waters could be contained, and saved to augment stream flows. The goal would be to keep water levels from getting too low, making it easier to maintain cooler temperatures and allow fish passage. (Riley)</p> <p>Ecology does not expect the proposed changes will require any substantive changes in</p>

	<p>“Currently Accepted” stormwater practices, which represent the best available methods for managing urban stormwater. It is assumed that “Currently Accepted” practices refer to the Department of Ecology’s Stormwater Manual that may <u>not</u> be adopted by local governments especially in rural areas. (Island County)</p> <p>There is a general belief that using the stormwater manual will preempt city and county storm water plans with unnecessary and more costly water protection measures. (PABA) (Port Angeles) (WAR)</p> <p>Configured as such, the state stormwater guidelines could become mandatory regulations if water quality standards are approved. This is too stringent. (Smith-P)</p> <p>I’m here also to just express my concerns on the intertwining of the storm water manual. First of all let me clearly state that we’re not referred to that manual or clearly state that it’s optional as its use was intended. (DeRousi)</p> <p>It concerns me a great deal and I notice the reference to storm water in this document as well. And it seems to imply that that would be a requirement in some way. (Forde)</p> <p>It very clearly states within the document, the Western Washington storm water manual itself, that it’s not mandatory for adoption and that there’s no jurisdiction; but if you reference the document in a WAC, I have to believe that that document is then going to have some authority. I question both the mixed messages to local governments and the confusion to the general public. I understand that the document was written to be used as a tool and I find it concerning that it’s referenced and included within something that’s being amended for law. (Kitchens)</p>
<p>(70j) General Comments</p> <p>Pesticides and herbicides</p>	<p><i>The following comments were received from entities regarding concerns about the regulation of pesticides and herbicides. We do not believe that any changes being made are going to lessen the protection from pesticides and herbicides. The following comments are noted:</i></p> <p>I’m concerned that there might be ambiguous criteria in these regulations that would lessen the standards when herbicides and pesticides are applied. (Way)</p> <p>I am particularly concerned with allowing more pesticide residue into the water supply. It is unacceptable to allow new sources of pollution for any reason. (Hill-J)</p> <p>Ecology is anal about siltation for Forestry, fertilizers, herbicides, pesticides etc. yet you allow population centers to use our water as the earth’s kidneys. Ecology promotes the “do nothing until they catch me attitude” by businesses. It is my hope that you will form an active enforcement arm. If Ecology wants positive changes establish new standards for water clarification prior to exhaust or purification. (BREPI)</p>
<p>(70k) General Comments</p> <p>Affect on property rights</p>	<p><i>The following comments were received from entities regarding concerns about the affect of the rule on property rights. The standards to not take away property rights, but only clarify that water quality, as a public resource, must be protected. The following comments are noted:</i></p> <p>Ecology needs to discuss the effects of property rights and compensation for potential development restrictions. (Smith-P)</p> <p>The proposed rule will reduce or eliminate the function and utility of landowner’s property. (WGCA)</p> <p>I think studies that set criteria that take away from tree farm families rights to harvest trees they have planted and cared for on tree farms they have paid taxes on for up to 100 years or more, should be based on true science. What better science is there than years of historical hatchery data? (Hedglin)</p> <p>The standards are an un-funded regulatory mandate requiring the land owner to either</p>

	<p>spend more money managing his operation, reduce his income potential or both. (RSR)</p> <p>If you want to come and take peoples property away because you think you have a better way to manage it, then you better be prepared to pay for it 100%. (Postier)</p> <p>You are overlooking all sorts of economic impact to private property owners. That can be considered a taking. Irreversible and irretrievable commitments to national resources, timber or anything else that may be on there. (WRCRL)</p> <p>There is political losers in this rule. We are the guys that live out in the country. You know, we try and we are met with more and more restrictive criteria all the time. You wonder why we get nasty.</p> <p>The Decision Support System is not an optimization tool for making decisions on standards and criteria. This is more of a trial and error approach. It's going to be a very expensive trial and error for landowners since buffer zones, which they seem to be focusing on, is a long-term haul. (WRCRL)</p> <p><i>RESPONSE: We are not sure what the “decision support system” is referring to. If the comment refers to adaptive management, we should note that it is an existing part of the state’s water quality protection program and the existing water quality standards. This system is used to prevent the unnecessary expenditure of resources by people that are trying to come into compliance with the standards. It does this by not requiring a guarantee that the set of best management practices that will be used will meet the standards, but instead to try them in lesser combinations to determine the minimum set that is effective in protecting water quality.</i></p>
<p>(701) General Comments</p> <p>Affect on farms and agriculture</p>	<p><i>The following comments were received from entities concerned about the affect of the standards on farms and agriculture. The standards are not designed to impact any particular land user or industry, but do clarify that water quality, as a public resource, must be protected. The following comments are noted:</i></p> <p>Farmers and ranchers cannot stay competitive with more regulatory expenses. (Schauer)</p> <p>Why are you always after the farmers? Cities cause problems, especially with stormwater, and no one is fined. Hopefully common sense will prevail even in the Department of Ecology. (Bentham, CCLA)</p> <p>Please work with farmers to assure that the new rules are fair to all. (Keesling)</p> <p>The proposed standards cannot be met and will put farmers and ranchers out of business. (Howards)</p> <p>We want to incorporate many of the State Farm Bureau concerns by reference into our comments. (Skagit County)</p> <p>Agriculture and forest practices that impact downstream aquatic life, recreation use, groundwater recharge etc. should be regulated, since the impacts of those actions are not just on the property where the degradation starts, but cross over into other ownership. (Lands Council)</p> <p>It is time for agriculture to move into this present age and protect against dwindling water supplies. Environmental agencies must stop trying to be friendly with dedicated foes of doing the right thing. (Yeoman)</p> <p>I would suggest additional leeway for the agricultural and grazing uses. (Storey)</p> <p>Will these standards lead to more farmers and ranchers getting put out of business and the further decline of economics in the rural sector of Washington? (VanderVeen)</p> <p>We need to look at saving fish and water quality, but I think there's also something that needs to be addressed, and there's a whole segment of our society that is dying and that is</p>

	<p>agriculture. And I want clean water for my -- for my kids, their kids and their kids. And but I think they've got to go hand in hand where we as a society have to also protect our heritage, which is agriculture. (Smit)</p>
<p>(70m) General Comments</p> <p>Affect on forest practices</p>	<p><i>The following comments were received from entities concerned about the affect of the standards on forest practices. The standards are not designed to impact any particular land user or industry, but do clarify that water quality, as a public resource, must be protected. The following comments are noted:</i></p> <p>The Forest practices Rules are dependent on the WQS as targets for management strategies. The adaptive management program will be used to evaluate whether the FPR meet the new standards. Monitoring data will be used to determine whether the management practices meet the standards. DNR will look to Ecology to play a lead role to ensure the Adaptive Management program and monitoring program adequately assess the effectiveness of the rules in meeting our shared water quality goals. (WDNR)</p> <p>Large Woody Debris (LWD) increases E-coli counts, but Ecology is still encourage the recruitment of LWD in effect encouraging the poisoning of our water and placing the health of our citizens at risk. (Simmons)</p> <p>The forest owner should not be penalized through regulation forest activities of adjacent land owners. (Schaaf)</p> <p>By the end of this process the entire forest land base in Washington State, both federal and private, will have received protection and will receive essentially certification for protection of standards under the Clean Water Act and the Endangered Species Act, and represent our role or our responsibility in protecting water quality. (McCaulay)</p> <p>Forest land as a land use has dramatically increased its standards that will have an overall impact to improve water quality and improve habitat of salmon and other fish populations throughout the State. The other items that are important to try to take credit for in understanding overall increase in water quality protection on forest land, including the Northwest Forest Plan that's in place on federal lands throughout Washington State, Habitat conservation Plans that have been completed, physical TMDLs that are being implemented across forest land areas, as well as a host of landowners who have gone through a certification process, adding measurable standard to how they are managing the lands. (McCaulay)</p> <p>This proposal undermines the goal of regulatory certainty that was agreed upon when they developed the current forest practices regulations. (PABA)</p> <p>I support Ecology's proposal that regulated activities such as forest practices that are consistent with the Forest and Fish Report based forest practices rules should not have to go through any additional review for tier II under the anti-degradation implementation plan. (Peach)</p> <p><i>RESPONSE: We appreciate your support, although we want to clarify that while individual activities do not need to go through separate reviews the forest rules need to show they are in compliance with the intent.</i></p> <p>The timber industry is largely exempt. The Fish and Forest Report exempts applicable covered forestland from having to comply with water quality standards. Apparently dams are exempt. This is crazy. (Espenhorst)</p> <p><i>RESPONSE: They are not exempt. The rules are designed to meet water quality standards and regularly reviewed to see whether that goal is being met.</i></p>
<p>(70n) General Comments</p> <p>Affect on tribal rights</p>	<p><i>The following comments were received from entities concerned about the affect of the standards on tribal rights. Ecology recognizes that tribes must be involved in decisions that affect treaty protected resources and has built language into the standards for tribes to be consulted with when use attainability analyses are conducted. Consultation with tribes was also held as part of this rulemaking. The following comments are noted:</i></p>

	<p>The global nature of the tribes' treaty rights imposes an obligation to restore habitat and water quality in entire river systems in order to extend the range of species, repair fragmentation, and restore former habitats. (CRITFC)</p> <p>Information available suggests the proposed rule will threaten the Tribe's federally protected treaty rights, further harm endangered salmon runs, and pre-empt our ability to co-manage water resources in the state. (Puyallup Tribe)</p> <p>Proposed modification to Clean Water Act standards must, under U.S. law and treaty designation, promote the survival and recovery of fish. (Nooksack Tribe)</p> <p>It is essential that the Tribe be involved in any decision which might alter standards affecting treaty protected resources. (Jamestown Tribe) (Squaxin Tribe)</p> <p>The tribes need to be recognized as co-managers of aquatic resources. (Kalispel Tribe)</p> <p>The tribe has ceded lands and treaty resources in Washington and has been working to restore fish resources. It is vital the standards support such restoration. (Umatilla Tribe)</p> <p>Water is very important to us, not only for today -- but future generations. (Makah)</p> <p>I question whether we're being treated as just another stakeholder or if we're actually being treated as a co-manager of this resource. And so I'm here from our Council to remind you that we are co-managers. We're not just another stakeholder in this issue. We want to be in the forefront, not comment in what you're trying to implement. (Makah Tribe)(Squaxin Island)</p> <p>You have made some effort to insert tribal consultation into certain places in the document, but tribal consultation isn't something that should be reserved for certain key receivers in the document. It's kind of an umbrella that should wrap around the entire process. (Squaxin Island)</p> <p>Tribes need to be recognized as trend-setter, not just another stakeholder. They are co-managers of these resources and they need to be respected, consulted, and counted on to be part of this process. (Squaxin Island)</p> <p>Getting tribes involved before a rule is created is obviously more preferable to us in that I think we save a lot of time, a lot of money, a lot of resources ahead of time. (Squaxin Tribe)</p> <p>The Lummi Nation requests that Ecology come to a meeting and inform us of how these standards relate to Lummi and how they may affect Lummi. (Lummi Tribe)</p> <p>We'd like to formally request a consultation with Ecology on these standards with the Sauk-Suiattle Tribe, especially since we have two or three concerns related to degradation issues. (Sauk-Suiattle Tribe)</p> <p>This proposal legally puts the state on a collision course with the Tulalip Tribe over our tribe's ability to protect and manage tribal waters and resources. (Tulalip Tribe)</p>
<p>(70o) General Comments</p> <p>Affect on local communities and businesses</p>	<p><i>The following comments were received from entities concerned about the affect of the standards on local communities and businesses. The standards are not designed to impact any particular land user or industry, but do clarify that water quality, as a public resource, must be protected. Ecology's objective is to have a rule that protects water quality, is reasonable to achieve and attainable. The rule contains many additional notes to implement the criteria in a reasonable manner. Tools are included in the rule to implement the standards. Exceptions are built into the rule for situations such as accounting for natural conditions. The following comments are noted:</i></p> <p>My concern is an apprehension with the potential impact for these new regulations on our</p>

	<p>county. Specifically, the ability of our citizens to not only use their existing lands in manners that they have used historically over a period of time, but also to develop that land into new uses as may be available in the future. (Hawkins)</p> <p>We cannot bear any more in our communities. We have the Fish and Forest. We have 80 percent of my 987 square miles of Pacific County still in timber. We have classifications of streams that are being changed, buffers that are being changed. All of these impact water quality. All of these impact any kind of ownership, any kind of ability to maintain a business. It seems like it doesn't stop. (Pacific County BOD)</p> <p>We continue to increase on a daily basis the requirements for anybody that is trying to make a living in the State to the point where, I guess, the goal is if we all move out then we can go back to prehistoric standards and maybe then they would be happy. (Pacific County BOD)</p> <p>How can business survive in Washington? (American Gardens) (Bentham) (CCLA)</p> <p>The cost of 16°C (for example) temperature standard and 9.5 mg/l dissolved oxygen standard will cause further financial impacts to smaller communities. There is very little grant funding available today, so basically the costs are paid for by ratepayers. Monthly sewer bills for smaller communities will likely exceed \$50 per month. (Kimball)</p> <p>The two pollutants I am most concerned with are water temperature (fresh water) and dissolved oxygen (indirectly phosphorus). I am concerned that the new water quality regulations as currently proposed are overly restrictive and will cause an additional financial burden on the State's already cash-strapped small communities. (Kimball)</p> <p>As the rural population declines that will shift the burden on suburban and the already beleaguered urban sectors and resistance will start coming from these sectors. Without the human equation the programs are doomed to failure. (WRCRL)</p> <p>The people must decide what is to be preserved and this has not been the case. This is a legislative decision, the regulatory departments must implement the people will. Ecology needs to go before the legislature and lobby for this. Anything else will lead to failure and anger among the citizens. The legislature must give you a clearly defined path to follow and if the citizens don't like the path, we can fire those turkeys! (WRCRL)</p>
<p>(70p) General Comments</p> <p>Protect public rights</p>	<p>Water is the quintessential public resource. It is critical for a whole host of reasons including the public health. These standards need to recognize that, and I hope in the end are significantly improved in order to protect the public interests. (Osburn)</p> <p>RESPONSE: We do not believe these changes move us away from that basic recognition.</p>
<p>(70q) General Comments</p> <p>Reorganization of rule for clarity and easier use.</p>	<p>The following comments were received from entities regarding reorganization of the rule for clarity and to make it easier to use. The following comments are noted:</p> <p>Many sections of the rules have been re-organized and rewritten so that they are easier to use and understand. A standout is the short-term modification section. (Seattle Port)</p> <p>The regulations are better organized and easier to use. (Bulin) (Shroeder) (Totten) (Reese) (Snare) (Hoffman) (Prestrud) (Cooper) (Olson) (Baker-D) (Mann) (Goelzer) (Reinhard) (Dunn) (Goedhard) (Kearin) (GAC) (King County)</p> <p>The proposed text should have undergone more scrutiny before asking for public comment. The current version does not articulate clearly to the average reader, the intent or guidance envisioned by Department of Ecology. (CBP)</p> <p>I guess in an attempt to make it very clear it makes it a little difficult for some of the average people to understand it and in fact, the average people as well the scientists. (DeRousi)</p>

(70r) General
Comments

Public review process

The following comments were received from entities regarding concerns about the public review process. Ecology worked hard to ensure that a good public process was held. We held a 60-day review of the proposed rule, and held 8 workshops and hearings throughout the state. Approximately 4000 entities were notified of the proposal through mailings and email. Unfortunately, some members of the public felt that the process was lacking. There were also some minor mistakes in notification times, which the department corrected as soon as we could, and did not affect the overall integrity of the public review. While we are confident that we met public notice and review requirements for the draft rule, we will continue to strive in the future for even better public processes. The following comments are noted:

The public meeting in Port Angeles was not well publicized, and many people were unaware of it. (Lavo Huffman)

I think Ecology has made this process inaccessible to the public. (Espenhorst)

What's the hurry? We need to take more time, answer questions, and start over. (Harrison- Bryan)

The amounts of information released by Ecology for these proposed regulations to the water quality standards is overwhelming. And there is not enough time to adequately review materials needed and time to provide adequate comments. (Lummi Tribe)

We were unpleasantly surprised at the low level of public awareness and the short time opportunity available to study and respond to this very complex proposal. (PABA)

Ecology sends a memo out on March 04 and expects to receive an answer from the recipients in 3 days? Please be realistic and use your brains. Increase the time limit to 3 months so you may receive some input. (Hadley)(Sid) (Scarvie)

Ecology should be commended for its open public process. This is a great example of collaboration. This should be continued. (McDaniels) (Williams) (Anonymous) (Woodson) (NWOI) (Marx) (Christensen) (Lonngren) (Throup) (Stauffer) (Wasson) (Phillipson) (Burke) (Gortha) (Westegmeter) (Bales) (Callis) (Newman-G) (Krans) (Gorman) (Smith) (Parent) (Calder) (Chen) (Davis) (Wilder) (Beach) (Williamson) (Miller) (Clarke) (Jackson) (Gueck) (McDougall) (Carlson) (Goodwin) (Browne) (Fox) (Mallon) (Walagon) (Rodgers) (Landry) (Schwartz) (Schroeder) (White) (Gunder) (Hoffman) (Junkin) (Elder) (Middleton) (Roderick) (Shedd) (Thomson) (Padilla) (Papageorge) (Hulse) (Remmers) (Raschko) (Prestrud) (Marcella) (Jackson) (Cooper) (Wilson) (Porter) (Wilbur) (Rose-D) (Blinks) (Masterman) (Bailey) (NOTAC) (Verlander) (Knepper) (Longview Fibre) (McDonald) (Brunstad) (Ogden) (McCay) (Olson) (Britt) (Pierson) (Anderson-O) (Rayonier) (Zettle) (Childs) (Abson) (Dixon) (Glaser) (Nelson) (Goelzer) (Vandevent) (Warfle) (U.S. Timberlands) (Weyerhaeuser) (Ritchie) (York) (Gross) (Markland) (Hansen) (Reinhard) (Powell) (Williamson) (Price) (Malsch) (McDonell) (Hawkins) (Ritchie) (Garratt) (Folsom) (Emmerton) (Glase) (Dahl) (Jamison) (Imhof) (Isom) (O'Neill) (Player) (Parks) (Kearin) (Lefebvre) (Oberg) (Crisp) (Bagley-L)

I am wondering why there are no hearings scheduled in Thurston, Lewis, or Cowlitz counties? (Lewis County BOCC)

The hearings held by Ecology have not been adequately publicized to solicit public comment or public participation. Ecology's low-key efforts have resulted in minimal public comment. (Smith-P)

Although the materials available for review have been very informative, and content of the workshops was very good, the public outreach pertaining to the proposed water quality standards has been biased towards larger metropolitan areas with established water quality data and stormwater infrastructure. Rural jurisdictions are forced to "Guess" as to the perceived impacts related to the proposed changes in the water quality standards. Furthermore, urban areas will be able to quantify the impacts of the rule changes based on

a simple evaluation of historical water quality data compared to the proposed standards. Again, rural areas are left guessing as to the impact of these standards without the advantage of referencing historical water quality data. In addition, it is assumed that rural areas without data to support an "Existing Natural Condition" will need to justify the current water quality results through extensive research and study along with associated costs necessary for compliance. (Island County)

A lot of people did not know about this meeting tonight. I would hope that you would publicize this in the newspaper additional times than just once. (Steffensen)

I don't know how you got a list of individuals to mail to or a list of persons to send e-mails to, but one notice in the paper doesn't do it. And if there are dramatic changes or changes at all coming down, this workshop and this public hearing doesn't do justice to them. (Emerson)

I had to make five phone calls and three e-mails to even find out about the meeting; and, after all of that, I couldn't be told where the meeting was. So whatever apparatus you have for getting information out to us, it's not working very well. (Pros)

I really want to protest the lack of public information on this issue. (Reisland)

I would like to congratulate Ecology on a well organized and efficient public hearing, and I think it's an important thing to do. (VanderPloog)

Longview Fiber Company is appreciative of the liberty of the open public process the Department of Ecology has used to establish the proposed new rules. (Boyd)

So what happens on this document? It's been going for a long time. And I've got copies of the stakeholders involved. But it didn't go to the public until the end of December. We did not receive it in Pacific County. On January 8th, 2002, I wrote for information on this WAC. I wanted memos, e-mails, et cetera, et cetera. I will say they were fairly responsive. I did finally get it. It looked to be about 20 CDs that I could go through. I appreciate getting them. (Pacific County BOD)

This has been a deliberate and open public process and expansive record demonstrating use of the best available science and data, as well as numerous public comment periods and workshop opportunities. (Opp)

You have had years to put this together. We have had four months to review it. I think that's inappropriate. (Pacific County BOD)

I congratulate you on your website, making it easy to review issues. (Oberg)

Recently the Department of Ecology has proposed changes to the water quality standards. Many citizens and local governments have only recently become aware of these proposed changes. There should have been a more concerted effort to contact local governments and planning units engaged in water quality monitoring and assessment as there is a major linkage between water quality standards and the watershed planning process. We would like to request additional time to review and respond to the proposed changes to the standards. (Mason County)

RESPONSE: We unfortunately were not able to accommodate your request for additional time. We will note the importance of working with local government and planning units and commit to improving the process of public communication. As mentioned above, we did a broad distribution of notices and materials to several thousand government agencies, regulated industry, and the public, and conducted 8 hearings and workshops statewide.

I got information second-hand from a friend who heard on the radio today that there was a public hearing on new water standards tonight at 8 o'clock. I came just before 8, only to find out that I had missed the workshop to explain the new water standards. (Emerson)

RESPONSE: That was unfortunate, and a follow-up workshop was held in Bellingham

to try and accommodate those that had been given the wrong information. The meeting had a good attendance and we appreciate all those persons that took this second night out of their personal schedules to meet with us.

We went to your website and looked up the public rule making hearings on this particular WAC. It said all hearings begin at 6:00 p.m. (Pacific County BOD)

RESPONSE: We are sorry for the confusion that the mistake caused. The staff involved caught it the same day but not until some people like yourself had already read it.

If you're going to change things so frequently, you have to do things right. If there are dramatic changes or changes at all coming down, this workshop and this public hearing doesn't do justice to them. (Emerson)

RESPONSE: The last change was in 1997 and only involved topics that were relatively non-controversial. The changes being made in this rulemaking have been under development with statewide public involvement and stakeholder committees for almost ten years. We are sorry if you felt you did not have adequate time to consider the changes.

<p>(70s) General Comments</p> <p>Development of standards</p>	<p><i>The following comments were received from entities regarding concerns about development of the standards. This draft rule culminated after several years of working with stakeholder groups, government agencies, and tribes on the various issues, such as temperature, bacteria, and antidegradation. Ecology also held a series of stakeholder meetings prior to the final draft rule development, working through the Water Quality Partnership, which represents the broad array of water users in Washington. The following comments are noted:</i></p> <p>The proposed new rules and standards were developed by a “Technical Working Group” that lacked adequate representation from the agricultural landowner arena. Ecology apparently did not make an effort to inform the state’s agricultural organizations. (RSR)</p> <p>Some of the terminology that this used in this document in the new changes are ambiguous and open to interpretation. As an example, what does aesthetic value mean? Who determines what is artistically beautiful? Since these rules are being made and enforced by Ecology, I would assume or presume that the perception would be determined by a staff. That doesn't take into consideration individual's different perceptions as far as what looks nice and what doesn't look nice. (Forde)</p> <p>Standards should be based upon what is practical and possible. Research should be undertaken to acquire a small watershed and do all of the things that scientist can do to make it the best. Then take the water quality measurements for temperature, dissolved oxygen and so forth and see what you get. That would set baseline standards for future performance. Those might be then standards that can possibly be met. (Bordsen)</p> <p>Commends Ecology for making stakeholders part of the process. (King County)</p> <p>We advocate the far more productive approach of bringing the scientific information that generated these revisions to the local watershed planning bodies and allowing them to develop site specific standards that will produce the water quality we all seek. (WCAPC)</p> <p>This review and revision of Washington’s water quality standards is far overdue. (WPIRG)</p> <p>Suggest you convene a stakeholder committee to work on regulations that address real issues and do not put unwarranted burdens on Washington citizens. (YRBCC)</p> <p>The process needs to clarify what the revisions are attempting to accomplish and the local implications. (CBP)</p> <p>Were most of Washington State residents fairly represented during rule formulations? No. Ninety-two people were invited. Fifty-nine of them were government bureaucrats. Large cities like Everett, Seattle, Federal Way, and Tacoma were represented, while only one representative from a small city was present. That would be Chehalis, incidentally. Grays Harbor and Pierce County sent one man each. That was it for smaller counties. Associations, lawyers, consultant, big business, and environmentalists were all there. The place was devoid of small business owners, small timber owners, private property owners, individual farmers. And no senior citizens who own private property were present. (WRCRL)</p> <p>Ecology has not worked with the Fisheries co-managers regarding fish, especially in distribution. Ecology needs to work with all the Fisheries co-managers to obtain the necessary information. If Ecology wants to change fish distribution they cannot do it alone. The co-managers make those determinations. (Lummi Tribe)</p> <p>I believe Ecology is pushing a certain agenda with these regulations. A government agency trying to push an agenda, I think, is egregious. I believe it's illegal. It certainly is immoral since government and its agencies are supposed to represent everybody; not just like-minded interest groups. (WRCRL)</p> <p>It is near impossible to measure things that are really important to people. For example, how do you measure the trade-off between using water to grow potatoes versus the same</p>
---	--

	<p>water to grow salmon? How important to fishermen are wild salmon versus salmon started live in hatcheries? How important is preserving the icon status of the wild salmon versus preserving private property rights? (WRCRL)</p> <p>The revisions fail to provide adequate information relating to implementation and compliance with Ecology's expectations thus making it difficult for local government to assess the impacts of the revisions on our constituents. We strenuously urge the department to take these comments into consideration, delay the adoption process and expand your comment and outreach efforts. (Island County)</p> <p>We need to get out of the collaborative approach and back to the on-the-ground approach. A group of collaborative people getting together, making warm and fuzzy decisions I do not think are appropriately. The loss of vegetative cover, changes in late season flow, changes in repairing function have all made determining natural conditions very difficult. A better system is to use strict standards based on conditions needed to support native fisheries and native aquatic organisms and protect human health. (Peterson-M)</p> <p>What you're doing now is looking at a range of scientific studies and trying to figure out where is it going to be sort of least inconvenient for industry and not likely to extinguish aquatic species, mostly salmon, because that is where a lot of the work has been done. That is not the approach you should be taking. Ecology's charter, the Clean Water Act say making clean water is a national and a state priority. That emphasis should be reflected in your standards and I urge you to do that. (Espenhorst)</p> <p>I think there is a problem in this State -- We take a bunch of white papers. We subtract from that what we are interested, and we put it together into guidelines and things that we now have to comply with. And we don't have the correct amount of on-the-ground testing. (Pacific County BOD)</p> <p>If you could take an example and say, "Okay. This is where we were before on this lake or this piece of water and here's where it's going to be now," we would be able to understand what you're talking about. I would like to see it be more down to earth. (Pros)</p>
<p>(70t) General Comments</p> <p>Implementation of Standards</p>	<p><i>The following comments were received from entities regarding concerns about the implementation of the standards. Ecology notes that many aspects of the rule are designed to make implementation of the rule clearer, more understandable, and flexible where it can be allowed. We note that we will continue to rely on guidance documents for the factors that change readily or require site-specific considerations. Upon completion of the rule, more guidance will be written to implement the criteria where necessary, the antidegradation section, and other parts of the rule where guidance will enhance or clarify implementation. The following comments are noted:</i></p> <p>If the revisions are substantially changed, then Ecology and/or EPS should fund an outreach program to assist with compliance. Failure to implement this program is asking the public to ignore the revisions. (CBP)</p> <p>The proposed rule only sets the standard and does not specify how a water body should meet the standard. It is our understanding that compliance will be achieved through "Adaptive Management". What will local government's role be in this "Adaptive Management" process and what are the consequences for non-compliance with draft rule? (Island County)</p> <p>We have a document now that I would suggest is an excellent scoping document. But rather than use that for the basis of a rule, let's use that for the basis of a discussion of the sorts of programs, the sorts of regulations, the sorts of enforcement that we ought to have in place to each truly obtainable goals, and what I think is everyone's desire, to obtain a higher standard of water quality. (Houston)</p> <p>For 37 years I've watched the Lake Whatcom watershed deteriorate, mainly because of over-regulation, not lack of regulation. It's become hard to respect DOE. Often they give</p>

the impression that they're listening, but they're not hearing. (Gilda)

I hope you're not depending on the Bush administration to make sure that your standards are upheld. (Way)

I realize the term "flexibility" has been used, and I would submit flexibility in the law is remarkably close to ambiguity in the law. If a regulation is so difficult to pinpoint in terms of compliance, I submit we're going to spend a lot of time burning resources, creating credibility issues, creating concerns in the very people that need to come forward to assist the state in gaining this compliance, that we're going to lose our ability to actually generate the sorts of improvements we would all like to see. Take the Irrigation Improvement Program. There's money in the bank that has not been spent because people will not come forward to avail themselves of those resources, put irrigation improvements in place to conserve water. (Houston)

Have the old standards been met? I suggest not. Ken Johnson of the Weyerhaeuser Company argued that Ecology should have focused on implementation, but, instead, they focused attention on writing the new rule. And since compliance was never attained with the old rule, what facts do you have to support a major rewrite is in order? (WRCRL)

Were the present water quality standards judged to be a success and what was this decision based on? If not what changes are in place to make sure the new standards will be success? The taxpayers must demand accountability here. Seeing program after program being implemented at considerable expense our economy and its taxpayers, is not acceptable unless there is a reasonable and prudent chance of success. (WRCRL)

DOE didn't follow the adaptive management systems, where the agency learns from their successes and failures, continually improving, gradually modifying the old rule, and then determining it's insufficient. (WRCRL)

I would like to see standards brief, clear, distinct, and then the details of how to enforce or measure the standards would come through a guidance document. (McKenzie)

More study is necessary to determine if technologies exist for small cities to use to meet the proposed criteria and on the cost and time required to acquire them. (Ellensburg)

Only by using natural occurring conditions by reach, can one effectively implement both good science and common sense water quality standards. Unfortunately this rule doesn't come even close to this requirement. (Jenkins)

Because the discussions are compartmentalized, it is so difficult for people to truly believe that they're safe in stepping forward, that we're not getting these improvements in the field. We worry about water temperature rather than trying to put the very infrastructures in the field that could conserve water and enhance in-stream flows. (Houston)

How will enforcement actions impact rural communities and farms. (Baldree)?

RESPONSE: *There is no change in enforcement that accompanies this rulemaking.*

I just want to make sure that your new standards in fact really do ensure that the water quality is being protected and that when a citizen calls the Department of Ecology, a qualified staff will come out and take it seriously, especially in the urban areas, and look at the situation that's being reported. (Way)

RESPONSE: *Our staff do take reports seriously, we have a system for tracking and responding to complaints, and we respond within the limits of our staff resources. If you have not received a reasonable response then you should contact the department with that specific concern.*

Implementation is critical to tribes because we're getting down to resource management. And if these are not implementable, then they're useless to both the state and the tribes as managers. (Sauk-Suiattle Tribe)

RESPONSE: *We agree and have focused on making changes that are implementable.*

	<p>We think that it's very important for the rule that does come out for implementation to describe a workable process with the cooperative identification of fish use area distribution and for update of those known distribution areas periodically. The distribution area delineation should be inclusive of tribal staff and state staff as well as US Fish and Wildlife staff and other US level agencies. (Nooksack Tribe)</p> <p>RESPONSE: <i>We will need to develop methods for identifying uses outside this rulemaking in guidance, and any changes will include all the fishery managers and Tribes.</i></p>
<p>(70u) General Comments</p> <p>Specific water bodies or geographic areas</p>	<p>I am concerned about Ebey Slough in Everett. There is green water in Steamboat Slough and brown water in Ebey. (Blair)</p> <p>RESPONSE: <i>When you see changes that make you concerned call the regional office and issue a water quality complaint. It is not unusual for there to be color differences due to algal blooms in portions of the water and suspended sediments dominating the other portion.</i></p> <p>There have been two questionable water release/discharge incidents from a 56-acre property which the Snoqualmie Tribe has plans to develop. (Warfle)</p> <p>RESPONSE: <i>Your concern is noted.</i></p> <p>201A lists all waters in WRIA 36 as salmon spawning and rearing. Where do salmon spawn or rear in WRIA 36 other than the Columbia River. This seems to demonstrate a lack of scientific analysis of the proposed water quality standards. (SCBID)</p> <p>RESPONSE: <i>This is an existing use designation that cannot be changed without going through a Use Attainability Analysis. Any changes will need to occur in a separate rulemaking. The changes we are proposing would make any appropriate corrections easier than under our current regulation.</i></p> <p>Paradise Creek does not meet Ecology's standards at its origin and has a rough flow until it enters our county and our watershed, which is WRIA 34. This is just one small creek in one of the 11 counties that inherits some or all of the water from other political enemies -- entities. What provisions have you put in your standards for dealing with these inherited waters? (Whitman County)</p> <p>RESPONSE: <i>We have not done a use assessment for the downstream waters. Until such time we expect that the currently designated uses (fishing, swimming, boating, water supplies, spawning and rearing habitat, etc.) will be protected as described in the standards. We have had numerous discussions on this issue with Idaho and other interested parties in the area.</i></p> <p>Palouse Falls prevents movement of anadromous fish up river. Protection should be based on non-anadromous trout or warm water species. (Baldree)</p> <p>RESPONSE: <i>Perhaps, but this is an existing use designation that cannot be changes without going through a Use Attainability Analysis. Any changes will need to occur in a separate rulemaking.</i></p>
<p>(70v) General Comments</p> <p>Transboundary issues</p>	<p>The following comments were received from entities regarding transboundary issues. While we try to have uniform standards with other states and tribes, it is not always possible given the different geographic, political, and managerial systems of each. We note that other states have an obligation to meet our standards at the border. We work with other states (Idaho and Oregon) where water quality concerns coming from that state is an issue. The following comments are noted:</p> <p>We have a significant problem with the movement of heavy metal wastes from Idaho into Washington, and we are very concerned that the amended standards incorporate standards for transboundary pollution. For a river like the Spokane that is so important to the history and culture of our community, and yet has been treated as an industrial sewer, it is critically important that these standards be recognized and adopted in terms of the transboundary pollution problems. (Osburn)</p>

	<p>Washington should make every effort that it can to come to some type of uniform standards with Idaho. (Hollingsworth)</p> <p>As the water quality authority for the waters entering Washington from Idaho, it is necessary to insure that permitted discharges in Idaho do not result in violations in Washington's water quality standards. Under this context the Idaho DEQ has serious concerns over some of the criteria proposed in the revisions. The criteria that concern us the most are the new dissolved oxygen and temperature criteria. (Idaho DEQ)</p> <p>There is a need for Washington to work with the Idaho to protect our water quality because of runoff, particularly from the Coeur d'Alene basin. (Cosby)</p> <p>In Eastern WA we have extra problems with pollution coming in from other states. We need to require that surface water crossing into WA from other places comply with our water quality standards. (Belzer) (Sierra Club)</p>
<p>(70w) General Comments</p> <p>Relation to 303(d) List and TMDLs</p>	<p><i>The following comments were received from entities regarding the relationship between the rule and the 303(d) List and related TMDLs. While the standards are the basis for 303(d) list, the listing process is a separate one and not directly tied to the rule revisions. Ecology has developed some initial guidance on how we will transition from the old rule to the new rule in relation to TMDLs and future 303(d) lists. Ecology also notes that the 303(d) listing policy is not a part of this rulemaking and is developed with a separate public involvement process. The following comments are noted:</i></p> <p>My first concern in looking at these proposed standards is that they are likely out of sync in process with the national TMDL review process that Congress ordered. Before Washington goes forward with new standards, Ecology should wait for the study to be completed so that we don't end up having to change direction or gears following their analysis. I don't think that study is too far off from completion. (Harrison- Bryan)</p> <p>Technically there have been extreme difficulties and challenges with the TMDL models that Ecology is relying upon. We determined that there were serious flaws in the development of the model and assumptions placed into them. As such, worked with the legislature to get a direct allocation so the community itself would take over, complete the TMDLs. Is this really the time to increase the water quality standards or is it the time to actually analyze the models that we have? (Harrison- Bryan)</p> <p>We have nearly 700 TMDLs identified that need to be done throughout the State. Very few have been completed. And given that my belief would be with these new standards we would have more stream reaches, more TMDLs that are required, and yet we are in a budget crisis, if we add hundreds more, and the complexity of those increases, how on earth can we actually believe that we can accomplish what we're setting forth here and creating more? (Harrison- Bryan)</p> <p>Given the experience of the economy in Pacific County in relation to the Lower Willapa River, actually increasing the list of areas that are on the TMDL list and require a water cleanup plan puts a chilling effect upon business. We have had the major employer in the County state after the 303d list came out -- this was Weyerhaeuser -- no more money in Raymond until the TMDL list is completed and we have some clear direction and certainty. (Harrison- Bryan)</p> <p>Ponderay Newsprint Company determined that WDOE had not made an effort to evaluate the natural condition of the river during the 1998 303(d) listing process. The NPDES permit writer for PNC also did not make an effort to evaluate the natural condition of the river, instead deferring to the 303(d) listing decision. As a result, a very onerous temperature limit was imposed on Ponderay Newsprint without any understanding or consideration of the natural condition. Based on PNC's recent experiences, we feel it important to emphasize that the implementation of the natural component of the temperature standard is a significant issue that WDOE needs to address in both the water quality standards regulation and in the 303(d) process. (PNC)</p>

	<p>We need to provide some guidance on how we will deal with the 303d list relative to the new standards versus the old standards. Are some of the 303d lists going to be dropped because they now no longer meet the new standard? (McKenzie)</p> <p>Recommend keeping the old single maximum criteria and keeping waters on the 303(d) list until monitoring demonstrates the water body is in compliance. (Yakama Nation)</p> <p>An issue that is near and dear to the heart of Squaxin are not traditional water quality criteria, like dissolved oxygen and temperature, but things like fine sediment, stream flows, large woody debris. If you reflect that to the Deschutes 303D listing, all those things are there -- those physical parameter. And the way this new policy is structured, there's absolutely no way to address those issues. (Squaxin Tribe)</p> <p>The thing that really disconcerts me -- I literally had to go and have legislation passed before it really caught the eye of people, and we were able to work through the process on TMDL and get money for the community to take it over so we knew we had credible science. (Pacific County BOD)</p> <p>Are these changes common-sense changes or are they changes to be changes? If one part of Lake Whatcom as an example is bad, would you condemn the whole lake? The north end, Silver Beach, has its problems, but you put the whole lake on your list. (Gilda)</p> <p>For TMDL implementation it appears that unless no field work has begun the new criteria are not likely to be applied. This needs to be more protective. New criteria can be easily implemented for many pollutants up to and beyond the determination of load allocations. Even where the TMDL is near final, if it won't result in compliance with the standards use of the new criteria should be required. (WDFW)</p> <p>Ecology has made many mistakes in the 303(d) listings for the Sammamish River and Bear Creek, and these mistakes indicate Ecology is listing waters where data do not support listings. In many cases fecal coliform is from geese and ducks, and is not from human sources. (Keesling)</p> <p>At the 6/19/02 meeting on 303(d) listings in Bellevue I read a statement by Kathy Fletcher, Executive Director of People for Puget Sound, that " Puget Sound, including the rivers and streams that feed it, is still dangerously polluted". One of the DOE-has said the statement was "for effect, to get contributions", and that the waters are NOT dangerous. (Keesling) RESPONSE: It is difficult to respond to hearsay. We apologize on behalf of the department if such a statement was made from a department representative.</p>
<p>(70x) General Comments</p> <p>Other</p>	<p>Affirmative duties, such "entities must comply with...", should be removed. (Seattle City) RESPONSE: That is the purpose of the standards under state law.</p> <p>National Parks should clean up debris near campsites. It's so bad that is a wonder they haven't caught fire. (Schroeder) RESPONSE: Comment noted.</p> <p>Please add clarifying language for determining an impact when groundwater intersects a surface water body. For example, if contaminated groundwater is exceeding drinking water or other health risks standards, and flows into a body of surface water. (Oregon OOE) RESPONSE: Any entity that pollutes ground water is responsible for meeting both the ground water standards and the surface water standards. While this is the case now, adding a discussion on the interface between ground and surface waters in the standards at this time in the rulemaking would be out of the scope of the rulemaking.</p> <p>Please provide the appropriate reference to defining a statistical exceedance. Individual D.O., bacteria, and ammonia measurements can vary significantly. (Oregon OOE) RESPONSE: We do not set a statistical exceedance for temperature and dissolved oxygen other than the reoccurrence interval of once every ten years on average. We do</p>

not find significant variability that is caused by analytical variability. Natural variability was considered in establishing the criteria. The temperature criteria are based on a 7-day average of daily maximum temperatures. The bacteria samples are geometrically averaged. The ammonia criteria are expressed as 1-hour and 4-day concentrations not to be exceeded more than once every three years on average. All these factors are listed in the standards.

As an American citizen, I would hope your final decisions will be indeed based on what is best for the future generations of our children and the quality of life here in Washington state, not the pressure you receive from various industrial interests. (Mazzetti)

RESPONSE: Ecology operates within the confines of its duties and directives. Our decision will be based upon carrying out the laws and regulations of the state of Washington and the United States.

Too much is left to the subjective judgment of Ecology. (Parker)

RESPONSE: Comment noted.

More effort in the direction of education and maybe, just maybe, less power play. (Gilda)

RESPONSE: Education is central to many of our efforts to control pollution.

Can EPA make changes to the proposal and will they go through public review? (Sunnyside)?

RESPONSE: They cannot change the proposal or the adopted version, but they can disapprove the state's changes and promulgate their preferred modifications in a federal rule that the state would be obligated to follow.

Standards should be considered along with all the other water programs. Not doing so is ineffective thinking. Rather than discuss arbitrary water temperature standards lets discuss how we can more effectively capitalize on water conservation projects and discuss relinquishment and ways the law can be changed to encourage conservation. Let's discuss setbacks. A 20 foot setback with restored habitat is much better than a proposed 200 foot setback which lands you in litigation and attacks the credibility of the program. People won't implement what regulations that are not credible. (Kittitas CC)

RESPONSE: We have not suggested any arbitrary changes, nor have we proposed any setbacks.

I have not seen either global warming or climatic change mentioned in any of the documentation that I have seen. I consider this a significant deficiency because it is important to plan for the future. Washington water will suffer as we have higher temperatures, more precipitation, usually in terms of heavy downpours, more storms and more droughts. The effects: The snow pack will be smaller, which means that in our hotter and dryer summers we will have less water. At the same time there will be a need for more water because of the reduced summer precipitation and hotter temperatures. The precautionary principle, which is internationally recognized, would say that we need to be conservative in what we are planning. (Powers)

RESPONSE: The standards target what the uses require. If as predicted water temperatures continue to rise, than the required control actions may need to become more restrictive. But building the precautionary principal into state standards is not really feasible unless sound forecasts on the changes could be coupled with the costs and benefits of setting precautionary criteria to show that the benefits exceed the costs. The state law for rulemakings requires many tests of need and benefit for a rule to be considered acceptable.

What is the purpose of this? We keep running into problems with over regulating. And then they go out the first chance they get and they'll go around with a dozer or a backhoe or a trencher and they'll drain their wetlands or take their stream and change it. We've lost more wetlands in Whatcom and Skagit County now due to over-regulations or fear of regulations. (Gilda)

RESPONSE: Comment noted.

As a youngster in the '30s, certain winds and tides would cause the untreated sewage from

the West Point outfall to be carried directly onto the Golden Gardens beach. Finally, many years ago a storage treatment plant was erected and that water quality problem was solved. The hard work of concerned citizens over a long period of time and government resulted in identification and improvement of water quality. (McDonell)

RESPONSE: Positive improvements are indeed possible and do occur all the time. Thank you for noting it and recognizing the importance of public involvement.

If we knew what your change in philosophy actually meant to us, it would have a lot more meaning. (Pros)

RESPONSE: It is not clear what change in philosophy occurred or is being alluded to. But any major changes to the agency's position or mission statement are typically well publicized.

Appendix A

Commenters (except form letter e-mails)

Commenters (except form letter e-mails)

Acronym	Person Resonding
Abson	Derek Abson
Walagon	Walagon
Aagaard	League of Women Voters of Washington (Aagaard)
ACD	Adams Conservation District (Rudd)
American Rivers	American Rivers (Kelleher)
American Whitewater	American Whitewater (Gangemi, O'Keefe, Bowers)
American Gardens	AmericanGardens1
Amundson	
Anderson-J	Anderson, Jamie
Anderson-O	Orville Anderson
Anderson-R	Richard Anderson
Anonymous	
Armstrong	Barry Amrstrong
Arnold	Arnold, Pat
Artley	Artley, Richard
Audubon	Audubon Washington (Stevens)
Avista	Avista (Howard)
Backstrom	D. Backstrom
Bagley-C	Bagley, Charles
Bagley-L	Lee A. Bagley
Bailey-V	Virginia Bailey
Bailey-W	Bailey, Walt
Baker-D	Daniel Baker
Baker-P	Baker, Pamela
Bakke	
Baldree	Baldree, Randy
Bales-K	Kenneth Bales
Bales-L	Laythell Bales, Chairman
Bales-P	Patricia Bales
Barrett	Milton Addison Barrett, Jr.
Bass	Robert Bass
Bassett	Alva Bassett
Beach	Glenn Beach
Bead	
Beaver	Beaver, Niel
Beckman	Beckman, Joel
Bell	Harry Bell
Bellingham City	Bellingham, City of (McCourt) (Fogelsong)
Belzer	Belzer, Patrice
Benson	
Bentham	Bentham, John
Acronym	Person Resonding

Bergeron	Bergeron, Lynn
Berry	Berry, Jeff
Bibby	
Bieker	Marla Bieker
Bjorklund	Peter Bjorklund
Blair	Jack Blair
Blaylock	Aloma Blaylock
Blinks	Stanley Blinks
Boeing	Boeing Company (Thomson)
Bonnie	Bonnie(no last name)
Bordsen	Bordsen, Mark
Bottles	Bottles, Don
Bowers	Bowers, Rich
Boyd	Wade Boyd
BREPI	Blue Ribbon Environmental Products, Inc (Snyder)
Brimm	Brad & Suzon Brimm
Britt	Robert Britt
Browne	James Browne
Brunstad	Harold Brunstad
Bryan	
Buchanan	Buchanan, Lois
Buchert	Buchert, Rob
Buhn	Raymond Buhn
Buker	Beretta Buker
Bulin	Edwin Bulin
Burke	Eula R. Burke
Burke	Violet Burke
Buttemer	Buttemer, Helen
Bye	Richard Bye
Cain	Alan Cain
Calder	Trena Calder
Callies	Roberta Callies
Callig	Jack Callig
Camenzind	Camenzind, Doug & Karen
Campbell Group	Campbell Group (McCauley)
Carlson	Joy Carlson
Carlson	Patricia Carlson
Carney	Wayne Carney
CBP	Chehalis Basin Partnership (Spahr)
CCLA	Columbia County Livestock Association (James)
CCTU	Clark County Trout

	Unlimited (Mackey)
CELP	Center for Environmental Law & Policy (Allston)
Chehalis Tribe	Chehalis, Confederated Tribes of (Hare)
Chen	F. Feriz Chen
Childers	
Childs	Chase J. Childs
Chrisholm	Ken Chisholm
Christensen	Earl Christensen
Christofferson	Dick & Rose Christofferson
Churchill	Robert Churchill
Clarke	Laura Clarke
Clark-H	Heather Clark
Clark-J	Jerry Clark
Clark-S	Clark, Steve
Clifford	Clifford, Bill
Clinkenbeard	T. Clinkenbeard
CNF	Colville National Forest (Wasson)
Cohen	Cohen, Fritz
Cole	Cole, Roger
Conyers	Conyers, Sarah
Cooper	Donald M. Cooper
Corr	Corr, John
Cosby	Glen Cosby, PhD
Cota	Elsie Cota
Cox	
Crampton	Susan Crampton
Crawford	Crawford, Donald
CRC	Chehalis River Council (Schanz)
Crisp	Kenneth Crisp
CRITFC	Columbia River Inter-Tribal Fish Commission (Sampson)
CRK	Columbia Riverkeeper (Foster)
Cronin	Cronin, Jim
Crow	Tyler Crow
Dahl	Arthur Dahl
Dan & Georgia	Dan & Georgia (elkcreekmeadows)
Darrington	Darrington, Town of (Dempsey)
Davies	Thomas L. Davies
Davis-Dana	Dana Davis
Davis-Don	Davis, Don
Davis-G	George Davis
Davis-R	Ralph Davis
DeRousi	DeRousi, Mark
DeVoe	Stephen DeVoe
Dixon	Joseph Dixon

Douke	Wilmer Dougke
Duncan	Sandra Duncan
Dundas	Dundas, Ken
Dunlap	William Dunlap
Dunn	Robert Dunn
Dunn	Amy Dunn
Durrent	Paul Durrent
Eberhart	Bill Eberhart
ECBID	East Columbia Basin Irrigation District (Erickson)
Edwards	Edwards, Ruth
Eichentoph	Edwin Eichentopf
Elder	Emerson Elder
Ellensburg	Ellensburg, City of (Bollinger)
Eller	Eller, Gerald
Emerson	Emerson, Richard
Emmerton	
Engle	Engle, Erica
EPA	US Environmental Protection Agency (Smith)
Espenhorst	Espenhorst, Erik
Esvelt	Esvelt Environmental Engineering (Esvelt)
Evans	Jim Evans
Everett	Everett Public Works (Wright)
Farm Bureau	Washington Farm Bureau (Lund)
Favius	
Fecca	Michelle Fecca
Fernandez	J. R. Fernadez
Fink	Fink, Dan
Fish	Fish, Brett
Fisher-B	B Fisher
Fisher-D	Donald Fisher
FMHP	Fairchild Mobile Home Park (Leenhouts)
FOGH	Friends of Grays Harbor
Folsom	Don Folsom
Fontana	Fontana, Louie
Forde	Forde, Sue
FOTCG	Friends of the Columbia Gorge (Fullilove)
FOTWSR	Friends of the White Salmon River (Clausen)
Fowler	Gary Fowler
Fox	Sherry Fox
FP&S	Foster Pepper & Shefelman (DiJulio)
Frisk	Frisk, Donna

Frost-E	Ed Frost
Frost-J	Jim Frost
FSMI	Floyd Snider McCarthy, Inc (Floyd)
Gabriel	Gabriel, Kay
GAC	Goldendale Aluminum Company (Wooster)
Gaither	Gaither, Michele
Garratt	
Gately	Gately, Glenn
Gates	
GCPHA	Grand Coulee Project Hydro Authority (Gibbens)
Gee	
George	George, Gregory
Gerhart	William D. Gerhart
Gilbertson	Kenneth Gilbertson
Gilda	Gilda, Richard
Gilmore	Kevin Gilmore
Glase	
Glaser	B. J. Glaser
Glasgow	Robert Glasgow
Goedhard	Alex Goedhard
Goelzer	Goelzer, Patricia
Goldendale	Goldendale, City of (Sigfrinius, Bellamy)
Good	Good, Randy
Goodwin	Tami Goodwin
Gorman	John Gorman
Gortha	
GPC	Georgia-Pacific Corporation (Whitaker)
Grathwohl	Grathworhl
Green	Norma Green
Green Crow	
Greenblatt	
Grette	Olaf Grette
Grimm	Grimm, Brad & Suzan
Gross	H. Gross
Grover	Grover, Marguerite
Grunbaum	R. D. Grunbaum
Gueck	Larry Gueck
Gunder	Larry Gunder
Hackett	Marie Hackett
Hadley	Hadley, Herb
Hadley & Sid	Hadley & Sid (no last name)
Hanen	Hanen, Archie
Hansen	Steve Hansen
Hartley	Ed Hartley
Harman	
Harper	Doug & Audrey Harper
Harrison	
Harrison-Ben	Ben Harrison

Harrison-Bryan	Harrison, Bryan
Harshman	Harshman, Daniel
Hatfield	
Hauper	Ronald Hauper
Hawkins	
Healea	Obe M. Healea, Jr.
Hedglin	Hedgliin, Lloyd
Heller-Ehrman	Heller-Ehrman Attorneys (Loehr)
Henderson	Raymond Henderson
Henery	Henery
Hensley	Hensley, Karen
Herdsman	Herdsman, Harry
Herman	Herman, Chris
Herman	Bill Herman
Hill-J	Hill, Judith
Hill-L	L. Hill
Hinton	Ella Hinton
Hoehne	Bob & Jan Hoehne
Hoffman	P. R. Hoffman
Hohendorf	
Hollingsworth	Hollingsworth, Jim
Holm	Kris Holm
Holman	Holman, Kermit
Holmes	Elisha Holmes
Holt	Holt, Susan
Houston	Houston, Perry
Howard	Howard, Don & Janet
Hubbard	Harold Hubbard
Huffman-D	Huffman, Doug
Huffman-L	Huffman, Lavonne & Howard
Hughes	Hughes, Pat
Hulse	Carl Hulse
Hurley	P Hurley
Huston	Richard Huston
Hyvonen	Hyvonen, Karen
Ianniello	Ianniello, Susan
Idaho DEQ	Idaho Department of Environmental Quality (McIntire)
Imhof	Louis V. Imhof
Island County	Island County Board of Commissioners (McDowell)
Isom	
Jackson-G	G. S. Jackson
Jackson-M	Michael Jackson
Jamestown Tribe	Jamestown S'Klallam Tribe
Jamison	
JCCD-G	Jefferson County Conservation District (Gately)

JCCD-L	Jefferson County Conservation District (Latham)
Jenkins	Jenkins, Gene
Jensen	Roy Jensen
Jester	Winnie Jester
Johnson-C	Johnson-C
Johnson-LaTour	Johnson-LaTour, Noreen
Johnson-R	Johnson-R
Johnson-T	Johnson-T
Jones-G	Greg Jones
Jones-J	Jeff Jones
Jones-K	Jones, K.E.
Junkin	K. Mabel Junkin
Kaald	Kaald, Pat
Kalahan	Clyde R. Kalahan
Kalispel Tribe	Kalispel Tribe of Indians (Gross)
Kauffman	
Kittitas CC	Kittitas County, Board of County Com (Huston)
Kittitas Co CDS	Kittitas County Community Dev Services (Bala)
KCWP	Kittitas County Water Purveyors (Ready)
Kearin	
Keller	Eric Keller
Kelly	Kelly, Dan
Kenney	David Kenney
Kessling	Keesling, Maxine
Keverline	J. Keverline
Kimball	Kimball Engineering (Gardes)
King County	King County Wastewater Treatment Division (Theiler)
King	Ronald L. King
Kitchens	Kitchens, Barbara
Kiver	Kiver, Eugene
Knepper	J. Knepper
Knowles	Knowles, Derrick
Koch	Koch, Daniel
Kogut	Megan Kogut
Kraft	Elena Krafts
Krans	
Kraus-J	Kraus, John & Martha
Kraus-W	Walter Kraus
KRCG	Kettle Range Conservation Group (Knowles)
Kriegel	Kriegel, Paul
Lakewood	City of Lakewood

Landry	Pierre J. Landry
Lands Council	Lands Council (Peterson)
Lapic	
LaRiviere	Mark LaRiviere
Lawton	Lawton, James
Layman	Layman, Paul & Genevieve
Leach	Betty Leach
Lefebvre	
LEK Tribe	Lower Elwha Klallam Tribe (Sullivan)
Lester	Edward K, Lester
Lewis County BOCC	Lewis County Board of Commissioners
Lewis County PUD	Lewis County PUD
Lummi Tribe	Lummi Indian Business Council (Jefferson)
Light	Light, Jane
Lindholdt	Lindholdt, Karen
Lindholdt	Lindholdt, Paul
LLIC	Lake Louise Improvement Club
Lodzinski	Lodzinski, Lori
Lomer	Allan Lomer
Longer	
Longview	Longview, City of (Gregory)
Longview Fibre	Longview Fibre Company (Rowe)
Lonngren	George Lonngren
Lovejoy	Doug Lovejoy
Lumsteden	Clinton Lumsteden
Lundberg	Craig Lundberg
Luster	Luster, Tom
LWVOW	League of Women Voters of Washington (Aagaard)
Lynn	Frank Lynn
Lysak	Lysak, William & JoAnn
Madsen	Jeff Madsen
Mallon-C	Christine Mallon
Mallon-M	Michael Mallon
Malone	
Malsch	
Mann	
Marble	Marble, Steve
Marcella	Wayne Marcella
Markland	
Marquardt	Marquardt, Roger & Eleanor
Marx	Robert Marx
Mason	Mason, Barry
Mason County	Mason County Dept. of Comm. Dev. (Manassee)
Masterman	Patricia Masterman

Masterson-A	Annie Masterson
Masterson-T	Tad Masterson
Maxwell	Maxwell, Pat
Mazetti	Mazetti, Michael Buffalo
MBarr5	MBarr5
McAninch	
McCart	McCart, Wesley
McCarty	Victoria L. McCarty
McCaulay	McCaulay, Jim
McCay	Bill & Veda McCay
McCluskey	McCluskey, Shannon
McCollum	W. W. McCollum
McDaniels	David McDaniels
MCDOCD	Mason County Dept. of Comm. Dev. (Manassee)
McDonald	Ted McDonald
McDonnell	McDonnell, Norm
McDonnough	Jess McDonough
McDougall	R. D. McDougall
McEwen	John M. McEwen
McIntosh-Rhod	McIntosh, Rhoderick
Mcintosh-Rob	McIntosh, Rob
McKee-R	Rex McKee
McKee-S	McKee, Samuel
Mckenzie	McKenzie, Stu
McLaughlin	McLaughlin, Beverly Mid-Columbia PUDs (Hays, Club, Sears)
MC-PUDs	
Meenach	Meenach, Robyn
Mengel	
Menzies	Menzies, Geoff
Merlit	
Merrill & Ring	Merrill & Ring (Schaaf)
Merritt	Marvin Merritt
Meyer	Clifford Meyer
Middleton	Carl Middleton
Mielke	Mielke, Alison
Miller-B	Mller, Bonnie
Miller-E	Miller, Eric
Miller-Kath	Kathryn Miller
Miller-Ken	Ken Miller
Misnet	Paula Misnet
Mitchem	Larry Mitchum
Mohr	Raymond Mohr
Monahan	G L Monahan
Moore	Moore, Corrine
Moore	V G Moore
Morgan	Morgan, Chuck & Colleen
Mountaineers	Mountaineers (Eades)
Muller	Anne Muller
Murphy	Jim Murphy, President
Natapoc Resources	

NBC	Neighborhood Business Council (Wasserman)
NCAS	North Cascades Audubon Society (Pratum)
NCFA&SI	National Council for Air and Stream Improvement Wiegand)
NEA	Northwest Environmental Advocates (Bell)
Nelson-A	Adrian Nelson
Nelson-T	Ted Nelson
Nesbit	Hertha Nesbit
Ness	Ness, Chris
New Resources	New Resources (from database)
Newman-G	Gene Newman
Newman-L	Newman, Linda
Nicpon	Nicpon, Billie
NMFS	US Department of Commerce/NOAA/NMFS (Landino)
Nooksack Tribe	Nooksack Indian Tribe Natural Resources Department (Kelly)
Normandy Park-B	Normandy Park, City of (Bennett)
Normandy Park-M	Normandy Park, City of (MacReynold)
NOTAC	North Olympic Timber Action Committee
NSBK	North Sound Baykeeper (Steffensen)
NSIA	North Seattle Industrial Association (Burke)
NWF	National Wildlife Federation (Hasselman)
NWOI	Northwest Oyster Inc
NWPPA	Northwest Pulp & Paper (Matthews)
O'Leary	
O'Neill	
Oberg	
Odendahl	James P. Odendahl
Ogden	Jon Ogden
Olson-C	charlotte Olson
Olson-J	John Olson
Olympia	Olympia, City of (Iwai)
Opdycke	Linda Opdycke
Opp	Opp, Dwight
Oregon OOE	Oregon Office of Energy (Stoops)
Osborn	Osborn, Rachel
Osburn	Osburn, John
Ostlund	Ostlund, Joanne
PABA	Port Angeles Business Association (Forsell)

Pacific County BOD	Pacific County Board of Dir (Hamilton)
PacifiCorp	PacifiCorp (Campbell)
Padilla	Dick & Mary Padila
Paladeni-H	Harold Paladini
Paladeni-M	Margaret Paladeni
Papageorge	James Papageorge
Parent	Dennis Parent, Forest Oper Mgr
Parker	Parker, Stan
Parks	
PAS	Pilchuck Audubon Society (Kogut)
Patterson-J	Patterson, John
-----	-----
-----	-----
Peach	Bill Peach
Pech	Pech, Solomon
Peterson	Peterson,Bill
Peterson-M	Peterson, Mike
Phillipson	Andy Phillipson
Pierson	Darrell & Betty Pierson
Plampin	James Plampin
Player	
Ploeg	Jim Vander Ploeg
Plum Creek	Plum Creek Timber Company (Light)
PNC	Ponderay Newsprint Company (Blau)
Pobst	Dennis Pobst
Port Angeles	Port Angeles, City of (Quinn)
Porter	Mac A. Porter
Portwood	Portwood, Charles
Postier	Postier, Mickie
Potter	Potter, Rod
Potts	John Potts
Poulson	Barbara Poulson
Powell	Lois Powell
Powers	Powers, Julian
Prestrud	Charles H. Prestrud
Price	
Pros	Pros, Dave
PSE	Puget Sound Energy (Schild)
PTCC	Paddle Trails Canoe Club (Bottles)
Puyallup Tribe	Puyallup Tribe (Sullivan)
QCBID	Quincy-Columbia Basin Irrigation District (Franklin)
Rainwater	Rainwater, Dayle
Raisler	Raisler, Richard

Raschko	Tim Raschko
Ray	Ray, Garth
Rayonier	
Reed	Peggy M. Reed
Reese	Fredrich Reese
Reinhard	
Reisland	Reisland, Bob
Remmers	Bette Remmers
Renzetti	Renzetti, Bree
Revesz	Revesz, Peter & Jane
Richards	Justine Richards
Rick	Arehen Rick
Riley	Riley, Louis & Janice
Rimbos	Rimbos, Peter & Naomi
Ritchie	
Robbins	Robbins, Robert
Roderick	Warren Roderick
Rodgers	James Rodgers, Sr.
Rogers	Virginia Rogers
Rose-D	Daniel C. Rose
Rose-R	Rose, Robert & Jane
Rowe	Rowe, Hal
Royer	Royer, Ollie
RSR	Rafter-Seven Ranch (Playfair)
Sauk-Suiattle Tribe	Sauk Suiattle Indian Tribe (McMurtrie)
Scarvie	Scarvie, Stan
SCBID	South Columbia Basin Irrigation District (McDaniel)
SCCA	Skagit County Cattleman's Association (Mitchell)
Schaaf	Schaaf, Norm
Schauer	Schauer, Angela
Schink	William Schink
Schneider	Richard P. Schneider
Schroeder	D. L. Schroeder
Schwartz	Gerald Schwartz
Schwendiman	Donald Schwendiman
SCKC	Spokane Canoe and Kayak Club (Castleberry)
Scott-B	Blair Scott
Scott-N	N Roger Scott
Seattle City	Seattle, City of (Marquis, Glaser)
Seattle Port	Seattle, Port of (Ridgley)
Securegems	Securegems
Shedd	Robert Shedd
Sheppard-J	James Sheppard
Sheppard-N	Nancy Sheppard
Shroeder	

Sierra Club	Sierra Club, Cascade Chapter (Osborn, Axel)
Simmons	E. Keith Simmons, Manager
Simpson Timber	Simpson Timber
Singsaas	Conrad Singsaas
Skagit County	Skagit County (Karsh)
SLS	Save Lake Sammamish (Johnson)
Smit	Smit, Robert
Smith-H	Helen Langer Smith
Smith-J	Jim & Betty Smith
Smith-M	Smith Meredith
Smith-P	Smith, Phillip
Snare	Paul F. Snare
Snow	James Snow
Spokane City	Spokane, City of Wastewater Management (Arnold)
Spokane County	Spokane County Public Works Department
Squaxin Tribe	Squaxin Island Tribe (Konovsky)
SRA	Stoel Rives Attorneys (O'Connell)
SSC	Skagit System Cooperative (Weber)
Stauffer	Betsy Stauffer
Steele	Karen Dorn Steele
Steffensen	Steffensen, Wendy
Steiger	
Stemilt Management	Stemilt Management (Smith)
Stevens	Stevens, Naki
Storey	Storey, Mark
Stroble	R. E. Stroble
Struck	Struck, Donald
Stueckle	Stueckle, David
Stuhlmiller	Bob Stuhlmiller
Sundt	Robert Sundt
Sunnyside	Sunnyside, City of (Potter)
Susan	Richard Susan
Suter	Suter, Fred
SVID	Sunnyside Valley Irrigation District (Schramm)
Swanson	Scott Swanson
Swartz	Swartz, William
Swindale	Swindale, David
TCEHD	Thurston County Env Health Div (Davis)
Tecca	
Tenneson	Tenneson, Glen
Tetra Tech	Tetra Tech/ECM Inc

	(Wakeman)
Theoe	Don Theoe
Thiemens	Jim D. Thiemens, General Manager
Thomson	Stan Thomson
Throughs	Clayton Throughs
Throup	
Tolles	
Totten	Lucille Totten
Tracy	Alley Tracy
Tuck	Tuck, Bob
Tupper	Tupper, Laura
Turner	Turner, Robert
U.S. Timberlands	U.S. Timberlands (Jones)
Ucheler	M. Van Ucheler
Umatilla Tribe	Umatilla, Confederated Tribes of (Farrow)
USACE	US Army Corps of Engineers
USBOR	US Bureau of Reclamation(Glover) (Postma)
USFS	US Department of Agriculture, Forest Service (Carroll)
USFWS	US Department of Interior/USFWS (Berg)
Uusitalo	Arlen & Taimi Uusitalo
Vaagen	Duane Vaagen
Vaaye	
Valenzuela	Andrea Valenzuela
Vandergriff	Vandergriff, Mel
VanderPloeg	VanderPloeg, Jim
Vanderveen	Vanderveen, Jason
Vandever	Alan Vandever
Verlander	Michelle & Rob Verlander
Virden	L. Virden
Waddell	Hal & Bettie Waddell
Walker	Cheryl Walker
Wallace-D	Wallace, Don
Wallace-J	Julie Wallace
Wallow	
Walogan	
WAR	Washington Association of Realtors (Francks)
Wardell	Wardell, Jean
Warfle	Oliver Warfle
Warnberg	Warnberg, Larry
Wasgatt	David Wasgatt
Wasmiovicd	Jack Wasmiovicd
Wasson	Wesley S. Wasson
Watts	John B. Watts
Way	Way, Janet
WBWRCC	Willapa Bay Water Res

	Coord Cncl (Johnson)
WCA	Washington Cattlemen's Association (Hudson)
WCAPC	Whatcom Cnty AgPres Comm (Bierlink)
WDFW	WA Dept. of Fish & Wildlife (Hall)
WDFW	Washington Department of Fish & Wildlife (Carleton)
WDNR	Washington Dept of Nat Resources (McElroy)
WDOA	WA Dept. of Agriculture (Buckner)
WDOA	Washington Department of Agriculture (Arrington)
WDOT	WA Dept. of Trans-Env Affairs Office (Stone)
Webster-E	Edith Webster
Webster-S	S R Webster
Wend	Wend, Dick
Westegmeter	Ed Westergreen
Weston	Duane Weston
Weyerhaeuser	Weyerhaeuser (Johnson)
WFPA	Washington Forest Protection Association (Goos)
WGCA	WA Growers Clearing House Assoc (Mayer)
WGHOGA	Willipa/Grays Harbor Oyster Growers Association (Engvall)
Whactlon	Deberal Whactlon
White	Philip White
Whitman County	Whitman County Engineer (Storey)
Whitman County	Whitman County Planning Commission (Wardwell)
Whitman County	Whitman County Planning

	Director (Bordsen)
Wilbur	Don Wilbur
Wilder	Clint Wilder
Williams-L	Williams, Larry
Williamson	Donna Williamson
Williams-R	Ronald Williams
Wilshusen	Wilshusen, Fran
Wilson	Jonathan H. Wilson
Winterowd	Brett Winterowd
Witt	Scott J. Witt
Witter	R N Witter
Woodhurst	George Woodhurst
Woodmansee	Woodmansee, Gary
Woods	Woods, Carole
Woodson	Emily Woodson
Woodworth	Harmon Woodworth
WPIRG	Washington Public Interest Research Group (Sager-Rosenthal)
WRCRL	Washington Rural Civil Rights League (Frank)
Wright	Wright, Emily Skinner
WSHA	Washington State Horticultural Association (Hazen)
WSPC	Washington State Potato Commission (Boss)
Yakama Nation	Yakama Indian Nation (Palmer)
Yeoman	Yeoman, Margaret
York	Nelson D. York
YRBCC	Yakima River Basin Commodity Coalition (George)
Yungel	Bruce Yungel
Zettle	Joanne Zettle
Zuvela	Loneard Zuvela

Appendix B

Form Commenters

Form Commenters

Frank Aaron
C Abendroth
Andrew Abian
Mergan Aboute
Twa-le Abrahamson
Jake Achey
Beverly Ackerman
Audrey Adams
Leanne Adcox
Roger Adkins
Jessica Adlin
Eric Adman
Paul Ahart
Jan Aille
Fred Aistrope
Carolyn Akinbami
Peter & Mary Al Belov
Judith Alexander
Caroline Allen
Rebecca Allen
Margaret Allman
Priscilla Althaus
Donna Ambrozy
Dawn Andersch
Diane Anderson
J. P. Anderson
Laura Anderson
Mike Anderson
Rachael Anderson
Laura Andersson
Michael Anselme
Charlotte Apgood
Luisa Armoranto
Joseph Armstrong
Ardith Arrington
Ben Asher
Harris Atkins
Jamie Austad
Bill Avalone
Shawn Averkamp
Katherine Babiak
Jacquelyn Baetz
Joseph Bail
David Bailey
Sean Bailey
Doug Balcom
Jason Ball
Nuri Banister
Paul Bannick
Mary Barber
Gloria Barello
Gordon R. Barnett
Daniel Barshis
Dorian Baum
Mark Baum
Chris Beamis
Ryan Beane
Clyde Beardsley

Nancy Beavers
Susan Bechtholt
Vicki Becker
Dwight Beckmeyer
Edward Beechert
Gail Beeson
Amy Behnke
Sarah Belchjer
Julia Benedetti
Barbara Bengston
Erica Bennett
Edwin Bentley
Heather Bentley
Coralie Benton
Richard Bergner
William Berry
Alberto Bianco
Violette Bienn
Jessica Bigby
Stonewall Bird
Valerie Birdsong
Melissa Bishop
Lori Bjorklund
Ellen Blackstone
Tina Blade
Nancy Bland
Robert Bliss
Mack Boelling
Nancy Bolerjack
Burnett Bonow
Christina Borra
Max Boschert-Zielsdorf
Zenda Boss-Hall
Delano Bradford
Suzan Bradley
Jackie Branagan
Joan Breiding
Carole Brennan
Tom Brennan
Noah & Natasha
Steve Brickley
Joan Broeckling
Rebecca Browne
Lisa Broxson
Carol Bryan
Carlin Buchanan
Mark Buckley
Helen Bueker
Helen Bueker
Shannon Burbridge
Deena Burke
Mary Burke
Ryan Burkett
Kerry Burkhardt
Bob Burkholder
Candace Burlingame
Carol Burns
Shelley Burton

Barbara Busby
Paul Byers
Amy Callahan
Daniel Calnan
David Cameron
Carol Campbell
Kay Carley
Esther Carlson
Beverly Carroll
William Carry
Linda Carson
Geniene Catalano
Susan Chadd
Maribeth Chadwell
Brad Chamberlain
Kai Chan
Jerry Chawes
Sue Chealander
Sue Checkman
Heather Chenevert
Sue Chickman
Darien Chin
Carmen Chism
Donald Christine
Robert Ciao
Jennifer Clark
Neil Clement
Liz Clements
Bruce Clifton
Patsy Coats
Sharlynn Cobaugh
Jordan Cohen
Annapoore Colangelo
Timothy Coleman
Karin Collins
Shanti Colwell
Eric Concannon
Patrick Connole
Jody Conrad
Thomas Conroy
Jennifer Corio
Marvin Cornell
Keith Cotton
Lisa Covell
Scott Cowan
Donald Cramer
Tammi Crider
Nancy Crom
Shonna Crompton
Burt Culver
Richard Curtis
Dimitri Dadiomov
David Dalton
A. Daria
Billie Daugherty
Paul Davallou
Alan DAvanzo
Larry & Mary DeForrest

Lorrie DeJarnett
Tim Deller
Wendi Dennis
Gene Derig
John DeRocco
Atul Deshmane
Stephen DeVoe
Barbara Diaz
Lily Dimauro
Wendy DiPeso
Garth Donald
Becky Dorsey
Kerry Doyle
Alix Drake-williams
Joe Dray
Tara Dudley
Vincent Duffy
Pamela Dugan
Brad Dundas
Tasha Dunn
Connie Durkee
Todd Edison
Jhanna Eggers
Kim Eggers
Shannon Ehrenberg
Donna Ellis
Jerry Ellis
Linda Ellsworth
Alexandra Espindola
Gregory Esteve
Marcia Evans
Alicia Evans-Imbert
Franklin Eventoff
Rhonda Fabert
Stephanos Fairbanks
Maria Falsetto
Dani Feathers
Rachel Ferm
Margot Fetz
Glenn Fidler
Brian Fink
Andrea Finley
Ketith Fisher
Elaina Foley
Merritt Ford
Mark Forman
Chris Fosse
Gordon Foster
Jack Foulke
Shannon Fouts
Kory Fowler
Larry Fox
Joanne Francis
Curtis Freeman
Ruth Fruland
Christian Fulghum
Linda Fullerton
Lonnie Gallagher
Paul Garber
Jon & Judy Gardner

Janie Garris
Hannah Garrison
Michael Garrity
Courtney Gartin
Michael Garvin
Nikki Gentry
Carey Gersten
Vafa Ghazi
L. Gibbons
Stephen Gibson
Susan Gideon
Mark Gilbert
Rhonda Gilliam
Kevin Gilmore
Marie Glennon
Julie Glover
William Gnaedinger
Michael & Melissa
Rebecca Golden
Kenn Goldman
Jan Gonzalez
Bryan Goodrich
Ray Gould
Lise Grace
Charlene Graham
Kay Green
Nicole Green
Steve Green
Martin Greenlee
Linda Gresky
Robert Gresky
Fred Griest
Heather Grimmer
Jon Groebner
Ashley Gronek
Lawrence Groobert
Ravi Grover
Claire Grygotis
Pamela Gurskell
Robin Gustus
Matthew Haeuser
Kyle Haines
Craig Hajduk
Bryan Hall
Michael Hamel
Russ Hamlerly
Steve Hamm
David Hanig
Kelly Hanlon
Thelma Hansen
Richard Harbus
Kimberly Hardy
Mark Harrison
Zach Harrison
Brian Hart
Diana Hartley
Carolyn Hartt
David Haskell
Steve Hasslinhger
Gary Hatcher

Bob Haugen
Debra Havill
Daniel Hawley
Marguerite Hayde
Christopher Hayward
Rob Hazen
Sharon Heckt-Deszo
Theresa Heiler
James Heller
Denver Henderson
Steve & Donna Hengeveld
Daniel Henling
Teresa Henson
Martha Herrero
Rosalie Hewitt
Sanford Higginbotham
Sharon Higgins
Wade Higgins
Judith Hill
Michelle Hippler
Jennifer Hisrich
Janet Hitt
Anne Hoffert
Holy Holian
Tina Horowitz
Richard Hoskins
Frances Howard
Laura Huddlestone
Don Huling
Ann Hursey
Justin Iger
Kathy Jackson
Rosemary Jackson
Rosemary Jackson
Richard Jacobs
Mikayla Jacobson
Stephen Jacolev
Christina Jensen
Lottie Jenvey
Winnie Jester
James Johansen
Veronica Johns
David Johnson
Eileen Johnson
Janice C. Johnson
Judith Johnson
Mark Johnson
Merril Johnson
Tia Johnson
Timothy Johnson
Angeline M. Johnston
Caterina Johnston
Edit Jonas
Geoff Jones
Nicole Jordan
Patti Jordan
Linda Joy
Emily Kalweit
Alexandra Kaufman
Aaron Keeler

JoAnn Keenan
Maureen Kelley
Kristin Kelly
Lori Ketterlin
Hilda Kidwell
Adam Kilborn
Sharon Killay
Jean Kilts
Brita Kimmerly
Kathie King
Sue Kingery
Coleen Kinlin
Richard Kirchoff
Vanessa Kirn
Vanessa Nixon Klein
Theodore Klipsch
Donna S Klopfer
Carmen Klucsor
Justin Knox
David Koch
Emil Kraft
Emila B. Kraft, MCSO
Corbett Kroehler
Mark Krukar
Sara Kube
Joel Kuperberg
Barmak Kusha
Sylvester La Blanc
Linda-Lou La Voy
Christy Lafayette
Marneen Laffoon
Michele LaFontaine
Earl Lane
Greg Lange
Kimber Langton
Tim LaPlante
Mary Larson-Edwards
Jacqueline Lasahn
W. Brent Latta
David Lauder
K. Lauzon
Helen Lawless
Judith Lawrence
Marcella Layden
Nanette Leaman
Patricia LeBaron
Lynn Ledgerwood
Richard Lehman
Ben Lenth
Hugh Lentz
Michael Letendre
Nete Leth
Eric Leuschner
Timothy Lewis
Vicki Lewis
Rich Libbey
Eric Lichty
Jerry Liebermann
Shirley Linberg
Ken & Jan Livingston
Travis Logan

Lorena Loubisky-Lonergan
Kimberly Lowe
Debra Lozon
Sharon Lu
Shelley Lucus
Jay Lyman
Daniel MacKinnon
Susinn Macmerchys
Janet MacMillan
Lelani MacMillan
Diann MacRae
Mela MacVittie
Robert Mahan
Becky Maller
Maggie Malone
Paul Maloney
C. P. Malus
Suzanne Maniatis
Connie Marsh
Gerald Marshall
Lisa Marshall
Wes & Lisa Marshall
Melodie Martin
Sonja Martin
Matt Martin-Vegue
Rob Masonis
Pamela Mataisz
David Matsuno
Katy Matthews
Glenn Mattison
Josephine Maurer
Serena Maurer
Sue Maxon
Cathy McBeth
Mo McBroom
J. Patrick McCarthy
Leslie McClure
Melissa McConnell
Marine McCook
Bruce McCoy
Kathy McCoy
Jess McDonough
Lisa McGlashan
Scott McGlothlin
Jill McGrath
Ryan McKnight
Meg McLynn
Emelie McNett
Lynn a. McQueary
James McRoberts
Raven McShane
Tom Melancon
Suellen Mele
James Merlin
Lou Messmer
John Meyer
Sondra Meythmann-Evans
Janine Michelsns
Amanda Mikalson
Christine Mikalson
Claire Mikalson

Kathy Milacek
Constance Miller
Kathryn Miller
Kelly Miller
Randi Miller
Tina Miller
Edward Mills
Susan Moe
Michael Monaco
Amy Mook
Phyl Morello
Christine Moreno
Jennifer Morgan
John & Sheila Morris
Larry Morris
Paul Morris
John Mottl
Alexandra Muirray
Robert Mull
Jen Mullen
Ben Munat
Jennifer Munde
Tom Munro
Dawn Murin
M. S. Myers
Mark Nagel
Rose Marie Namay
Karen Nance
Paul Needham
Sara Needleman
Robin Nelms
Amanda Nelson
Elaine Nelson
Karen Nelson
Ronald Nelson
David Nerad
Landon Neustadt
John Newton
Evelyn Norsen
Kelsey O'Brien
Susan O'Neil
Mary O'Shea
Mike O'Shea
Gary Oaksford
Ruth Olden
Laura oliva
Victoria Olsen
Sandra Hoffelt Olson
Victoria Olson
Michael Ortlieb
Esther Osborne
Barbara Owen
Janice Packard
Paul Paine
Kelley Parker
Russ Pascoe
A. J. Pasquarelli
Leah Paterson
Sally Patterson
Joe Payne
John Payne

John Payne
Tamara Pearlman
Nicole Peison
mary Pendergast
Saundra Pendleton
Dennis Pennell
Toni Penton
John Percy
Kimberly Peterson
Dean Petrich
Nathan Petz
Steve Phillips
Suzanne Pierson
Andrea Pike
Audrey Pitigliano
Paul Platt
Roland Press
Steven Presto
James & Sharon Price
Linda Pyr
Donna Quilter
Tom Quinlivan
Heather Randall
Timothy Randle
Leann Rayfuse
Shannon Reagan
Rev. Rosa Redtail
Ellen Reese
Robert Reichner
Fred M. Reinman
Gloria Reinman
Julie Remmerde
Carrie Rex
Richard E. Reynolds
Heather Richman
Pamela Richter
Richard Rieman
Laura Rink
Jeff Rische
Dale Riston
Daniel Rivas
Maureen Roach
Barbara Robbins
Kurtis Roberts
David Robison
Anita Rocha
Julie Rodgers
Michele Rogalin
Reyene Rollman
Mercy Rome
Dan Roper
Vincent Rosalia
Mari Rosen
Peter Roth
Dwight Rousu
David Rowan
Vanessa Ruddy
John Rundl
Christina Ruth
Nadine Safadi

Jeannie Sargent
Mark Scantlebury
Keith Scarmato
Angela Schaab
Wietse Schaafsma
Kathryn Schetzer
Peter Schipper
Daniel Schollaert
Linda Schwartz
Betty Scott
Geoffrey Sedgwick
Judy Selig
Nancy Sendler
Tauri Senn
Michael Shapiro
Wenonah Sharpe
Peter Shaw
Patricia Shcreiner
Jill Sheldon
LaVinia Sherman
Susan Shouse
Barre Simmons
Jonathan Simon
Megan Simpson
Angi Skarda
Robert Slater
Peggy Slemp
Deborah Smith
Diana Smith
Richard Smtih
Nancy Snow
Steve Snow
Amy Souers
Lisa Southerland
Chris Southwick
Kathy Sparks
Sarah Sparks
Kevin Spath
Riley Spath
Nancy Spears
Alexander Spielhagen
Richard Spry
Chelsea St. Claire
Laim Stacey
Mike Standish
Sylvia Starr
Gerald Steel
Michael Stein
Lorelei Sterling
Joan Stewart
Marilyn Stoknes
Louise Stonington
Beate Storlie
Dawn Stover
Tracey Stover
Eycke Strickland
Judith Strozer
Leila Summers
Robin Supplee
Mika Suzuki

Jan Swann
Jodi Swanson
Dorothy Swarts
Giles Sydnor
Nicole Tadano
Delia Tapp
Murphy Tapp
Carinna Tarvin
Jennifer Taylor
Mason Taylor
Michael Taylor
Robert Taylor
Sarah Temus
Perry Thacker
Maria Therese
Ben Thompson
Nate Thompson
Pearl Thompson
Solar Richard Thompson
R. Scott Thurman
Rodney Thysell
Jennifer Tice
Liz Tickman
Todd Tollefson
Ellen Tolmie
Suwigoon Tonsiengsom
Leon Towns-von Stauber
Clare Tremper
Tia Triplett
Leon Trumppp
Leeanne Tryon
Brian Tseng
Roy Tuckman
Diana Utsman
Andrea Valenzuela
Barbara Vallarino
Shaun Van Eyk
Betty Van Wicklen
James Vary
Lisa Vaughn
Gerard Veraldi
Ann Vetter-Hansen
Anthony Villagomez
Florence Vincent
Umberto Vizcaino
Robert von Tobel
Stamatina Vourgourakis
Janice Waite
Gerald Wallace
Roy Wallace
Kristen Wallway
David Ward
Gilbert Ward
Wendy Warren
Liz Washburn
Mark Watson
Carol Watts
Leonard Weber
Marie Webster
Thomas Weickert

Connie Weiseth
Julie Weiss
Ross Welton
Russel & Candice
Susan White
Reade Whitwell
J. D. Wick
Adam Wieser
Norma Wigutoff
Norma Wigutoff
Jennifer Williams
Morgan Williams
Paul Williams
Patricia Williford
Greg Wingard
Joel & Lucinda
Tom Wingard-Phillips
Brian Winkel
Ted Winterer
Jan Witter
David Woerner
Barbara Wood
Chris Worswick
Patricia Park Woytko
Denise Wright
Jean Wells Yablonsky
Madeline Yamate
Denise Yee
Linda York
Stasi York
Peter Zadis
Carole Chambers Zah
Judith Zarin
Michelle Zeidman
Deborah Zeitler
Zentura
Jessica Zern
Art Zernis
DVM Ralph F. Ziegler
Anya Zimberoff
Marian Zimmerman

Index

- Aagaard, 27, 86, 94, 113, 154, 175
Abson, 185
ACD, 174
American Gardens, 22, 172, 174, 178, 184
American Rivers, 11, 27, 28, 35, 53, 87, 118, 119, 120, 121, 124, 132, 137, 142, 172, 176
American Whitewater, 11, 62, 86, 88, 108, 116, 124, 132, 142, 175
Amundson, 172
Anderson-O, 18, 40, 185
Anderson-R, 18, 107
Anonymous, 40, 107, 116, 171, 185
Armstrong, 171
Arnold, 90, 130, 153
Artley, 176
Audubon, 11, 121, 154, 173, 177, 178
Avista, 9, 58, 78, 141, 149, 151, 152
Backstrom, 171
Bagley-C, 178
Bagley-L, 185
Bailey, 40, 107, 185
Baker-D, 18, 40, 184
Baker-P, 176
Bakke, 18
Baldree, 141, 152, 155, 157, 190, 191
Baldree, 141, 152, 155-7, 190, 191
Barrett, 18
Bass, 171
Bassett, 171
Beach, 171, 185, 193
Bead, 171
Beaver, 19, 172
Bell, 111, 115, 122, 172
Bellingham City, 10, 12, 16, 65, 73, 78, 97, 107, 115
Belzer, 88, 108, 121, 124, 154, 159, 167, 172, 192
Benson, 171
Bentham, 19, 22, 172, 174, 178, 181, 184
Bergeron, 176
Berry, 30
Bibby, 171
Bieker, 18, 40, 107
Bjorklund, 18, 107, 144
Blair, 18, 191
Blinks, 18, 107, 185
Boeing, 6, 9, 10, 48, 73, 75, 77, 81, 125, 135, 170
Bordsen, 21, 154, 159, 166, 188
Bottles, 62, 63, 124
Bowers, 62, 97
Boyd, 18, 107, 171, 186
BREPI, 180
Brimm, 63, 148, 175
Britt, 18, 107, 185
Browne, 185
Brunstad, 185
Bryan, 18, 40, 107, 186, 193
Buchanan, 18
Buchert, 152, 173
Buker, 171
Bulin, 184
Burke, 171, 186
Buttemer, 63, 148, 175
Bye, 18, 107, 171
Cain, 170
Calder, 186
Callig, 171
Camenzind, 19, 32, 67
Campbell Group, 18, 24, 28, 86, 107, 115, 148, 153, 171
Carlson, 171, 185
Carney, 107
CBP, 64, 80, 99, 105, 114, 148, 156, 159, 165, 184, 188, 189
CCLA, 19, 22, 172, 174, 178, 181, 184
CCTU, 172
CELP, 10, 11, 62, 154, 178
Chehalis Tribe, 35, 88, 153, 178
Chen, 185
Childers, 171
Childs, 18, 185
Chrisholm, 171
Christensen, 185
Christofferson, 171
Churchill, 171
Clark, 171, 185
Clarke, 185
Clark-S, 114
Clifford, 11, 62, 124, 154, 178
Clinkenbeard, 171
CNF, 32, 57, 62, 148, 150
Cole, 62, 175
Cooper, 184, 185
Corr, 172
Cosby, 108, 114, 116, 192
Cota, 18, 107
Cox, 171
Crawford, 176
CRC, 10, 11, 62, 88, 124, 153, 178
Crisp, 18, 186
CRITFC, 5, 10, 15, 31 32, 34, 35, 37, 40, 44, 46, 48, 50, 52, 54, 55, 59, 68, 74, 81, 88, 90, 94, 101, 107, 119, 121, 128, 130, 141, 152, 182
CRK, 5, 11, 48, 57, 58, 91, 92, 106, 111, 112, 124, 125, 126, 127, 129, 130, 132, 133, 134, 137, 138, 139, 140, 151
Cronin, 10, 11, 154, 172, 178
Crow, 18, 34, 115, 116, 153, 170, 171
Dahl, 40, 153, 185
Dan & Georgia, 173
Darrington, 115, 116
Davis, 18, 107, 171, 185
DeRousi, 179, 184
Dixon, 185
Douke, 171
Duncan, 171
Dunlap, 153
Dunn, 18, 40, 171, 184
Eberhart, 171
ECBID, 67, 157, 174
Edwards, 10, 11, 124, 154, 172, 178
Eichentoph, 171
Elder, 170, 185
Elder, 185
Ellensburg, 173, 175, 190

Eller, 63, 148, 175
 Emerson, 186
 Emmerton, 18, 40, 185
 Engle, 10, 11, 115
 EPA, 3, 4, 6, 11, 13, 15, 16, 17, 25, 26, 28, 30, 31,32, 33, 34, 36, 39, 43, 45, 48, 49, 50, 52, 53, 54, 55, 57, 59, 60, 61, 63, 64, 66, 69, 70, 72, 74, 77, 78, 79, 80, 83, 84, 86, 87, 88, 95, 99, 100, 103, 104, 110, 111, 112, 113, 115, 116, 119, 120, 123, 125, 127, 129, 131, 132, 133, 135, 136, 137, 140, 144, 146, 151, 152, 153, 160, 162, 163, 173, 177, 194
 Espenhorst, 11, 124, 179, 182, 186, 189
 Evans, 171
 Everett, 70, 94, 95, 102, 110, 113, 122, 189, 192
 Farm Bureau, 13, 14, 22, 24, 27, 31, 32, 34, 38, 40, 41, 42, 44, 45, 50, 53, 54, 67, 146, 155, 156, 159, 160, 162, 164, 165, 168, 174, 177, 181
 Favius, 171
 Fernandez, 171
 Fink, 171
 Fish, 11, 14, 17, 22, 24, 27, 28, 30, 46, 62, 68, 71, 88, 90, 107, 127, 144, 147, 158, 159, 160, 162, 168, 170, 182, 183, 190
 FMHP, 10
 FOGH, 71, 127, 176, 177, 179
 Folsom, 18, 107, 185
 Forde, 24, 37, 159, 166, 179, 188
 FOTCG, 132
 FOTWSR, 90, 132
 Fowler, 171
 Fox, 171, 185
 FP&S, 90, 131, 132
 Frisk, 11, 124, 154
 FSMI, 66, 149
 Gabriel, 33, 107, 153, 171
 GAC, 12, 78, 137, 153, 184
 Gaither, 11, 124, 154
 Garratt, 18, 153, 185
 Gately, 19, 34, 52, 51, 173
 Gates, 18
 GCPHA, 67
 Gee, 18, 172
 George, 11, 87, 154, 178
 Gerhart, 175
 Gilbertson, 171
 Gilda, 25, 158, 174, 190, 193, 194
 Glase, 185
 Glaser, 107, 185
 Glasgow, 171
 Goedhard, 107, 171, 184
 Goelzer, 18, 107, 184, 185
 Goldendale, 19, 149, 165
 Good, 21, 51, 67, 122, 160, 179
 Goodwin, 185
 Gorman, 185
 Gortha, 185
 GPC, 47, 69, 84, 152, 154
 Grathwohl, 176
 Green, 18, 115, 152, 171
 Greenblatt, 171
 Grette, 107, 152
 Gross, 185
 Grover, 41, 169
 Gueck, 185
 Gunder, 185
 Hackett, 171
 Hadley, 108, 123, 172, 185
 Hamilton, 167
 Hanen, 18
 Hansen, 171, 185
 Harlley, 171
 Harman, 107
 Harper, 18, 107
 Harrison, 18, 50, 113, 121, 171, 173, 185, 193
 Harrison-Ben, 18, 172
 Harrison-Bryan, 51 113, 122, 173, 192
 Hartley, 171
 Hatfield, 171
 Hawkins, 18, 110, 184, 185
 Healea, 18
 Hedglin, 19, 180
 Heller-Ehrman, 70
 Henderson, 171
 Henery, 64
 Hensley, 11, 62, 124, 154, 178
 Herdsman, 11, 111, 116, 154
 Herman, 11, 63, 148, 154, 171, 172, 173, 175, 176, 178
 Hill-J, 124, 173, 180
 Hill-L, 171
 Hoehne, 171
 Hoffman, 107, 171, 184, 185
 Hohendorf, 171
 Hollingsworth, 108, 124, 132, 133, 134, 136, 192
 Holman, 107, 153
 Holmes, 107, 153, 171
 Holt, 63, 148, 175
 Houston, 173, 189, 190
 Hubbard, 171
 Huffman, 5, 185
 Hughes, 11, 108, 124, 154, 173, 178
 Hulse, 18, 185
 Hurley, 18
 Huston, 18
 Hyvonen, 173
 Ianniello, 11, 91, 176, 178
 Idaho DEQ, 13, 192
 Imhof, 185
 Island County, 19, 51, 71, 72, 80, 89, 113, 141, 154, 158, 165, 174, 179, 186, 189, 190
 Isom, 185
 Jackson, 18, 171, 185
 Jamestown Tribe, 16, 35, 71, 72, 154, 182
 Jamison, 185
 Jenkins, 4, 6, 7, 8, , 13, 42, 158, 159, 177, 190
 Jensen, 18
 Johnson-C, 172
 Johnson-LaTour, 63, 148, 175
 Jones, 177
 Junkin, 107, 185
 Kaald, 172
 Kalahan, 107
 Kalispel Tribe, 10, 45, 55, 56, 59, 79, 92, 106, 107, 142, 151, 182
 Kauffman, 18
 KCWP, 13, 21, 28, 62, 67, 68, 151, 155
 Kearin, 184, 185, 186

Keller, 171
 Kelly, 10, 91, 108, 111, 116,
 123, 124, 153
 Kenney, 171
 Keverline, 171
 Kimball, 37, 55, 184
 King County, 72, 73, 80, 82,
 84, 94, 95, 109, 111, 114,
 130, 138, 140, 184, 188
 King, 80, 82, 84, 94, 109,
 111, 114, 137, 140, 171
 Kitchens, 170, 179
 Kittitas CC, 194
 Kittitas Co CDS, 21
 Kiver, 11, 126, 154, 178
 Knepper, 18, 185
 Koch, 172
 Kraft, 171
 Krans, 185
 Kraus, 11, 124, 154, 171
 KRCG, 11, 64, 87, 92, 108,
 111, 116, 123, 136, 142,
 153, 154, 156, 172
 Lakewood, 42, 160
 Landry, 185
 Lands Council, 66, 108, 113,
 144, 157, 173, 176, 178,
 181
 Lopic, 172
 Lawton, 63, 148, 175
 Leach, 171
 Lefebvre, 184
 LEK Tribe, 90, 130
 Lester, 171
 Lewis County BOCC, 185
 Lewis County PUD, 46, 59,
 149
 Light, 172
 Lindholdt, 6, 8, 11, 124, 172,
 178
 LLIC, 127
 Lodzinski, 63, 148, 175
 Lomer, 171
 Longer, 129, 171
 Longview Fibre, 18, 107, 171,
 185
 Longview, 18, 81, 94, 107,
 115, 147, 149, 170, 186
 Lonngren, 170, 185
 Lummi Tribe, 11, 36, 45, 55,
 69, 93, 96, 101, 104, 106,
 147, 183, 185, 188
 Lumsteden, 18
 Lundberg, 171
 Luster, 11, 87, 104, 108, 124
 Lynn, 18
 Makah Tribe, 183
 Malone, 171
 Malsch, 153, 185
 Mann, 18, 184
 Marble, 169
 Marcella, 185
 Markland, 107, 186
 Marquardt, 63, 148, 175
 Marx, 185
 Mason County, 186
 Mason, 11, 115, 186
 Masterman, 185
 Maxwell, 11, 62, 124, 154,
 178
 Mazetti, 62, 111, 117, 124,
 153, 154, 173, 176, 194
 Mazetti, 62, 124, 154
 MBarr5, 19, 22, 51, 158, 159,
 165, 173, 177
 McAninch, 172
 McCart, 19, 158, 159, 165
 McCarty, 171
 McCaulay, 107, 182
 McCay, 185
 McCluskey, 11, 124, 154, 178
 McCollum, 107
 McDaniels, 185
 McDonald, 171, 185
 McDonnell, 107, 171, 185,
 195
 McDougall, 171, 185
 McEwen, 171
 McIntosh, 173, 174
 McKee, 107, 171, 172
 McKenzie, 25, 28, 29, 63, 65,
 158, 190, 193
 McLaughlin, 11, 124, 154,
 178
 MC-PUDs, 6, 8, 23, 24, 39,
 40, 41, 105, 106, 134, 143,
 151, 152, 171
 Meenach, 21, 22, 25, 38, 39,
 50, 51, 89, 159, 165, 177
 Mengel, 171
 Menzies, 109, 137, 139, 154
 Merlit, 171
 Merrill & Ring, 19
 Merritt, 18, 171
 Meyer, 171
 Middleton, 18, 185
 Mielke, 11, 64, 110, 124, 154,
 178
 Miller-B, 11, 124, 154, 175
 Miller-E, 176
 Mitchem, 171
 Mohr, 171
 Monahan, 171
 Moore, 171
 Morgan, 11, 124, 154
 Mountaineers, 62, 88, 110,
 112, 117, 178
 Muller, 171
 Murphy, 171
 Natapoc Resources, 171
 NBC, 66, 149
 NCAS, 13, 66, 110, 115, 148
 NEA, 3, 4, 6, 7, 8, 914, 15,
 17, 26, 31, 33, 36, 41, 43,
 46, 54, 55, 57, 58, 63,
 65, 66, 68, 70, 72, 73, 74,
 75, 76, 77, 78, 80, 81, 82,
 83, 84, 85, 86, 88, 93, 94,
 96, 102, 103, 104, 106,
 108, 110, 111, 112, 115,
 116, 117, 119, 121, 122,
 123, 127, 129, 131, 132,
 133, 135, 136, 138, 139,
 140, 141, 144, 146, 148,
 153
 Nesbit, 170
 Ness, 170
 Newman-G, 185
 Newman-L, 63, 148, 175
 Nicpon, 153, 160
 NMFS, 9, 10, 15, 16, 26, 33,
 34, 44, 45, 52, 54, 55, 56,
 57, 59, 66, 74, 87, 104,
 108, 110, 119, 135, 136,
 153, 155
 Nooksack Tribe, 16, 22, 31,
 32, 38, 146, 165, 166, 178,
 182, 190
 Normandy Park, 30, 78, 98,
 139, 154, 155, 176
 NOTAC, 18, 107, 153, 170,
 185
 NSBK, 11, 13, 18, 30, 54, 87,
 89, 93, 94, 97, 98, 104,
 105, 115, 123, 124, 128,
 132, 139, 154, 154, 175
 NSIA, 66, 149
 NWF, 176

NWOI, 185
 NWPPA, 27, 46, 70, 156, 170
 O'Leary, 172
 O'Neill, 185
 Oberg, 107, 171, 185, 186
 Odendahl, 18
 Ogden, 18, 107, 185
 Olson, 18, 153, 171, 184, 185
 Olson, 18, 153, 171, 184, 185
 Olympia, iv, 6, 18, 50
 Opp, 33, 107, 186
 Oregon OOE, 4, 82, 193, 194
 Osborn, 29, 62, 178
 Osburn, 116, 184, 191
 Ostlund, 63, 148, 175
 PABA, 116, 164, 166, 169, 174, 179, 182, 185
 Pacific County BOD, 22, 23, 159, 177, 184, 186, 187, 189, 193
 PacificCorps, 4, 12, 40, 49, 56, 58, 59, 61, 82, 83, 85, 90, 93, 94, 129, 133, 135, 139, 142, 143, 178
 Padilla, 64, 171, 185
 Papageorge, 185
 Parent, 171, 185
 Parker, 63, 176, 194
 Parks, 107, 185, 194
 PAS, 19, 37, 50, 62, 67, 74, 83, 102, 104, 110, 136, 142, 146, 154
 Patterson-J, 11, 124, 154
 Peach, 171, 182
 Pech, 124, 148, 154, 175
 Peterson, 18
 Peterson-M, 18, 95, 123, 154, 176, 189
 Phillipson, 185
 Pierson, 18, 40, 107, 153, 171, 185
 Plampin, 107
 Player, 185
 Ploeg, 18, 40, 107, 115, 152
 Plum Creek, 18, 25, 28, 45, 107, 120, 145, 153, 160
 PNC, 12, 192
 Pobst, 171
 Port Angeles, 1, 23, 179, 186
 Porter, 107, 185
 Postier, 173, 181
 Potter, 22, 171, 174
 Potts, 171
 Powell, 171, 185
 Powers, 176, 194
 Prestrud, 107, 184, 185, 186
 Price, 185
 Pros, 186, 189, 194
 PSE, 22, 156
 PTCC, 63, 148, 175, 176
 Puyallup Tribe, 27, 28, 35, 154, 163, 164, 166, 173, 182
 QCBID, 22, 67, 153, 173, 175
 Raisler, 16, 88, 124, 129, 131, 148, 176
 Raschko, 18, 107, 153, 185
 Rayonier, 107, 185
 Reed, 18, 40
 Reese, 18, 107, 184
 Reinhard, 18, 184, 185
 Reiland, 23, 158, 186
 Remmers, 18, 107, 185
 Renzetti, 16
 Richards, 171
 Rick, 107
 Riley, 67, 179
 Rimbos, 11, 124, 154
 Ritchie, 170, 186
 Robbins, 18
 Roderick, 147, 186
 Rodgers, 18, 186
 Rogers, 171
 Rose-D, 185
 Rose-R, 19, 179
 Rowe, 62, 123, 154, 172
 Royer, 63, 148, 175
 RSR, 168, 177, 178, 181, 189
 Sauk-Suiattle Tribe, 108, 115, 119, 183, 190
 Scarvie, 108, 123, 172, 185
 SCBID, 84, 136, 158, 191
 SCCA, 9, 19, 21, 22, 23, 159, 164
 Schaaf, 19, 21, 114, 171, 182
 Schauer, 50, 158, 159, 165, 179, 181
 Schneider, 171
 Schroeder, 18, 107, 185, 193
 Schwartz, 18, 40, 50, 107, 153, 185
 Schwendiman, 107
 SCKC, 62
 Scott-B, 171
 Scott-N, 171
 Seattle City, 4, 6, 12, 13, 31, 51, 61, 69, 77, 81, 82, 84, 95, 137, 143, 144, 147, 149, 193, 194
 Seattle Port, 3, 28, 64, 70, 77, 78, 79, 83, 84, 89, 97, 112, 123, 133-140, 153, 156, 184
 Shedd, 18, 107, 185
 Sheppard, 171
 Shink, 172
 Shroeder, 184
 Sierra Club, 10, 11, 62, 97, 116, 123, 124, 137, 142, 178, 192
 Simmons, 21, 80, 182
 Simpson Timber, 18, 107, 148, 171
 Singsaas, 107
 Skagit County, 21, 22, 50, 165, 178, 181, 194
 SLS, 75, 95, 99, 102, 108, 140
 Smit, 181
 Smith-P, 166, 179, 180, 185
 Snare, 18, 184
 Snow, 19, 50, 171
 Spokane City, 12, 28, 39, 51, 53
 Spokane County, 11, 51, 53, 117, 123, 136, 141, 147, 149
 Squaxin Tribe, 27, 50, 65, 70, 71, 88, 96, 124, 147, 153, 165, 175, 178, 182, 183, 193
 SSC, 27, 50, 76, 97, 98, 116, 145, 146, 170, 172
 Stauffer, 171, 185
 Steffensen, 13, 30, 69, 87, 99, 103, 106, 123, 154, 176, 186
 Steiger, 18
 Stemilt Management, 19, 22, 51, 158, 159, 165
 Storey, 21, 95, 151, 159, 181
 Stroble, 171
 Struck, 90, 132, 163
 Stueckle, 19, 174, 178, 179
 Sundt, 18

Sunnyside, 64, 67, 74, 146, 157, 194
 Susan, 1, 18
 Suter, 10, 11, 98, 124, 172, 178
 SVID, 172
 Swanson, 171
 Swartz, 49, 65
 TCEHD, 167
 Tecca, 171
 Tenneson, 172
 Tetra Tech, 150
 Theoe, 171
 Thomson, 185
 Throup, 171, 185
 Tolles, 172
 Totten, 18, 184
 Tracy, 171
 Tuck, 33
 Tulalip Tribe, 11, 53, 154, 164, 183
 Turner, 63, 148, 175
 U.S. Timberlands, 18, 107, 171, 185
 Ucheler, 171
 Umatilla Tribe, 5, 59, 67, 68, 73, 78, 79, 110, 124, 125, 132, 133-6, 143, 144, 155, 182
 USACE, 5, 9, 19, 22, 25, 29, 37, 42-44, 46, 48, 52, 54, 56, 58, 59, 62, 69, 74, 78, 79, 92, 96, 105, 125, 132, 133, 136, 138, 141, 143, 147, 148, 150, 155
 USBOR, 156
 USFWS, 26, 27, 28, 30, 31, 33, 42, 44, 45, 48, 68, 86, 90, 100, 113, 144, 145, 147
 Uusitalo, 171
 Vaaye, 171
 Vandergriff, 63, 148, 175
 VanderPloog, 18, 28, 40, 67, 107, 122, 153, 159, 186
 VanderVeen, 160, 175, 181
 Vandevent, 185
 Verlander, 18, 171, 185
 Virden, 171
 Waddell, 171
 Walagon, 170, 186
 Walker, 171
 Wallow, 171
 Walogan, 171, 185
 WAR, 179
 Warfle, 171, 185, 191
 Warnberg, 4, 7, 69, 73-75, 125, 127
 Wasmiovicd, 171
 Wasson, 171, 185
 Way, 124, 178, 180, 189, 190
 WBWRCC, 22, 38, 51, 179
 WCA, 27, 38, 41, 135, 158, 159, 174
 WCAPC, 19, 28, 153, 188
 WDFW, 15, 30, 34, 36, 37, 90, 127, 144, 146, 150, 153, 193
 WDNR, 182
 WDOA, 7, 28, 66, 69, 70, 76-78, 84, 118, 156
 WDOT, 19, 23, 25, 31, 43, 44, 61, 69, 73, 84, 85, 92, 97, 99, 100, 101, 105, 114, 125, 129, 138
 Westegmeter, 184
 Weston, 171
 Weyerhaeuser, 3, 6, 8, 9, 18, 28, 36, 42, 46, 54, 64, 65, 70, 72, 78, 81, 83, 92, 95, 97, 99, 100-103, 105, 106, 109, 111, 116, 127, 134, 148, 153, 162, 163, 185, 190, 193
 WFPA, 18, 28, 40, 107, 116, 144, 153
 WGCA, 9, 16, 21, 27, 28, 165, 168, 180
 WGHOGA, 72
 White, 185
 Whitman County, 156, 158, 191
 Wilbur, 107, 185
 Wilder, 185
 Williams, 18, 23, 107, 171, 185
 Williams-L, 23, 171
 Williamson, 18, 107, 153, 185
 Wilshusen, 4
 Wilson, 185
 Witt, 171
 Witter, 171
 Woodhurst, 18, 171
 Woodmansee, 11, 124, 154
 Woods, 172
 Woodson, 185
 WPIRG, 25, 26, 31, 35, 40, 50, 53, 88, 91, 92, 96, 103, 106, 111, 116, 118, 122, 125, 160, 188
 WRCRL, 17, 24, 26, 27, 32, 159, 181, 184, 189, 190
 WSHA, 18, 26, 27, 89, 135, 159, 164, 174
 WSPC, 9, 21, 22, 24, 35, 36, 41, 42, 67, 68, 144, 145, 154, 158, 174
 Yakama Nation, 14, 17, 19, 28, 39, 50, 73, 79, 98, 150, 175, 178, 193
 Yeoman, 181
 York, 185
 YRBCC, 26, 51, 64, 68, 159, 172, 177, 188
 Zettle, 107, 171, 185
 Zuvela, 171