WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

As required by
the Washington State Administrative Procedures Act
Chapter 34.05 RCW

CONCISE EXPLANATORY STATEMENT
AND
RESPONSIVENESS SUMMARY
FOR THE ADOPTION OF WATER QUALITY STANDARDS
Chapter 173-201A WAC

July 1, 2003

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CHAPTER 173-201a WAC

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Washington State Department of Ecology
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Introduction **6**

Background **6**

General Goals and Objectives **7**

Determination that the rule is needed to achieve the goals and objectives **8**

Least Burdensome Analysis **11**
Mitigation of Impacts on Regulated Community **39**

Rule does not require those to whom it applies to take an action that violates requirements of another federal or state law **40**

Rule does not impose more stringent performance requirements on private entities than on public entities **40**

Determine if the rule differs from any federal regulation or statue applicable to the same activity or subject matter and, if so, determine that the difference is justified **41**

Detailed overview of the rule changes **43**

Implementation Plan **60**

These documents are part of the Concise Explanatory Statement but are bound as separate documents

- Cost Benefit Analysis
- Responsiveness Summary

Introduction

The Washington State Department of Ecology is revising the state's surface water quality standards regulation, Chapter 173-201A WAC. This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing pollution control programs. The standards are controversial and it is crucial that they be set carefully to protect the instream uses (such as fish and wildlife habitat and recreation) without causing unnecessary compliance costs. This goal requires a careful balancing between stringency, complexity, and protectiveness. Making this balancing act more challenging is that it must occur within the context of complying with state and federal laws and regulations that set directives for state water quality standards and the control programs that are used to implement those state standards.

This Concise Explanatory Statement is meant to be read in conjunction with the Final Environmental Impact Statement (FEIS) and the discussion documents for this rule.

Background/overview

As identified in Washington's Water Pollution Control Act Chapter 90.48, RCW, the goal for this rulemaking and for future Water Quality Standards rulemaking is to: "**maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington."**

Under federal regulations (Title 40 CFR Part 131.20), states are to establish water quality standards that meet the requirements of the federal Clean Water Act. States are from time to time, but at least once every three years, required to consider making changes to their standards to:

- Incorporate new science;
- Consider where changes could be made to better meet federal laws and regulations; and
- Consider the incorporation of new guidance from the US Environmental Protection Agency.

The changes being made by Ecology at this time include all three of these elements. These changes have been developed over a significant period of time

and have resulted in a variety of options. It is important to note that the alternatives analyzed in this document and the FEIS do not cover the wide spectrum that could meet the goals of the CWA or the wide spectrum that we have analyzed over this ten year period, but are options that have been narrowed down through extensive and intensive public feedback over the last ten years.

The current rule revision process began in 1992 with an outreach process that was designed to ask the questions:

- Are there any changes that should be made to the surface water quality standards?
- And if so, which changes appear to be the most important at this time?

Using this feedback, Ecology chose several very important topics to review for possible changes to the regulations. Some of those changes were made in the 1997 update to the standards. The remaining issues that are being incorporated in this revision are:

1. Reformatting fresh water uses and criteria from class based standards to use based standards;
2. Creating an implementation plan for the state's water quality antidegradation policy;
3. Revising criteria for temperature and adding new aquatic life uses for char (bull trout and Dolly Varden);
4. Revising criteria for bacteria and ammonia;

There was also significant feedback about rule clarity and the need for more information on implementing the regulations. Based on that ongoing feedback we are establishing clarity and detail on how to implement the regulations (such as language that references federal language on use attainability analysis, variances, site specific criteria) and providing clear provisions for the use of compliance schedule when conditionally approving the effects of hydropower dams in the state.

General goals and specific objectives of the statute that the rule implements

- **CHAPTER 90.48 RCW WATER POLLUTION CONTROL**

  RCW 90.48.010
  Policy enunciated.
  It is declared to be the public policy of the state of Washington to maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment thereof, the propagation and protection of wild life, birds, game, fish and other aquatic life, and the

industrial development of the state, and to that end require the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington. Consistent with this policy, the state of Washington will exercise its powers, as fully and as effectively as possible, to retain and secure high quality for all waters of the state. The state of Washington in recognition of the federal government's interest in the quality of the navigable waters of the United States, of which certain portions thereof are within the jurisdictional limits of this state, proclaims a public policy of working cooperatively with the federal government in a joint effort to extinguish the sources of water quality degradation, while at the same time preserving and vigorously exercising state powers to insure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington.

RCW 90.48.035
Rule-making authority.
The department shall have the authority to, and shall promulgate, amend, or rescind such rules and regulations as it shall deem necessary to carry out the provisions of this chapter, including but not limited to rules and regulations relating to standards of quality for waters of the state and for substances discharged therein in order to maintain the highest possible standards of all waters of the state in accordance with the public policy as declared in RCW 90.48.010.

- **WATER RESOURCES ACT OF 1971**

RCW 90.54.020
General declaration of fundamentals for utilization and management of waters of the state.
(b) Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served.

Determination that the rule is needed to achieve the goals and objective & alternatives to rule making and the consequences of not adopting the rule

- The Administrative Procedures Act RCW 34.05 defines what constitutes a rule. The term "rule" under RCW 34.05.010(16) includes "any agency order, directive, or regulation of general applicability (a) the violation of which subjects a person to a penalty or administrative sanction;" and "the term includes the amendment or repeal of a prior rule."

- Under Chapter 90.48 RCW the Water Pollution Control Act, the state is required to "maintain the highest possible standards to insure the purity of all waters of the state". The proposed changes to the rule incorporate new science and federal guidance to protect beneficial uses and to insure the purity of Washington's waters.

  Under federal regulations (Title 40 CFR Part 131), states are to establish water quality standards that meet the requirements of the federal Clean Water Act. States are from time to time, but at least once every three years, required to consider making changes to their standards to:

  Incorporate new science;
  Consider where changes could be made to better meet federal laws and regulations; and
  Consider the incorporation of new guidance from the US Environmental Protection Agency.

  The changes being considered by Ecology at this time include all three of these elements. If the Agency were to not adopt these rules then we would not be meeting the policy objective of maintaining the highest possible standards of all waters of the state in accordance with the public policy as declared in RCW 90.48.010.

- Chapter 90.48 RCW the Water Pollution Control Act also requires Washington to "insure that present and future standards of water quality within the state shall be determined by the citizenry, through and by the efforts of state government, of the state of Washington". The procedure for adopting rule changes in Washington are governed by the Administrative Procedures Act and require agencies to go through a very prescriptive process for making sure citizens have an opportunity to provide input. The purpose of the rule-making procedures is to ensure that members of the public can participate meaningfully in the development of agency rules which affect them. Not only do we think that these changes need to be placed in rule to ensure uniform requirements but we also think the rule development process has made sure that we satisfied the other intent of the statute which is to provide a formal opportunity for the public to engage in this process.

- The state's surface water quality standards set limits on pollution in our lakes, rivers and marine waters in order to protect water quality. The Clean Water Act requires that the water quality standards protect beneficial uses, such as swimming, fishing, aquatic life habitat, and agricultural and drinking water supplies. The water quality

standards are the foundation for other water quality programs such as waste water permits, water clean-up plans (also known as TMDLs), and for designating the polluted water bodies on Washington's 303(d) list.

In Washington, if an agency knows what it will require of regulated entities and those requirements will not be determined on a case-by-case basis, it is expected that the state agency adopt those requirements by rule, and not put them in guidance. This is to ensure that such requirements are not used just as a regulatory requirement would without having been subjected to the critical public involvement procedures and oversight that a regulation mandates. Since these proposed changes will govern permit requirements, the determination of impaired water bodies and the clean up levels for water bodies, it was determined that these changes need to go into rules instead of being placed in a guidance document.

Least Burdensome Analysis

Summary of Key Points

Antidegradation:

Tier I

- The rule formally assumes that all of the correct uses have been applied to the waterbodies and that the water quality criteria assigned will protect all the existing and designated uses. The alternative considered would be to require an evaluation of the existing and potential uses for a waterbody and whether they are being fully protected by the assigned criteria as part of each antidegradation approval process.

Tier II

- Required a Tier II analysis only for activities directly regulated by Ecology that also cause a measurable reduction in the quality of a waterbody after allowing for dilution. This compares to making the alternative requirement to cover all human activities that would add any level of pollutants to state waters.
- Required Tier II analysis only for new actions and for actions that are increasing their level of pollution of state waters. Tier II reviews could have been applied to all existing activities regulated by Ecology.
- Allowed general permit and other pollution control programs to be evaluated at the programmatic level and to use adaptive management to move the programs into compliance with the antidegradation provisions. The alternative that has been suggested is to require each action to go through the Tier II analysis and that they be required to meet water quality criteria at the time of approval.
- Required a brief statement on why the benefits of the degradation are in the overriding public interest and placed the regulatory focus on looking at whether reasonable and feasible less degrading alternatives are available. Consistent with EPA guidance, a comprehensive economic and social impact evaluation could have been incorporated which would require the collection and detailed analysis of information that is not currently part of Ecology's approval process.
- Allowed public involvement process existing with the program being regulated to suffice for antidegradation. The alternative considered was to create a minimum enhanced set of public notice requirements associated with the antidegradation review.

Tier III

- Allows existing point and nonpoint dischargers to continue at current levels. This compares to the suggestion to phase out or in some other manner cause greater restrictions to be imposed on existing human sources of pollution in Tier III waters.
- Allows pollution trading between new and existing sources so long as there is not any net increase in degradation of water quality. This compares to a prohibition on new discharges and on trading pollution between any existing dischargers.
- Tightened the eligibility requirements so that only very special waters of high quality can be considered. Ecology tightened up the descriptions used for Tier III in EPA's rules so that they would better describe the outstanding waters in the state of Washington. This significantly restricts the potential number of waters that are eligible for evaluation and focuses the program on those truly outstanding waters that have a reasonable chance of being maintained at their current level of water quality.
- Tightened the approval requirements so that Ecology would need to find that there is strong public and political support for the designation, so that the waters must be generally free of human influences, and that designation of a waterbody under Tier III would not occur where doing so would be expected to harm the economies of local communities. This compares to earlier drafts that would have made the Tier III designation automatic if the waterbody met the physical criteria as being outstanding state waters, and builds in the ability of local interests to override outside groups who may want the waters protected from any future degradation.

Temperature Criteria

- Focused only on the species that had the greatest amounts of data on their thermal requirements. This compares to including separate criteria for amphibians, smelt, and aquatic insects based upon the existing but less definitive research that currently exists for these species.
- Grouped salmon and trout together in single community group for protection. This compares to early drafts and public comments suggesting that criteria be set for different species recognizing the small differences that appear to exist in their temperature requirements.
- Set the criteria at the upper end of the range of temperatures found to represent full protection and set that range above that found to be optimal based on field and laboratory research. Established that the criteria are only expected to be met 9 out of every ten years on average. Both of the foregoing provisions reduce the burden by allowing that natural temperature cycles can cause periodic warming above the numeric criteria without being considered a violation.
- Set the criteria using the weight of the evidence or central tendency of the research. The alternative would have been to rely on only selected studies showing more sensitive requirements.

- Chose to use only a narrative requirement for the protection of spawning where and when the default summer temperature criteria would not otherwise be protective. This compares to earlier drafts where spawning criteria were to be applied at default dates of the year based on statewide patterns of spawning.
- Set two levels of protection for salmon and trout spawning and rearing waters to better recognize the way waters naturally warm as it moves downstream from the headwaters and to better match with the existing criteria. This compares the past proposal of applying a single fully protective criteria to all waters having this use type.
- Chose not to establish separate criteria for outgoing smolts due to perceived low statewide risk and the higher complexity doing so would create. This compares to recommendations in past proposals and EPA guidance that would establish separate criteria for the spring, summer, and fall to protect smoltification, juvenile rearing, and spawning, respectively.
- Directed temperature monitoring to well mixed and representative habitat locations rather than to the worst-case location in a waterbody. This compares to requiring every habitat patch and every portion of a waterbody to be measured for comparison with the numeric criteria.
- Allow that an increment for human warming above naturally warm conditions also applies in situations where irreversible human structural changes have detrimentally warmed the waters above the numeric criteria. The alternative being requested was to allow only a de minimis increase from human actions and if a dam or other major structural alteration used that up, then no more warming would be allowed from any other human actions such as from a wastewater treatment plant or forest practices.
- Maintained the allowances in the standards for increments of allowable human warming for when temperatures are colder than the numeric criteria. This is in comparison to setting incremental allowances that maintain existing cold waters to protect these special thermal habitats, and to ensure that human activities do not harm incubating eggs during the fall and winter through automatic protection mechanisms such as a more stringent limitation on incremental warming.

Ammonia Criteria:

- Ecology changed the criteria for acute ammonia in salmonid waters and for acute and chronic criteria in nonsalmonid waters to less stringent values in recognition that these changes would make compliance easier and could be supported with the available science provided through a recent EPA criteria review.

Bacteria Criteria:

- Ecology chose to adopt only enterococci criteria in marine waters that do not have shellfish harvesting as a designated use. This compares to adopting EPA guidance recommendations that the state adopt enterococci criteria for all of its marine waters and *E. coli* or enterococci for all of its fresh waters. Ecology's decision retains the existing high level of protection for the state's waters, while minimizing the costs associated with monitoring for two new indicators. The state will continue to use fecal coliform in the vast majority of its fresh and marine waters.
- Ecology incorporated language that allows for alternative bacterial criteria to be established based upon site-specific considerations. This allows flexibility to look at the source of the violation and see if it is of sanitary significance.
- Ecology incorporated language that allows determinations on the health of shellfish beds made by the Department of Health to override direct comparisons with the state water quality standards for shellfish protection. This avoids doing TMDLs in waters considered acceptable by the Department of Health as well as the regulatory confusion that can result from conflicting assessments between state agencies.

Compliance Schedules for Dams:

- Established a formal program to allow dams to be approved as meeting the water quality standards based upon the development of a plan to evaluate technical and operational modifications that improve water quality. This compares to requiring annual resubmittal of requests for certifications until such time as the standards are met or with requiring immediate compliance.
- Clarified how the criteria and standards can be changed for a waterbody where a dam essentially demonstrates it's effects are not reversible or correctable. This compares to requiring an absolute adherence to the water quality criteria regardless on the economic impacts to the facilities or the prospect of causing the removal of the facility.

Restructuring the Water Quality Standards:

- Redesigned the way uses are assigned to waterbodies for protection in a manner that allows consideration and protection of only those uses (such as fish and aquatic life habitat and recreation) that actually can be attained in those waters. This compares to the existing class-based system that applies uses in defined sets which also applies the criteria to protect that entire set of uses, even if some of the uses actually do not exist and are not appropriate to the waterbody. This reduces the direct regulatory burden of having to meet criteria for uses that are not appropriate for the waterbody, but also makes the process of changing uses using federal tools such as a use attainability analysis more practical.

Analysis of Alternatives presented during public comment period

The grey highlighted sections indicate the final decision on what will go into the adopted rule package. This indicates the least burdensome alternative that will meet the goals and objectives of the federal Clean Water Act, Washington's Water Pollution Control Act and the Water Resource Act of 1971.

In developing the recommendations for water quality standards, it has become apparent that there are two different types of burden and while each creates economic and social costs, they can often be at odds with one another. These two types of burden are represented by the rule's **stringency** and the rule's **complexity**. In developing recommended changes for the state water quality standards, Ecology has come to recognize that it can establish requirements that are less stringent by making the criteria more complex. This occurs by adding more elements to the requirements that will recognize site-specific situations. While on the surface it would seem to be easy to just make criteria as precise in their application as possible, doing so creates an increased demand for site-specific and activity-specific information to implement the more complex criteria.

The alternatives analyzed were developed over the lengthy rule development process. This process has included significant work with a variety of interest groups which helped focus and narrow the range of options to look at as part of the public process. The feedback on those alternatives as well as the draft rule that went out for public hearing helped us to select the least burdensome alternative that met the goals and objective of the rule.

These water quality standards must be approved by the United States Environmental Protection Agency, and the federal fish agencies need to do an Endangered Species Act consultation on the rule before EPA makes a final decision on whether to approve them. This federal review and approval happens after the state adopts their standards.

Analysis for least burdensome alternative

Stringency – Tougher, more demanding analysis or criteria to meet. More stringent permit
requirements, more listed waterbodies, more TMDLs.

Complexity – More analysis, site-specific information and data needed to make decisions.

Long term vs. Short Term cost to society – Putting off decisions for future generations to deal with.

The Water Quality Standards establish minimum requirements for the quality of water that must be maintained in lakes, rivers, streams, and marine waters. This is done to ensure that all the beneficial uses associated with these waterbodies are protected. The standards are used in the following ways that have the potential to place burden on the regulated community:

1. They affect the requirements and effluent limits that are placed in NPDES permits. These requirements can be effluent limits based on the numeric criteria or implementation requirements such as the language on implementing the Tier II analysis. The more stringent the criteria numbers or implementation language is the more work for the regulated community

2. The water quality standards are used to define what water bodies in the state are impaired and need a water cleanup plan (TMDL). Waters defined as impaired are placed on the 303(d) list of polluted waterbodies. In addition to needing water cleanup plans, the amount of pollutant(s) allowed to be released into these waterbodies is severely restricted once they are placed on the impaired waterbodies list.

3. Water Quality Standards set the level of clean up needed for a waterbody. Once the waterbody meets the Water Quality Standards it can be removed from the impaired waterbodies list. These clean ups or TMDLS define the amount of pollution that needs to be reduced from point and nonpoint sources. The standards are critical to defining how much pollution is allowed and still protect beneficial uses.

REFORMAT

Reformat Fresh Waters from Class Based Standards to Use Based Standards (change in format will not affect marine waters)

	The new rule will organize the freshwater standards by uses that are protected (aquatic life, recreation, water supply)	**The current standards are organized by classes (AA, A, B); there are designated uses assigned to each class**
Stringency	The change from class-based to use-based will not change designated uses that are already assigned to waters. But it will provide interested parties more flexibility to change listed uses to reflect what actually exists and is attainable in a specific water body. Uses will be assigned individually and independently. This switch will allow interested groups to (over time) propose changes that more accurately reflect the appropriate beneficial uses.	The current "class-based" system for fresh waters contains 4 classes (AA, A, B, Lake) and lists certain beneficial uses that are assumed to occur in each of those classes. This grouping makes it difficult to tailor requirements for a particular water body when a use does not exist. The grouping of beneficial uses makes it difficult to remove uses that do not exist.
Complexity	The use based system will give Washington more flexibility to change listed uses to reflect what actually exists and is attainable in a specific waterbody.	It is complex and very difficult in the class system to remove a use when or where it is clear the use does not exist and is not attainable. Since the classes entail multiple beneficial uses, the analysis needs to show these beneficial uses do not exist.
Long term vs. Short Term benefits to society	The use based system will allow the correct criteria (the one that protects the use) to apply to individual waterbodies. This is done through future rule makings and requires EPA approval.	The current format has acknowledged problems where criteria are applied inappropriately. Based on the current structure some of those changes cannot be made easily when it appears there is a legitimate problem.

Least Burdensome Alternative:

Changing from a class-based to a use-based format will, in the future, provide greater flexibility to assign the most scientifically defensible combination of beneficial uses to a specific water body. For example, the new format would allow a water body to be protected as a high-quality recreational area without also needing to be protected as a salmon spawning area if it were determined that salmon did not, and never would, spawn in that water body. This is not currently possible under the existing class-based format because both uses are grouped into the same class. The use-based format, criteria would be assigned to individual beneficial uses instead of entire sets of beneficial uses. This way, everyone would know which criteria were being assigned to which beneficial use. The use based format will provide greater transparency and a more flexible approach to water quality protection.

ANTIDEGRADATION

1. Analysis for degrading waters that are above water quality standards (Tier II)

	The final rule language will limit the activities that would undergo an antidegradation alternatives analysis based on (1) the type of activity and (2) the amount of pollution produced by the activity.	**The existing antidegradation policy does not contain any details regarding the antidegradation alternatives analysis. The existing language leaves open to agency judgment what types of activities would need to comply with Tier II.**	**The alternative with a lower environmental impact would be to require all new or expanded activities to undergo an antidegradation analysis.**
Stringency	This would require only permitted activities with a measurable impact on the water quality to go through this analysis. This would only apply to those permitees requesting water quality program coverage or assurance.	The current rules are unclear so it is not applied consistently. Therefore, it could be more or less stringent based on when and how it gets applied.	This could mean that a larger and more varied set of permit applications and decisions outside Ecology and outside the Water Quality Program (SEPA determinations, Shoreline permits, and water rights) would be required to go through Tier II analysis.
Complexity	There is a clear definition on what activities get analyzed as	It is currently not clear which activities that degrade water	Other programs, governments and agencies would have to do an

	well as what permits and activities this applies to. Permitees with a measurable discharge would need to provide information regarding the ambient water quality and whether their discharge would be a measurable increase.	quality go through this analysis. There is inconsistent application or no application. If not placed in rules then Ecology will be required to develop guidance for how to implement.	antidegradation analysis on a very broad range of projects that might degrade water quality. They would need to be provided guidance to do this without any additional resources. Project applicants would have to understand the antidegradation analysis.
Long term vs. Short Term benefits to society	A focus on measurable activities required to obtain Water Quality approval will allow resources to be placed on activities which have a high likelihood of degrading clean water bodies.	If antidegradation is applied then it provides a long term benefit to society by looking for alternatives to reduce the amount of pollutants going into the water.	A more inclusive analysis of all polluting activities in Washington will provide long term benefits. These benefits will only be realized if all regulatory agencies/programs actually require permitees to go through this analysis.

Least Burdensome Alternative:

A key element of implementing Tier II protection is to determine what actions should be considered for a Tier II analysis. Earlier draft versions of the proposed rule had a very broad application of Tier II indicating that any action that could potentially lead to a lowering of water quality should be included. Ecology received many comments on the implications of a broad application and the authority of the department to require activities outside of its jurisdiction to go through this detailed analysis.

Based on this feedback, and a review of how other states are implementing Tier II, Ecology is proposing that implementation of a Tier II analysis occur only for actions that meet all of the following:

1) The action requires an authorization or approval that Ecology has jurisdiction over (NPDES Permits, State Waste Discharge Permits, Clean Water Act 401 certifications, and general pollution control programs);
2) Only new or expanded actions are considered; and
3) The action would cause a measurable change in the quality of a waterbody.

While no formal EPA guidance exists, EPA has previously indicated that states must apply antidegradation plans to activities that are regulated under state or federal law and has cited NPDES and 401 certifications as examples.

This alternative also explicitly states that only new or expanded actions are required to go through an antidegradation analysis. Performing a Tier II analysis on an existing activity that has been in place previously is not practical or reasonable.

Only new or expanded actions that have a measurable change in the quality of a waterbody have to undergo Tier II analysis. For purposes of Tier II, "measurable" is defined as a degradation of 0.3ºC temperature, 0.2 mg/l dissolved oxygen, 2 cfu/100ml bacteria, 0.1 pH units, 0.5 NTU turbidity, or any detectable change in a toxic or radioactive substance as measured in the waterbody outside the source area and after allowing for mixing. This requirement assures that resources are spent 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.

Earlier drafts of the water quality standards rule had specific provisions for conducting a public process for a Tier II analysis. Regulated activities that require approval or authorizations through Ecology already must go through a public review. After considering comments received, Ecology is proposing to use the public process already required by the proposed activity. This assures that antidegradation requirements for Tier II would not cost additional money to implement nor be another layer of public review.

2. Designation of Outstanding Resource Waters (Tier III)

	In the proposed December 2002 alternative, water bodies can be designated as Tier III waters by following a procedure that includes scientific, economic, social factors and level	**The existing standards contain little information on designating Tier III waters. Water bodies would be designated by name through the APA process.**	**An alternative with a lower environmental impact would be to add a category in addition to Tier III that would capture water bodies that were between Tier II and Tier III. They would have less**	**The final rule language will:** **Provide two options under Tier III designation:** **Option A would allow no degradation of Tier III waters and**

	of support from citizens and governments. Water bodies would be designated by name in a revised rule through the APA process.		**eligibility requirements but would still have to be designated in a revised rule through the APA process.**	**Option B would allow de minimis degradation.** **Both would still have to be designated in a revised rule through the APA process**
Stringency	Few water bodies will be likely to qualify and receive this level of protection since it applies to waters that are relatively pristine. Water bodies will not be designated Tier III if doing so will cause economic and social costs to the state and surrounding communities.	The language is vague so it could be implemented in a more or less stringent manner.	Also, see evaluation for proposed alternative. More waters will qualify for protection if Tier II ½ is included.	More waterbodies will qualify for this protection. Waterbodies will not be designated Tier III if doing so will cause economic and social costs to the state and surrounding communities.
Complexity	Few water bodies will qualify for just the Tier III. The process for designating Tier III specifically includes broad support by a number of interests, which could be considered more complex. Designation of any of	The language is vague so how it would be implemented could be more or less complex. If not placed in rules then Ecology will be required to develop guidance for how to implement. Designation of any of these waters will require a formal rule change.	More waters will qualify for a certain level of protection if Tier II ½ is included. Any dischargers would have to do an analysis to show that receiving waters would not have a measurable affect on water quality. Designation of any of these waters (Tier II ½ or III) will require a formal	It allows for 2 options of protection under Tier III instead of just one. More waters might qualify and be protected. Designation of any of these waters will require a formal rule change.

	these waters will require a formal rule change.		rule change. The communities around these waterbodies will be limited in the types of activities allowed.	
Long term vs. Short Term benefit to society	Few waterbodies will qualify for designation but the water bodies that do qualify will have a high likelihood of remaining pristine.	There is not a clear consistent process to go through to designate as Tier III. This has resulted in no waters being protected as Tier III.	The inclusion of Tier II ½ will provide more opportunity to protect a number of waters from increased pollution. These will probably be water bodies that just fall short of the higher Tier III requirements.	The inclusion of this option will likely result in more waters being protected under Tier II½ than just having a Tier III designation.

Least Burdensome Alternative:
Discussions have been held on who should ultimately make the decision on a Tier III designation and whether public support for a nomination should be factored into the final decision. Public comments were received on previous drafts suggesting that designating Tier III waters is a policy decision that should be left to elected officials, similar to how "shorelines of statewide significance" are designated under the Shoreline Management Act. There were also varying comments on how heavily public support should be weighed in the decision-making process for designation Tier III waters. After considering comments and reviewing the steps necessary to seek legislative approval for Tier III waters, Ecology has determined that legislative support is an important element but that Ecology must retain its authority over the final decisions on these designations. Proposed language also clearly states that public support for a designation should be given considerable weight in any final decision made by Ecology.

During the public comment period we received substantial comment that the Tier III language would limit the states ability to protect pristine waters if there was support. Many people felt the absolute no degradation federal requirement and the public process would limit waters that could receive this level of protection. Therefore we added an option B that would allow minimal pollution when state of the art pollution control technology is in place.

TEMPERATURE

1. Adding spawning and rearing life stages for char (bull trout) as a beneficial use

	The proposed alternative uses a single, year-round criterion (13ºC 7-DADMax) to protect both rearing and spawning (spawning). It does not establish separate spawning (spawning) criteria for char.	**The existing criteria (16ºC for Class AA and 18ºC for Class A, one-day maximums) also apply year-round. The existing criteria do not specifically designate char as a subcategory of aquatic life.**	**The alternative with a lower environmental impact is to adopt criteria to specifically protect spawning (spawning) where and when it occurs: 7.5ºC 7-DADMax – Spawning (spawning) of char (when it occurs) and 13ºC 7-DADMax - Rearing of char (rest of the year)**	**The final rule language rule language** **Uses a single, year-round criterion (12ºC 7-DADMax) to protect both rearing and spawning, except:** **Where there is data that shows this number does not protect char spawning when and where spawning occurs Ecology will apply 9ºC 7-DADMax.**
Stringency	13ºC will be more protective than the current regulations. This will potentially result in more waterbodies being listed and needing TMDLs. The actual requirements to meet the current standards and load allocations for nonpoint	The temperature requirements for waterbodies that have char use are 16ºC –one-day maximum and 18ºC. These temperatures were not set to protect char. Not protecting a use that exists, especially one that is a concern under the Endangered Species Act will raise the likelihood of	The spawning number of 7.5 C is a significantly more stringent number. This will result in more waterbodies being placed on 303(d), which will mean more TMDLs in areas of the state that might not have a way to get the water to meet this temperature. This will potentially result	12ºC 7-DADMax is more stringent than 13ºC. The narrative to protect spawning when and where it occurs is more stringent than just 13ºC. This will potentially result in more waterbodies being listed and needing TMDLs.

	TMDLs will probably not be different from what it takes to meet the current rules. More point source permits might need to start having temperature requirements.	federal agencies setting the criteria they support.	in more waterbodies being listed and needing TMDLs. The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules. More point source permits might need to start having temperature requirements.	
Complexity	One number is less complex and easier to work with in permitting and TMDL development. This will allow simpler permit requirements and Waste Load allocations. Do not need to identify spawning seasons and areas.	Not protecting for a use that exists might make approval of the Washington standards by EPA more difficult and could result in EPA setting federal criteria.	Using 2 numbers in a permit, for developing TMDLs and monitoring is inherently more complex than using one. This makes permits and load allocations in TMDLs more complex. Determining the correct dates for the spawning period is also complex and will result in different times for different waterbodies across the state.	One number will apply in most waterbodies. Where this number does not protect spawning (when and where it occurs) then there will need to be two numbers on a waterbody. Ecology will have to develop a separate process for determining what data to use to have the narrative criteria applied.

Long term vs. Short Term benefits to society	This option provides clear temperature criteria for protecting Char.	Current rules provide no protection for Char.	This option provides clear temperature criteria for protecting Char at all life stages.	This option provides clear temperature criteria for protecting char. When the criteria does not protect spawning it allows another number to apply to make sure all life stages of char are protected.

Least Burdensome Alternative:
Based on the specific feedback that Ecology received from the United States Environmental Protection Agency and the United States Fish and Wildlife Service, Ecology determined that this alternative is the least burdensome. These agencies had serious concerns related to the proposal that Ecology put forward. In choosing this alternative we weighed the role of the federal agencies in reviewing and approving our water quality standards, the data we had that showed the effectiveness of protecting all stocks at key life stages, and the resource impact associated with having the federal agencies promulgate standards on the state. Based on these significant issues the least burdensome alternative was developed.

2. Salmon, Steelhead and Trout Criteria – Spawning and Rearing Life-Stages

	The proposed alternative uses a single, year-round criterion (16ºC 7-DADMax) to protect both rearing and spawning. It does not establish separate spawning criteria.	**The existing criteria (16ºC for Class AA and 18ºC for Class A, one-day maximums) apply year-round.**	**The alternative with a lower environmental impact is to adopt criteria to protect spawning where and when it occurs: 13ºC 7-DADMax for spawning (when it occurs) and 17ºC 7-DADMax for rearing (rest of the year).**	**The final rule language uses a year-round criterion (16ºC 7-DADMax) to protect both <u>core</u> rearing and spawning, and a second year-round criterion (17.5ºC 7-DADMax) to protect non-core rearing and spawning, except:**

				Where there is data that shows this number does not protect spawning when and where spawning occurs Ecology will apply 13ºC 7-DADMax.
Stringency	16ºC 7-DADMax will be more stringent than the current regulations for Class A waters, but less stringent than class AA. This will potentially result in more Class A waterbodies being listed and needing TMDLs. The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules.	The temperature requirements for waterbodies that have Salmon, Steelhead and Trout spawning use are 16ºC one day maximum in Class AA and 18ºC in Class A.	The spawning number of 13ºC is more stringent than the current water quality standards for waterbodies that will be required to protect this beneficial use. This will result in more Class A and Class AA waterbodies being placed on 303(d) which will mean more TMDLs in areas of the state that might not have a way to get the water to meet this temperature. 17ºC is less stringent for Class AA waters. 13ºC is more stringent for both Class A and Class AA waterbodies.	16ºC 7-DADMax will be less stringent than the current regulations for Class AA waters. 17.5ºC 7-DADMax will be less stringent than the current regulations for Class A waters. This will potentially result in less waterbodies being listed and needing TMDLs. The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be different from what it takes to meet the current rules.
Complexity	One number is less complex and easier to	These numbers are currently being	Using 2 numbers in a permit, for developing	One number will apply in most waterbodies. Where

	work with in permitting TMDL development and monitoring.	implemented. Some interests think that they do not protect this beneficial use. Federal agencies could over file on our standards if they think that Washington is not adequately protecting this beneficial use.	TMDLs and monitoring is inherently more complex than using one. Determining the correct dates for the spawning period is also complex and controversial and will result in different criteria applying at different times in different waterbodies across the state.	this number does not protect spawning when and where it occurs then there will need to be two numbers on a waterbody. Ecology will have to develop a separate process for determining what data to use to have the narrative criteria applied.
Long term vs. Short Term cost to society	These criteria, as long as they are met, would provide long term benefits to fish.	Current standards for Class AA – 16ºC are sustainable for salmon populations. The current Class A criteria are not protective according to the literature.	These criteria, as long as they are met, would provide long term benefits to fish.	This option provides clear temperature criteria for protecting salmonids. When it does not protect spawning it allows another number to apply to make sure all life stages of salmonids are protected.

Least Burdensome Alternative:
Based on the specific feedback that Ecology received from the United States Environmental Protection Agency and the National Marine Fisheries Service, Ecology determined that this alternative is the least burdensome alternative. These agencies had serious concerns related to the proposal that Ecology put forward. In choosing this alternative Ecology weighed the role of the federal agencies in reviewing and approving our water quality standards, the data we had that showed the effectiveness of protecting all stocks at key life stages and the resource impact associated with having the federal agencies promulgate standards on the state. Based on these significant issues the least burdensome alternative was developed.

3. Salmon, Steelhead and Trout Criteria Rearing Only

	The proposed alternative uses a	**The existing criteria (20ºC for**	**The alternative with a lower**

	single, year-round criterion (17.5ºC 7-DADMax) to protect rearing only.	**Class B one-day maximums) apply year-round.**	**environmental impact is to apply 16ºC (7DADMax) as a single, year-round criterion to protect rearing only.**
Stringency	17.5ºC (7-DADMax) is more stringent than the current regulations for Class B (21ºC daily Max) waters, but less stringent than the current Class A (16ºC daily Max). This will potentially result in more Class B waterbodies being listed and needing TMDLs. The actual requirements to meet the current standards and load allocations for nonpoint TMDLs will probably not be significantly different from what it takes to meet the current rules.	This existing criteria for rearing-only waters is less stringent than the proposed criteria, but it also does not meet the goal of protecting rearing. A 7DADMax of 20ºC is outside the range of probable temperatures that will provide healthy rearing conditions.	16ºC (7-DADMax) is more stringent than either the current regulations for Class B, or the proposed alternative. This will potentially result in the highest number of waterbodies being listed and needing TMDLs. And would likely result in the highest number of TMDLs being conducted on waters that naturally cannot meet the 16ºC criteria; since the rearing-only use would be typically assigned to naturally warmer waters. The actual requirements to meet the current standards and load allocations for nonpoint source TMDLs would probably not be significantly different from what it takes to meet either the current rule or the proposed alternative criterion
Complexity	One number is easy to understand and work with in permitting, TMDL development, and monitoring.	One number is easy to understand and work with in permitting, TMDL development, and monitoring.	One number is easy to understand and work with in permitting, TMDL development, and monitoring
Long term vs. Short	These criteria would allow the maintenance and protection of	This criteria does not provide for healthy rearing conditions and does	These criteria would provide the greatest benefits to the aquatic

Term cost to society	healthy rearing conditions and thus would provide long term benefits to fish without creating unnecessary expenditures of resources to comply or measure compliance.	not meet the goal of protecting a healthy fish and aquatic life community	systems. However, the benefits are not considered substantially greater than those expected at the proposed criteria. Given this option would cause a redirection of limited resources away from waters with higher ecological potential, the long-term costs are not likely to be balanced by the modest increase in protection in those rearing-only waters capable of meeting 16°C.

Least Burdensome Alternative:
We did not receive significant comment on the rearing only criteria. It was our least burdensome alternative that would meet the goals of the Pollution Control Statute.

<u>Dissolved Oxygen Criteria</u>

	The proposed alternative uses a year-round criterion (9.5 mg/L 90-day average of the daily minimums and 7.0 mg/L one-day minimum) to protect both rearing and spawning (spawning). It does not establish separate spawning (spawning) criteria.	**The final rule language leaves the existing one-day minimum criteria in place.** **9.5 mg/L for Class AA (** now Char / Salmon and Trout Spawning, Core Rearing, and Migration) **8.0 mg/L for Class A** (now Salmon and Trout Spawning, Non-Core Rearing, and Migration/ Non-anadromous Interior Redband Trout) **6.5 mg/L for Class B** (now Salmon and Trout Rearing and	**The alternative with a lower environmental impact is to adopt criteria (90-day averages of the daily minimums) to specifically protect spawning (spawning) where and when it occurs: 10.5 mg/L for spawning (spawning) (when it occurs) and 8.5 mg/L for rearing (rest of the year). It also includes the 7.0 mg/l one day minimum.**

		Migration Only / Indigenous Warm Water Species)	
Stringency	The one-day minimums are less stringent than the current requirements. The addition of 90-day averages could be a more stringent criteria depending on the values being averaged.	The dissolved oxygen requirements are one day minimums for Class AA – 9.5mg/l and Class A 8.0. This could be more restrictive if there were monthly analysis that showed the single day minimum got down to 8 in a Class AA stream.	The one-day minimums are less stringent than the current requirements. The 90-day averages are more stringent than the proposed alternative. The addition of 2 separate 90-day averages are usually more stringent than just the one day.
Complexity	Using 2 numbers in a permit, for developing TMDLs and monitoring is inherently more complex than using one.	These numbers are currently implemented and only rely on one metric.	This alternative will require 3 different values to be used for TMDLs, permit modeling and water quality monitoring. Determining the correct dates for the spawning period is also complex and controversial and will result in different criteria applying at different times in different waterbodies across the state.
Long term vs. Short Term cost to society	The addition of the 90-day average ensures that long-term healthy levels of oxygen are present for fish.	The one-day minimum does not provide necessary insurance for protection of a healthy oxygen environment.	The addition of the 90-day average ensures that long-term healthy levels of oxygen are present for fish. Setting oxygen criteria specifically for spawning times would provide an additional level of protection.

Least Burdensome Alternative:
Ecology received a number of comments on the dissolved oxygen criteria that made it clear there were problems with the proposal. Based on this universal concern we decided to leave the current criteria in place.

BACTERIA

Selecting Numeric Criteria for Freshwater and Marine Water

	The proposed alternative: ***-Freshwater*** **Primary Contact - *E. coli* at 100 cfu/100ml.** **Secondary Contact - *E. coli* at 200 cfu/100ml.** ***-Marine Water*** **Shellfish Harvesting and Primary Contact – fecal coliform at 14 cfu/100ml** **Where shellfish is not a use** **enterococci at 35/100ml** **Secondary Contact. - enterococci at 70 cfu/100ml.**	**The existing criteria:** ***-Freshwater*** **Primary Contact fecal coliform at 50 cfu/100ml (Class AA) and 100 cfu/100ml (Class A)** **Secondary Contact fecal coliform at 200 cfu/100ml (Class B)** ***-Marine Water*** **Shellfish Harvesting and Primary Contact fecal coliform at 14 cfu/100ml.** **Secondary Contact.** **fecal coliform at 100 cfu/100ml (Class B) and 200 cfu/100ml (Class C).**	**The alternative with a lower environmental impact is to have the same as the proposed but eliminate all secondary contact.**	**The final rule language will keep the existing criteria in place for freshwater and go to 70 enterococci for all marine water that was formerly Class B or C.** *-Marine Water* **Shellfish Harvesting and Primary Contact** fecal coliform at 14 cfu/100ml. **Secondary Contact.** enterococci at 70 cfu/100ml (former class B and C)
Stringency	***-Freshwater*** The *E.coli* number is similar to the requirements in place for Class A and B waterbodies. It is less stringent for Class AA waterbodies. ***-Marine Water*** Where there are shellfish the criteria will stay the	Current requirements are more stringent for Class AA waters.	Same stringency as proposed alternative for primary contact. Would be more stringent for water bodies that currently protect for secondary contact.	There are 2 primary contact levels and the former class AA is more stringent.

	same.			
Complexity	Relies on 3 different indicator organisms to determine water quality for bacteria. This will make permits, monitoring and TMDLs more complicated.	EPA is requiring states to change to *E.coli* and enterococci so not changing will possibly put EPA in a position of not approving our rules and setting federal criteria. Staying with fecal removes the complexity of making the transition from *E.coli* and enterococci.	Relies on 3 different indicator organisms to determine water quality for bacteria. This will make permits, TMDLs and monitoring more complicated.	Do not have 3 different indicators. EPA indicated that if Washington can show that their criteria are protective of health then the indicator used should not be a significant issue.
Long term vs. Short Term cost to society	This alternative will provide less long-term protection for water bodies that were class AA.	The current regulations are simpler and provide more protection in class AA water bodies.	This alternative will provide less long-term protection for water bodies that were class AA. It will provide more long-term protection by not allowing secondary contact.	This alternative continues to provide strong protection for the states waters and shellfish protection.

Least Burdensome Alternative:
Ecology received significant comments on the bacteria proposal. Many of the commenters were concerned about the need to monitor for 3 different indicators, the shellfish industry and tribes were concerned about how the switch in indicators might impact shellfish protection. We also received concern about the cost impacts associated with switching indicators. Since the shellfish protection criteria will protect most marine water and will meet EPA's concern of being adequately protective of human health Ecology is only proposing to change indicators for Class B and C marine waters that are protected for secondary contact.

SELECTION OF NUMERIC CRITERIA FOR AMMONIA.

	The final rule language will use existing chronic criteria for waters with salmonids. Use the EPA 1999 update criteria for other situations.	**The lower environmental alternative is to use existing ammonia criteria in all situations.**
Stringency	This alternative is less stringent than existing regulations.	Current regulations for ammonia are more stringent than the EPA guidance.
Complexity	The proposed modification also results in highly complex criteria that are expressed as an equation. Site specific information on temperature and pH of the water is needed to calculate the criteria. There are different criteria for waters with or without salmonids, and for waters with or without early-life stages of fish present.	The existing criteria for ammonia are highly complex. They are expressed as an equation, and site-specific information on temperature and pH of the water is needed to calculate the criteria. There are different criteria for waters with salmonids and waters without salmonids.
Long term vs. Short Term cost to society	The proposed criteria will provide protection for aquatic life in Washington. Although the revisions make the criteria less stringent, they will likely not substantially change requirements for facilities discharging ammonia.	The existing criteria will provide protection for aquatic life in Washington, and maintain the current level of performance required of facilities emitting ammonia.

Least Burdensome Alternative:
Ecology received few comments on the Ammonia change. This criteria will eventually be used for any waters that are not protected for salmon. Although the adoption will result in less stringent criteria for permitting and water body assessment, this is unlikely to have any material effect on costs of compliance. Because almost all freshwaters in Washington are used by salmonids and because the existing chronic criteria for salmon waters is the most restrictive criterion for ammonia, this stringent criteria will still remain the driver for most permitting and waterbody assessment decisions. In effect, the cost of complying with the criteria will remain unchanged.

CRITERIA TO PROTECT AGRICULTURE WATER

	Adopt numeric criteria for electrical conductivity, bicarbonate, total suspended solids and pH to protect agricultural water supply.	**The existing criteria have narrative criteria but no numeric**.	**Adopt numeric criteria for electrical conductivity, bicarbonate, total suspended solids and pH that are more protective than the criteria in the proposed alternative.**
Stringency	This will add new water quality criteria for determining whether the beneficial use of agriculture water supply is being protected. The addition of these criteria mean that waterbodies that do not meet these new criteria could be listed as impaired and will require TMDLs. Could also mean that point source dischargers will need to make sure their effluent does not violate these criteria in the waterway.	Current regulations do not have specific numeric criteria to protect agricultural water supply. Only narrative criteria exist to protect agricultural water.	This will add more protective than proposed new water quality criteria for determining whether the beneficial use of agriculture water supply is being protected. The addition of these criteria mean that water bodies that do not meet these new criteria could be listed as impaired and will require TMDLs. Could also mean that point source dischargers will need to make sure their effluent does not impact these criteria in the waterway.

Complexity	The development of permits in these areas may need to include these new criteria. Water quality monitoring programs will need to add these parameters.	Current regulations do not provide specific numeric criteria to protect for agricultural water supply.	The development of permits in these areas may need to include these new criteria. Water quality monitoring programs will need to add these criteria.
Long term vs. Short Term cost to society	These criteria were developed to protect agriculture lands and equipment.	Does not provide for this protection.	These criteria would provide a higher level, than proposed, of protection for agriculture lands and equipment.

Least Burdensome Alternative:
Ecology received significant comments from the agricultural industry that these criteria are not needed. The industry did not think there are any issues associated with the quality of water they receive for agricultural use. Based on this feedback Ecology will continue to rely on narrative criteria to protect agricultural supply water from significant yet unforeseeable problems.

COMPLIANCE SCHEDULES TO ADDRESS LICENSES OF EXISTING HYDROPOWER DAMS

	The final rule language allows for compliance schedules for dams to be used in 401 certifications if they endeavor to meet standards.	**The language in the existing standards on compliance schedules is not clear about whether compliance schedules are acceptable.**	**Require all dams to fully comply with water quality standards before the certifications are issued.**
Stringency	Would clearly explain the compliance schedule timeframes and deliverables.	Current regulations do not specifically discuss allowing compliance schedules. Individual compliance schedules are negotiated in consent agreements.	Extremely stringent especially since most large dams do have water quality impacts that are difficult to address.
Complexity	The requirements for a	Current regulations do not	This would provide clarity for

	compliance schedule would clearly identify what analysis is required to offer a compliance schedule for existing dams.	specifically discuss allowing compliance schedules. It takes significant work and time to negotiate individual compliance schedules.	the agency and dam operators on how to deal with 401 certifications.
Long term vs. Short Term cost to society	Assures that dams will have to do all that they can to meet standards.	Current rules put a burden on agencies to negotiate complex agreements because many large dams do not meet criteria. Significant resources are spent on how to issue certification.	For dams that do not meet water quality standards, Ecology will not issue 401 certifications, which will affect a dam's ability to get their FERC licenses.

Least Burdensome Alternative:
Dam facilities, including those seeking FERC license renewals, are required to meet the water quality standards and can require a Clean Water Act 401 certification. Achieving standards in the near term may be very difficult and require significant investments of resources and time. Water quality program staff who work on the re-certification of these dams, or trying to bring the impacts of dams into compliance with the state standards, face significant challenges in writing conditions that accomplishes the goal of meeting standards in a reasonable manner.

Ecology's consideration of this issue has resulted in identifying four major goals approving the effects from dams:

1. Dam owners should endeavor to meet water quality standards – facilities need to evaluate what it would take and implement those changes to the extent feasible.

2. The water quality standards should allow for off-ramps (such as site specific criteria or use attainability analyses) where the dam is not a cause of the water quality problem or no options short of dam removal will help.

3. If the facility changes based on the evaluation identified above are not feasible or do not achieve compliance with the standards, provide a path to establish site specific standards through a use attainability analysis that takes advantage of "less than full support" language in federal regulations (40 CFR 131.10(g)(4)).

4. If dam owners commit to a process to work through the items above, a 401 certification could be issued to comply with the standards.

Based on the above goals, language was added to the final rule to allow compliance schedules for dams under the 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.

Mitigation of Impacts on Regulated Community

There are a number of items that have been included in this rule to mitigate the impacts on the regulated community. These include:

- The antidegradation section that requires a more detailed analysis from applicants of water quality permits discharging to clean water bodies is limited to new and expanded actions that have a measurable change in water quality. This limitation assures that resources are spent on those actions that will cause a measurable change, and therefore not require resources to be used on insignificant actions.

- The revised pollutant criteria have been designed to avoid unnecessary impact on human economic activities and to allow for reasonable implementation. Revisions include:
  (a) Applying the criteria based on general patterns of stream use and species mixes,
  (b) Not basing recommendations on individual studies showing sensitive outcomes, and
  (c) Recognizing longer-term averaging periods where appropriate when developing the recommended criteria.
  (d) Where natural conditions of a waterbody do not meet the criteria, a small allowance for human activities is allowed to be factored in to permits and pollution reduction plans.
  (e) An allowance that criteria can be adjusted to account for the thermal effects of permanent human structural changes.
  (f) Alternative language that allows waterbodies to only have to meet the criteria nine years out of ten. This exemption can be used in situations when temperatures or dissolved oxygen levels are naturally exceeded from extreme climatic years, and will make limits set using modeling more reasonable.

- Allows for general permits and pollution control programs to go through an antidegradation analysis at the time the permit or program is developed and not for each individual action covered by the general permit or pollution control program. Since many activities may be covered by general permits or programs, this will be a savings in terms of not having to provide individual analyses.

- Added a new part in the proposed rule to provide several tools that are available for applying alternative criteria or uses. These new tools include provisions for:

  (a) 173-201A-410: Allows on-going short-term modifications of water quality. The amendment moves the longer duration short term modification from pesticides to its own subsection that can apply to any short term activity. Thus the flexibility is more broadly provided.
  (b) 173-201A-420: Variances allow criteria to be modified for individual facilities, or stretches of waters on a longer term basis.
  (c) 173-201A-430: Site specific criteria may be developed.

(d) 173-201A-440: A use attainability analysis may be done to remove a designated use for a waterbody that is neither existing nor attainable.
(e) 173-201A-450: A water quality offset occurs where a project proponent implements or finances the implementation of controls for point or nonpoint sources otherwise under the control of other entities to reduce the levels of pollution for the expressed purpose of creating sufficient assimilative capacity to allow new or expanded discharges. The goal of water quality offsets is to reduce the pollution levels of a waterbody sufficiently enough that a proponent's actions are not causing or further contributing to a violation of the requirements of the standards and result in a net environmental benefit.

Rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing control programs. These rules do not require anybody to take an action that violates federal or state law.

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.

This longstanding regulation sets the water quality goals for all of the surface waters in Washington. By establishing numerical limits on the allowable amount of pollution that can occur to the state's waters, the standards serve as the driver for designing control programs that pertain to the regulated community and those that are not regulated but contribute to nonpoint pollution. These rules do not impose more stringent requirements on public or private entities.

Determine if the rule differs from any federal regulation or statue applicable to the same activity or subject matter and, if so, determine that the difference is justified.

Federal requirements for water quality standards are found in federal laws and federal regulations. The key federal law that standards' implement is the federal Clean Water Act. Title 40 of the Code of Federal Regulations, particularly Part 131 (40 CFR Part 131). The United States Environmental Protection Agency (USEPA) also establishes guidance for implementing the federal regulations.

Restructuring to a Use-Based System: There are no federal requirements pertaining to the type of system that the state uses to assign beneficial uses to their waters for protection. Federal requirements pertain to how the uses are selected and revised as well as to the way criteria must be set for protecting those uses. The change to a use-based system is consistent with all related federal regulations and is being made to create a greater ability to assign appropriate and attainable combinations of uses to the state's waters**.**

Antidegradation Implementation Plan: Federal regulations specifically direct that states establish a water quality antidegradation policy in their water quality standards and establish a plan for implementing that policy. The changes being made to the state standards include the required three tiers of protection for water quality and beneficial uses established in the federal regulations. Differences between the federal regulations and the state regulation were established to narrow the application of the program and create greater focus for the application of limited implementation resources. While these differences appear to constrict the program from that envisioned through a more strict and literal interpretation of the federal rules, these areas of reduced stringency or application were made in response to reviews of EPA antidegradation guidance. They were also made in recognition of antidegradation program content that had been approved by EPA in other states. Thus the state program incorporates an appropriate and approvable level of flexibility in its application of the federal regulations, and the differences are in the direction of making the program less stringent than would occur using a strict interpretation of the federal regulatory directives.

Secondary Contact Bacteria Criteria for Marine Waters: Federal guidance exists for establishing bacterial criteria that will protect humans from waterborne diseases. The guidance focuses on water contact exposure from swimming, but would pertain to non-recreational contact with surface waters as well. The federal guidance directs states to establish either *E. coli* or enterococci as the indicator bacteria for freshwaters, and enterococci only for marine waters. The state currently uses fecal coliform as its indicator bacteria in both fresh and marine waters, and EPA generally opposes the continuation of fecal coliform nationally as a state indicator bacteria. The change being made to Washington's standards only add enterococci to those marine waters that are currently protected only for secondary water contact (e.g. general boating, wading, fishing) and not to marine waters protected for shellfish harvesting. Ecology has presented EPA with an effective argument that in our state fecal coliform bacteria concentrations in fresh waters is almost equal to *E. coli* concentrations and so there is

no need to change indicators. In marine waters, Ecology demonstrated that the fecal coliform shellfish harvesting criteria, which must be retained to comply with other state and federal regulations, is as protective as the EPA directed enterococci criteria. Thus Ecology is only changing to the EPA recommended indicator of enterococci in marine waters that currently are not protected either for shellfish harvesting or primary contact recreation. This approach eliminated the need and associated costs for private and governmental entities across the state to change to monitoring for multiple indicators in marine waters and to a new indicator in fresh waters. The selection of criteria values was based on the directive in state law to maintain the highest possible quality of the state's waters and upon Ecology's findings that the added illness rates and associated costs of allowing an increase in bacterial concentrations in our waters would not be offset by costs savings by industries and others.

Temperature Criteria: The changes to the state's freshwater temperature criteria are consistent with the federal regulations on protecting aquatic life. The changes are also largely consistent with newly released guidance from EPA on temperature criteria for application to the Northwestern United States. The differences that exist between the EPA guidance and the revised state temperature criteria, are based on our careful analysis of the scientific information and generally make the state standards less stringent than would exist were the federal guidance followed explicitly. The biggest difference is that the state is planning to apply temperature criteria that is designed to protect spawning only where and when it is determined that a single summer-time criteria would not allow protective temperatures to occur at the time spawning actually occurs. EPA guidance would direct the use of a default – mandatory – application that would enact the cold spawning criteria to all waters. The state approach will keep the standards less complicated for most waters by continuing to allow a single summer time criteria to be the primary focus, but ensures the resources of the state will indeed be protected by directing that spawning is a critical life-stage that must be examined to ensure it is also appropriately protected.

Ammonia Criteria: The current state criteria for ammonia were adopted to be consistent with EPA guidance. EPA recently revised their national guidance. Ecology is only adopting part of the recommended revisions. We are adding less stringent criteria for non-salmonid waters and less stringent acute toxicity criteria for salmonid waters. We are retaining the existing chronic criteria for salmonid waters based on a technical review of the underlying science. While the other changes appear fully protective of the state's resources, there is great uncertainty that the changes EPA made to the chronic ammonia criteria would actually be reasonably protective of young salmonids. Thus, consistent with the mandates for use protection under the federal regulations and consistent with state law directing Ecology to set high standards for the protection of the state's resources, we are keeping the existing state criteria for chronic toxicity for use in waters that support salmonids.

Compliance Schedules for Dams: Based on legal decisions a state may only grant a period of time for an entity to come into compliance with their state standards if the provision for a schedule of compliance is directly built into their state standards. Ecology had already included a section on compliance schedules in the state standards, but the language was designed with

typical wastewater discharges in mind. There was considerable concern this language could not be used, and was not well suited for, granting compliance schedules to dams that currently do not comply with the state water quality standards. There is no federal mandate that state's establish allowances for compliance schedules, but these provisions are supported by EPA. Ecology recognizes the importance of allowing a facility time to investigate its options, arrange any financing, and enact any necessary changes. Therefore the section clearly authorizing compliance schedules to come into compliance is optional under federal regulations, but makes the standards less burdensome than would otherwise exist without it.

Pollution Offsets: Offsets are a program that allows one entity to control the pollution from another upstream source. There are no federal regulations that direct or prohibit states from allowing offsetting. This program was created for the water quality standards to provide another option for dischargers and others to come into compliance with the water quality standards with the least economic burden.

Variances, Use Attainability Analyses, and Site-Specific Criteria: The federal regulations and associated guidance establish the requirements and methods to be used to allow variances, use attainability analyses, and site-specific criteria as tools to modify the uses and criteria that are assigned to waterbodies under state water quality standards. While these tools are currently available, Ecology is describing them in the state standards so that the public will understand that they exist and how they can be used to adjust the state criteria on a site specific basis. The language adopted is consistent with the federal regulations and guidance on the use of these tools.

Detailed overview of rule changes

Under the Administrative Procedures Act, RCW 34.05.325(6)(a)(ii) requires agencies to describe the differences between the text of the proposed rule as published in the register and the text of the rule as adopted, other than editing changes, stating the reasons for differences.

This document compares the final text as adopted with the proposed rule dated December 19, 2002 that was available for public comment. This document addresses each subsection of the rule where changes were made. This document does not address the changes that were made from the existing water quality standards.

Section 010 Introduction

010(1)

Ecology added the phrase "antidegradation policy" to make the statement include all three elements of the water quality standards. See part 1a of the Responsiveness Summary.

010(4)

Editorial changes were made for clarity.

Section 020 Definitions

"1-DMax"

The timing in the definition was changed to 30 minutes or less. See part 7b of the Responsiveness Summary.

"90-DADMin"

Since the dissolved oxygen proposal was not adopted, this definition was not needed, and therefore it was deleted. See part 19a of the Responsiveness Summary.

"AKART"

The references to the stormwater management manuals in the definition was deleted. See part 70i of the Responsiveness Summary.

"Background"

Editorial changes were made for consistency; the last sentence was deleted.

"Critical Condition"

Editorial changes were made for consistency.

"Designated Uses"

A definition was added at the request of people using the rule. See part 2c of the Responsiveness Summary.

"*E. coli*"

Editorial changes were made for clarity.

"Existing uses"

Editorial changes were made for clarity.

"Extraordinary primary contact"

A definition for the new term "extraordinary primary contact" was added. See "200(2) Recreation."

"Natural conditions"

Editorial changes were made for clarity.

"New or expanded actions"

The definition was changed to make it clear that newly regulated activities fall under the definition. Editorial changes were made for clarity. See part 2a of the Responsiveness Summary.

"Permit"

Editorial changes were made for clarity.

“Primary contact recreation”

Editorial changes (including the title) were made for clarity. See part 3b of the Responsiveness Summary.

“Secondary contact recreation”

Editorial changes (including the title) were made for clarity. See part 3b of the Responsiveness Summary.

“Thermal refuge”

The definition was deleted due to its lack of usefulness. See part 2a of the Responsiveness Summary.

Section 200 Fresh water designated uses and criteria

200

In the introduction, editorial changes were made for clarity.

200(1) Aquatic Life

The language protecting non-key species was strengthened to make the requirements clear. See part 4b of the Responsiveness Summary.

200(1)(a)

- The description of char was clarified to make it more specific; it now reads “first year juveniles” instead of “first years of life.” See part 5 of the Responsiveness Summary.
- All of the salmon and trout descriptions were changed to include the subcategories of “core” and “non-core” rearing. See part 9c of the Responsiveness Summary.
- “Migration” was re-inserted into the descriptions. See parts 24 and 64b of the Responsiveness Summary.
- The extraneous term “steelhead” was dropped since steelheads are a type of trout.
- Editorial changes (including numbering) were made for clarity.

200(1)(b) and other subsections titled “general criteria”

Section 260 was changed, so all references to 260 in the entire chapter, including the reference in this subsection, were also changed.

200(1)(c) Temperature

- Editorial changes (including numbering) were made for clarity.
- The char criterion was lowered from 13ºC to 12ºC. See parts 8a-b of the Responsiveness Summary.
- All of the salmon and trout descriptions were changed to include the subcategories of “core” and “non-core” rearing. See part 9c of the Responsiveness Summary.

- The beneficial use of “migration” was re-inserted. See part 64b of the Responsiveness Summary.
- A new criterion of 17.5ºC for spawning, non-core rearing, and migration was added. See part 9c of the Responsiveness Summary.
- Subsection (i) was clarified, with the “human structural condition” clause moved to section 260. See part 12b of the Responsiveness Summary.
- Subsection (iv) was added to protect spawning and incubation of char and salmon and trout when the department determines the other temperature criteria established for a waterbody would not be protective. See parts 9a-c of the Responsiveness Summary.
- Subsection (v) was added to address how the temperature criteria apply to lakes. See part 3d of the Responsiveness Summary.
- The old subsection (v) was deleted because it was redundant with language in 260.
- Subsection (vii) on lethality and barriers to migration was modified to make it clear when it should be used.

200(1)(d) Dissolved Oxygen

- All of the proposed D.O. numeric criteria were dropped. Ecology is re-inserting the existing D.O. criteria (6.5, 8.0, and 9.5 mg/L), with the existing metric (1-day minimum). The categories have been changed to match the new use-based system. This change affects both the table and other language in the subsection. See parts 19a-b of the Responsiveness Summary.
- All of the salmon and trout descriptions were changed to include the subcategories of “core” and “non-core” rearing. See parts 19a-b of the Responsiveness Summary.
- The beneficial use of “migration” was re-inserted. See part 64b of the Responsiveness Summary.
- Subsection (i) was clarified, with the “human structural condition” aspect moved to section 260. See part 12b of the Responsiveness Summary.
- Subsection (ii) was added to address how the temperature criteria apply to lakes. See part 3d of the Responsiveness Summary.
- The old subsection (v) was deleted because it was redundant with language in 260.

200(1)(e) Turbidity

- All of the salmon and trout descriptions were changed to include the subcategories of “core” and “non-core” rearing. The actual numeric criteria were not changed, with the exception of redband trout, described below. See part 21 of the Responsiveness Summary.
- The beneficial use of “migration” was re-inserted. See part 64b of the Responsiveness Summary.
- Ecology corrected an error in the redband trout criteria. See part 21 of the Responsiveness Summary.
- The numbering was changed for clarity.

200(1)(f) Total Dissolved Gas

- All of the salmon and trout descriptions were changed to include the subcategories of "core" and "non-core" rearing. The actual numeric criteria were not changed. See part 22 of the Responsiveness Summary.
- The beneficial use of "migration" was re-inserted. See part 64b of the Responsiveness Summary.
- Subsections (i) and (ii) were changed to clarify which criteria applied in which situation.

200(1)(g) pH

- All of the salmon and trout descriptions were changed to include the subcategories of "core" and "non-core" rearing. The actual numeric criteria were not changed. See part 23 of the Responsiveness Summary.
- The beneficial use of "migration" was re-inserted. See part 64b of the Responsiveness Summary.

200(2) Recreation

- Ecology deleted the proposed title of "water contact" and replaced it with the existing title "recreational." See part 3b of the Responsiveness Summary.
- Ecology dropped the proposal to switch to *E. coli*. Ecology is re-inserting the existing fecal coliform criteria (50, 100, and 200 colonies/100mL). The categories have been changed to match the new use-based system (for example, the new "extraordinary primary contact recreation" category matches the old "Class AA"). This change affects both the table and other language in the subsection. See parts 25a-d of the Responsiveness Summary.
- Proposed subsections (i)-(iii) were combined for clarity.

200(3) Water supply uses

- All numeric criteria for agricultural supply water were deleted. See part 27a of the Responsiveness Summary.

200(4) Miscellaneous Uses

The uses of boating and aesthetics, which are in the existing standards, were reinserted. See part 3b of the Responsiveness Summary.

Section 210 Marine water designated uses and criteria

210(1) Aquatic life uses

- The language protecting non-named species was strengthened to make the requirements clear. See part 4b of the Responsiveness Summary.
- The category descriptions were changed to: (1) match the existing descriptions, and (2) pull out harvesting as a separately listed use. See parts 29 and 31 of the Responsiveness Summary.
- In the proposal, Ecology simply referenced the notes in the fresh water section, stating they applied "where applicable." In the final version, Ecology actually

included the notes that were applicable. With the exception of editing changes to make the notes fit for marine water, the notes match the fresh water notes in section 200. See parts 29d and 30 of the Responsiveness Summary.
- The title in the D.O. table (Table 210(1)(d)) was changed for clarity.

210(2) Shellfish Harvesting

- A new subsection, 210(2), to contain the shellfish harvesting criteria. The new subsection was added to make the rule easier to navigate. The language in the proposal in subsection 210 and 210(1)(g) were transferred to this new subsection. The numeric criteria (14 fecal coliform colonies/100mL) are unchanged. Areas used for shellfish are simply called "Shellfish Harvesting". See parts 31 and 32 of the Responsiveness Summary.
- 210(1)(g)(i) was deleted since it is no longer necessary due to changes in the contact recreation subsection. See part 31 of the Responsiveness Summary.
- In the proposal, Ecology simply referenced the notes in the fresh water section, stating they applied "where applicable." In the final version, Ecology actually included the notes that were applicable. With the exception of editing changes to make the notes fit for marine water, the notes match the fresh water notes in section 200. See parts 29d and 30 of the Responsiveness Summary.

210(3) Recreation

- Ecology deleted the proposed title of "water contact" and replaced it with the existing title "recreational." See part 3b of the Responsiveness Summary.
- Since all primary contact recreation waters are currently shellfish harvesting waters, the bacteria indicator for primary contact was changed to 14 fecal coliform colonies/100mL. This matches the shellfish harvesting criteria, and eliminates an area of conflicting criteria. This also makes subsection 210(3)(b)(i) unnecessary, so the subsection was deleted. See parts 32a-b of the Responsiveness Summary.
- Subsection 210(3)(b)(ii) deals with shellfish harvesting, so it was moved to that section.
- In the proposal, Ecology simply referenced the notes in the fresh water section, stating they applied "where applicable." In the final version, Ecology actually included the notes that were applicable. With the exception of editing changes to make the notes fit for marine water, the notes match the fresh water notes in section 200. See parts 29d and 30 of the Responsiveness Summary.

210(4) Miscellaneous Uses

The uses of boating and aesthetics, which are in the existing standards, were reinserted. See part 3b of the Responsiveness Summary.

Section 230 Establishing lake nutrient criteria

230(6)

Due to changes in Section 260, the reference in 230(6) was changed.

Section 240 Toxic substances

240(3) (Notes to Table)

The phrase “existing or designated” was added to “uses” to clarify the types of uses the criteria were intended to protect. See part 35a of the Responsiveness Summary.

Section 250 Radioactive substances

No changes were made to section 250.

Section 260 Natural Conditions and other water quality criteria and applications

260

Subsection 260(1) and (2) were switched to move natural conditions to the top of the subsection.

260(1)

- The natural conditions clause in 260(1)(a) was strengthen to make the use of natural conditions more automatic. This was done to match existing rule language. See part 38b of the Responsiveness Summary.
- The human structural changes clause in 260(1)(b) was broken out for clarity. See part 38e of the Responsiveness Summary.

260(2)

Subsection 260(2)(c) on nonpoint sources was deleted. See part 37a of the Responsiveness Summary.

260(3)

A sentence was added to subsection 260(3)(b) that protects non-fish aquatic species in headwater areas. See part 4b of the Responsiveness Summary.

Section 300 Description

300

The title was changed to make it more accurate.

300(1)

The phrase “The antidegradation policy is guided by…” was moved up to subsection 300(1). This changed the numbering throughout subsection 300.

300(2)

The descriptions of the three tiers in 300(2)(e) were expanded to specifically mention which sources of pollution were included. See part 42c of the Responsiveness Summary.

300(3)

This subsection was added to address major habitat restoration projects. See part 42g of the Responsiveness Summary.

Section 310 Tier I

310(1)

This subsection was expanded to make the requirements of Tier I clearer. See parts 43a-f of the Responsiveness Summary.

310(2)

The phrase “degraded waters” was not clear, so it was replaced. See part 43b of the Responsiveness Summary.

310(3)

The subsection was expanded to clarify the role of natural conditions. The final rule explicitly states that under certain conditions, “the natural condition constitute the water quality criteria.” See part 43f of the Responsiveness Summary.

Section 320 Tier II

320

The entire section was reorganized to increase readability. Many pieces were edited for clarification and moved to new locations. See parts 44-49 of the Responsiveness Summary.

320(2)

Information on the public involvement requirements were added. See part 44 of the Responsiveness Summary.

320(4)

- Language was added stating that the analysis is related to the lowering of water quality, not the action as a whole. See part 44a of the Responsiveness Summary.
- Additional examples for the “overriding public interest” analysis were included in 320(4)(a)(v)-(vii). See part 47 of the Responsiveness Summary.

320(6)

- Subsection 320(6)(b) was simplified to one sentence to more accurately state the process for general permits or control programs. See part 48 of the Responsiveness Summary.
- Subsection 320(6)(c)(ii) was modified to match the period of permit reissuance, which may not be exactly five years. See part 48 of the Responsiveness Summary.

320(7)

This new subsection was added to reinforce the existing requirement that Tier I must still be met. See part 44g of the Responsiveness Summary.

Section 330 Tier III

330

An introduction was added to introduce the concept of Tier III(A) and (B). See part 49b of the Responsiveness Summary.

330(1)

- Subsection 330(1)(d) on ecologically significant waters was added to match federal language. See parts 49b and 50d of the Responsiveness Summary.
- Subsection 330(1)(e) on thermal refuges was simplified for clarity. See part 50e of the Responsiveness Summary.

330(4)

- The subsection was changed to make it explicit that Tier III includes “all degradation.” See part 42c of the Responsiveness Summary.
- Subsection 330(4)(d) on atmospheric deposition was simplified. See part 53 of the Responsiveness Summary.

330(5)

Language was added to 330(5) to explain the addition of Tier III(A) and (B). Tier III(B) is similar to Tier II½. See part 49b of the Responsiveness Summary.

Section 400 Mixing zones

No changes were made to section 400. See part 55 of the Responsiveness Summary.

Section 410 Short-term modifications

410

The introduction phrase was changed to re-insert existing language (in a modified form) concerning the time limits of short-term modifications. This helps the reader understand what is meant by “short-term.” See part 56a of the Responsiveness Summary.

410(1)

Changes were made for clarity, particularly with respect to the terminology around “uses.” The subsection addressing the fact that other rules still have to be met was moved. See part 56a of the Responsiveness Summary.

410(3)

Editorial changes were made for clarity, particularly with respect to the terminology around “uses.” See part 56a of the Responsiveness Summary.

410(4)

The subsection addressing the fact that other rules still have to be met was moved. The numbering of the section was changed.

410(5)

Editorial changes were made for clarity.

Section 420 Variance

420

The structure and numbering of the section was modified for clarity and readability.

420(1)

The requirements in 40 CFR 131.10(h) were not reference in the proposal. The final now references those requirements. See part 57 of the Responsiveness Summary.

420(4)

Subsection 420(4) was added so the reader is aware of the requirement for EPA to approve variances. See part 57 of the Responsiveness Summary.

Section 430 Site Specific Criteria

430

The structure and numbering of the section was modified for clarity and readability. See part 58 of the Responsiveness Summary.

430(1)

- An new introduction to site specific criteria was added to 430(1). See part 58 of the Responsiveness Summary.

- The requirements in 40 CFR 131.11 were not reference in the proposal. The final now references those requirements. See part 58 of the Responsiveness Summary.

430(4)

Subsection 430(4) was added so the reader is aware of the requirement for EPA to approve site specific criteria. See part 58 of the Responsiveness Summary.

Section 440 Use attainability analysis

440

- The structure and numbering of the section was modified for clarity and readability. See part 59a of the Responsiveness Summary.
- The differences between a "request to conduct a UAA" and the actual UAA was clarified. See part 59a of the Responsiveness Summary.

440(9)

Subsection 440(9) was added so the reader is aware of the requirement for EPA to approve UAAs. See part 59a of the Responsiveness Summary.

Section 450 Water quality offsets

450(2)

Extraneous language in 450(2)(a) was deleted. See part 60 of the Responsiveness Summary.

Section 500 Achievement considerations

No changes were made to section 500.

Section 510 Means of implementation

510(1)

Editorial changes were made for clarity, including the subsection dealing with discharges violating standards.

510(5)

- Subsection (a) was modified so it would not be construed that new dams might not have to meet water quality standards.
- Editorial changes were made for clarity.

- Additional examples were added to (g)(ii) so it would not appear that the water quality standards were limiting flexibility. See parts 61-62 of the Responsiveness Summary.

Section 520 Monitoring and compliance

No changes were made to section 520. See part 63 of the Responsiveness Summary.

Section 530 Enforcement

No changes were made to section 530.

Section 600 Use designations – fresh waters

600

- Structural changes were made to section 600. See part 64 of the Responsiveness Summary.
- The old sections 600(1)-(4) were deleted. The information is now in 600(1) and Table 602.

600(1)

This new subsection was added to assign uses to waters. Of particular note are the categories of core rearing, non-core rearing, and extraordinary primary contact recreation. These three use categories were not in the proposal, and they are assigned to only certain water bodies. These three use categories were developed to accommodate criteria in the existing standards that are not being changed. The system for assigning waters matches the class system in the existing standards. See changes in section 200 for more details.

600(2)

This subsection was added to reinforce that Washington's water quality standards do not apply on Indian reservations. See part 65b of the Responsiveness Summary.

Table 600

Table 600 (the key to Table 602) was modified to incorporate the changes made in sections 200 and 602.

Section 602 Table 602 – Use designations for fresh waters by water resource inventory area (WRIA)

602(1)

- The introduction in 602(1) was changed to explain the modified Table 602.
- The unnecessary reference to UAAs was deleted.

602(2)

The subsection was added so it was clear to the reader that Table 602 was necessary, despite the fact that it is called an "illustration."

Table 602

- The format of the table was completely changed. Each use is now listed across the top of each page. The changes in the categories match the changes made in section 200. See part 65b of the Responsiveness Summary.
- Various geographic errors in the table were corrected. See part 65b of the Responsiveness Summary.
- Certain waterbodies were split up into multiple descriptions to accommodate the changes in section 200.
- The phrase "1-DMax" was added to the special temperature conditions to clarify the metric. See part 65c of the Responsiveness Summary.
- All of the waterbodies listed in the existing standards are now included in Table 602 to accommodate the changes in section 200.

Section 610 Use designations – Marine waters.

610

- Structural changes were made to section 610.
- The old sections 610(1)-(3) were deleted. The introduction now correctly states that all marine waters are listed in Table 612.

Table 610

Table 610 (the key to Table 612) was modified to incorporate the changes made in sections 210 and 612.

Section 612 Table 612 – Use designations for marine waters

612(1)

The introduction in 612(1) was changed to explain the modified Table 612.
The unnecessary reference to UAAs was deleted.

612(2)

The subsection was added so it was clear to the reader that Table 612 was necessary, despite the fact that it is called an "illustration."

Table 612

The format of the table was completely changed. Each use is now listed across the top of each page. The changes in the categories match the changes made in section 210.

See attached Chart that provides a crosswalk from current standards to the draft rule and the federal requirement.

Current Standards 9/97	Proposed Standards	Federal Requirement
173-201A-010 Introduction.	173-201A-010 Purpose. *Modified*	CFR 131.2
173-201A-020 Definitions.	173-201A-020 Definitions. *Modified*	Not required.
173-201A-030 General water use and criteria classes.	173-201A-200 Fresh water designated uses and criteria. 173-201A-210 Marine Water Designated Uses and Criteria *Modified*	CFR 131.10-Designated uses CFR 131.11-Criteria
Fecal coliform for fresh & marine waters: 030(1)(c)(i) (A)(B) 030(2)(c)(i)(A)(B) 030(3)(c)(i)(A)(B) 030(4)(c)(i) 030(5)(c)(i)	Bacteria: Fresh water 200(2)(b) Marine water 210(2)(b)	2002 EPA Federal Guidance on Bacteria
Dissolved Oxygen-Fresh 030(1)(c)(ii)(A) 030(2)(c)(ii)(A) 030(3)(c)(ii)(A) 030(4)(c)(ii) 030(5)(c)(ii)	No change	
Temperature 030(1)©(iv) 030(2)©(iv) 030(3)©(iv) 030(4)©(iii) 030(5)©(iv)	Temperature Fresh water 200(1)©	April 2003 Region 10 Temperature Criteria guidance
Toxic narrative: 030(1)©(vii) 030(2)©(vii) 030(3)©(vii) 030(4)©(vi) 030(5)©(vii)	Toxic, radioactive & deleterious 260(a)	*No change*
Aesthetic narrative: 030(1)©(viii) 030(2)©(viii) 030(3)©(viii) 030(4)©(vii) 030(5)©(viii)	Aesthetic values 260(b)	*No change*
	Nonpoint source pollution	

	260©	
173-201A-030(6) Establishing lake nutrient criteria.	173-201A-230 Establishing lake nutrient criteria *Same as 7/97*	*No Change*
173-201A-040 Toxic substances.	173-201A-240 Toxic Substances *Modified for Ammonia and minor edits*	CFR 131.36-Toxics Criteria for those states not complying with CWA section 303(2)(b).
040(3)-Table of Toxic criteria	Table 240(1)(f) & (g) Ammonia equations modified	*Partial change based on updated EPA guidance*
173-201A-050 Radioactive substances.	173-201A-250 Radioactive substances. *Same as 7/97*	*No change*
173-201A-060 General considerations.	173-201A-260 Application of water quality criteria.	*No substantive changes in this section—all parts moved to other sections*
060(1)	260(3)(c)	*No change*
060(2)	260(e)(i)-(ii)	*No change*
060(3)	200(2)(b)(i)	*No change*
060(4)(a)-(c)	200(1)(f)(ii)-(iii)	*No substantive change*
060(5)	510(1)(a)-(b)	*No substantive change*
060(6)	510(1)	*No substantive change*
060(7)	260(3)(g)	*No substantive change*
060(8)	260(3)(h)	*No substantive change*
060(9)	200(1)(c)(vii)	*No change*
060(10)(a)-(c)	260(3)(i)(i)-(iii)	*No change*
070(2)	260(2)	*Statement on natural conditions broadened to include human structural changes as determined consistent with 40 CFR 131.10(g)(3)&(4)*
	260(3)(f)	*New subsection for exempting human-created waters managed primarily for the removal or containment of pollution. Not federal requirement.*
173-201A-070 Antidegradation.	173-201A-300 Purpose. 173-201A-310 Protection of Existing uses 173-201A-320 Protection of Waters with better water quality than the standards *Modified*	CFR 131.12-Antidegradation
173-201A-080 Outstanding resource waters.	173-201A-330 Protection of Outstanding National Resource Waters *Modified*	CFR 131.12-Antidegradation
173-201A-100 Mixing zones.	173-201A-400 Mixing zones. *Same as 7/97*	*No change.*
173-201A-110 Short-term modifications.	173-201A-410 Short-term modifications *Modified*	*No substantive changes*
173-201A-040 (3) Table, Note dd.	173-201A-420 Water Effect Ratios. *New Section in Tools*	*No change from current standard*
	173-201A-430 Water Quality Offsets	*No federal requirement*

	New Section	
	173-201A-440 Variances *New Section*	Must comply with CFR 131.10(g)
	173-201A-450 Site Specific Criteria. *New Section*	Must comply with CFR 131.10
	173-201A-460 Use Attainability Analysis. *New Section*	Must comply with CFR 131.10
173-201A-120 General classifications.	Deleted.	*No substantive change.*
173-201A-130 Specific classifications -- Freshwater.	173-201A-600 Table 602 Most Stringent Use Designations for Fresh Waters by Water Resource Inventory Area (WRIA)	No required but must be consistent with CFR 131.10
173-201A-140 Specific classifications -- Marine water.	173-201A-610 Table 612 Most Stringent Use Designations for Marine Waters	No required but must be consistent with CFR 131.10
173-201A-150 Achievement considerations.	173-201A-500 Achievement considerations. *Same as 7/97*	*No change*
173-201A-160 Implementation.	173-201A-510 Means of Implementation. *Modified*	*No substantive change*
	510(5) Compliance schedules for dams	*New subsection. No federal requirement.*
173-201A-170 Surveillance.	173-201A-520 Monitoring and Compliance. *Same as 7/97*	*No change*
173-201A-180 Enforcement.	173-201A-530 Enforcement. *Same as 7/97*	*No change*

WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Implementation Plan

for the Revisions to Chapter 173-201A WAC,

Water Quality Standards for Surface Waters of the State of Washington

As required by the Washington State Administrative Act, RCW 34.05.

July 2003

Implementation Plan

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Chapter 173-201A WAC,

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As required by the Washington State Administrative Act, RCW 34.05.

This was prepared in conjunction with the CR102

Prepared by:

Washington State Department of Ecology

Water Quality Program

July 2003

APA Requirements
Table of Contents

1. Describe how the Agency intends to implement and enforce the rule. Include a description of the resources the Agency intends to use. 62

2. Describe how the Agency intends to inform and educate affected persons about the rule. 71

3. Describe how the Agency intends to promote and assist voluntary compliance for this rule. 72

4. Describe how the Agency intends to evaluate whether the rule achieves the purpose for which it was adopted, including to the maximum extent practicable, the use of interim milestones to assess progress and the use of objectively measurable outcomes. 72

5. Describe how the Agency intends to train and inform Ecology staff regarding new rule or rule amendment. 74

6. Identify supporting documents that may need to be revised because of the rule amendment. Or identify new supporting documents that need to be developed because of a new rule. 74

Implementation Plan for Revisions to Chapter 173-201A WAC

Describe how the Agency intends to implement and enforce the rule. Include a description of the resources the Agency intends to use.

In general, the Washington State Department of Ecology (Ecology) will implement and enforce the revised rule in the same way the current rule is implemented and enforced. Part V of the revised rule (WAC 173-201A-500-530), briefly discusses overall implementation, and other sections of the rule address specific implementation issues.

Changing the Format of the Standards for Fresh Water

For more information on changing the format of the standards to use-based standards, please see the focus sheet, decision memo and final environmental impact statement (FEIS).

The switch from class-based standards to use-based standards involves changing the structure of the water quality standards. The standards will no longer be organized by the current class format (Class AA, Class A, Class B, Class C, and Lake Class). The reformatting of the standards to a "use based" format will change the appearance of the current list of specific classifications in fresh waters (currently in WAC 173-201A-130) to the revised table found in Part VI, WAC 173-201A-602, specific use designations for fresh waters. Each water body will have beneficial uses assigned to it. The beneficial use that has the most stringent criteria will dictate what criteria apply to a particular waterbody.

The switch to use-based standards is designed to provide more flexibility in determining which uses are most appropriate for a particular waterbody. It is important to note that any change to a waterbody's designated uses will require a rule revision of the water quality standards. Changes that reduce protection for water quality are required by federal regulations to be justified through a Use Attainability Analysis (UAA). All UAAs are required to go through formal state rule-making procedures and then must be approved by the Environmental Protection Agency (EPA) before they are final.

Ecology has draft guidance on completing UAAs. Once this rulemaking effort is complete Ecology will begin work to finalize the UAA guidance. This will be done in conjunction with key interest groups. The guidance will include:

- Information on what needs to be included in a UAA
- How to recognize when a UAA will not address specific issues
- Who to involve in the review of a UAA
- How to work with key interests like tribes
- Strategy on how to integrate UAAs with triennial reviews and other rule updates

Ecology (either the headquarters water quality standards team or by staff in regional offices) will need to review and make decisions on UAAs. All UAAs will have to go

through rule making and be approved by EPA. The ability to conduct or review UAAs in a timely manner will be dependent on agency resources. After rule adoption, Ecology's water quality program will assess what waterbodies in the state are known to have use designations that do not appear to be correct, and will assess resources to address the most pressing issues. Through the Water Quality program's budget and planning development the Program will determine the availability of resources to address these isues.

Antidegradation Plan Implementation

For more information on antidegradation, please see the focus sheet, decision memo and final environmental impact statement (FEIS).

The antidegradation plan included in the formal changes to the water quality standards is an expanded description of the current antidegradation language found in current WAC 173-201A-070. The new antidegradation section is in the rule at Part III, WAC 173-201A-300 through 330.

The revised antidegradation plan consists of the following three tiers:

Tier I

Tier I (WAC 173-201A-310) calls for providing a level of protection of water quality necessary to fully protect existing and designated uses. These provisions are currently being implemented and enforced through Ecology's permit program, TMDL program, and other water quality programs, and will continue to be similarly implemented under the revised rule. Tier I protection is not a "new" level of protection, but actually restates the intent of the chapter, to provide standards to protect the beneficial uses of a waterbody.

Tier II

Tier II (WAC 173-201A-320) calls for the protection of high quality waterbodies. Where a waterbody is demonstrated to be of a higher quality than a criterion assigned to that water, the revised rule requires that water quality be protected at the higher level unless the department determines that a lowering of water quality is necessary and in the overriding public interest.

The language for Tier II dictates that new and expanded activities applying for a permit or new or reauthorized general permit and pollution control programs, that have been determined to have a measurable lowering of water quality, must undergo a Tier II analysis. Information to determine if the proposed discharge will have a measurable change will be provided by the applicant, and analyzed by Ecology staff. Once an activity has been determined to cause a measurable lowering in water quality, then an analysis must be conducted to determine if the lowering of water quality is necessary and in the overriding public interest. Information to conduct the analysis must be provided by the applicant seeking a permit, or the department in developing a general permit or pollution control program. It must include sufficient information to determine

the activity is necessary and in the overriding public interest. The requirements for the Tier II analysis will be incorporated into the water quality permitting process.

When entities proposing a new or expanded activity apply for an individual permit, Ecology will work with them to get information to determine if the waste discharge is expected to cause a measurable change in the physical, chemical, or biological quality of a waterbody. Activities with no measurable change will not be required to undergo further Tier II analysis.

Entities with activities that are likely to cause a measurable change will be required to provide information to show that their activity is necessary and in the overriding public interest, as described in the revised rule at WAC 173-201A-320(4). This part of the rule requires that information be submitted to show that the lowering of water quality is in the overriding public interest, and that alternatives to prevent or minimize the lowering of water quality have been considered. Many of the elements required to fulfill these two requirements are already part of the current permitting process. Ecology will have the discretion to require additional information to conduct this analysis, and will base its final decision on whether to allow the activity on water quality effects, environmental impacts, and estimates of the costs associated with the proposed action.

General permit and water pollution control programs are developed for a category of dischargers that have similar processes and pollutants. New or reissued general permits or other water pollution control programs authorized, implemented, or administered by the department will undergo an analysis under Tier II at the time the department develops or revises the general permit or program. Individual activities covered under these general permits or programs will not require a Tier II analysis.

For developing general permits and new water pollution control programs, the department recognizes that many of these programs are in a continual state of improvement and development. As a result, information regarding the existence, effectiveness, or costs of control practices for reducing pollution and meeting the water quality standards may be incomplete. In these instances, the antidegradation requirements for Tier II will be considered met for general permits and programs that have a formal adaptive management process to select, develop, adopt, and refine control practices for protecting water quality and meeting the intent of this section.

Each new Water Quality Permit fact sheet will include a specific section on antidegradation. Permit writers will need to work with new facilities to meet the new requirements for the Tier II analysis, where applicable. The analysis will be included with new permit information. A summary of the Tier II analysis will also be part of the public notice for each new permit.

Ecology staff will need to develop additional guidance for permit writers to use when they implement the new Tier II language. As soon as this rule effort is complete, headquarters staff in the Ecology Water Quality Program will work with permit writers to prioritize the guidance they need. Guidance on the antidegradation part of the rules will be done in priority order.

Tier III

Tier III (WAC 173-201A-330) provides a process for designating an "outstanding resource water" (ORW), and then providing full protection for the water quality and uses of those waters. There are no waterbodies currently in this category, and Ecology is not proposing to assign any waters to this category during this rulemaking.

In the future any entity (including Ecology) may nominate waters for this level of protection. Ecology would then determine if the waterbody met the eligibility requirements outlined in the water quality standards WAC 173-201A-330(1). Once a waterbody is nominated, Ecology conducts a public process to consider the designation, and will make a decision on whether the waterbody meets the eligibility requirements. If, as a result of information provided and the public process, Ecology determines that the waterbody should be designated as Tier III, it will propose that designation in the next package of Water Quality Standards rule revisions. As part of that rule process Ecology will communicate with affected communities to make sure they support this designation. Ecology may also take information on nominations to legislative environmental committees to measure their support. This designation is significant and is similar to other designations the legislature makes for special public protection, such as "shorelines of statewide significance."

Ecology has included the concept of a Tier II ½ into the Tier III designation process. This allows the ability to chose between two levels of protection as part of the Tier III process. The first, or highest, level would provide full non-degradation protection, while the second would allow for de minimis degradation from actions using state of the art pollution control methods. This second choice for Tier III will allow some activities to occur in and around the waterbody that might not otherwise be allowed under the highest level of Tier III protection. Discharges that would not have a measurable increase in pollutants, or nonpoint source activities that used strict BMPs to control pollution, would be allowed under the second choice for Tier II. This choice was suggested by many commenters as being a viable one for waterbodies that are adjacent or run through communities, since the nondegradation status would likely be viewed as not allowing any growth potential for the community.

Assigning a waterbody to Tier III would require Ecology to go through the formal rulemaking process. Once a waterbody is designated as Tier III water, Ecology will need to monitor the actions on the water to ensure that waste discharges or activities that may cause a lowering of water quality are prevented, or minimized. Tier III designated waters under choice one will, in essence, become areas where no further permitted activities will be allowed if doing so would lead to a lowering of water quality. Tier III designated waters under choice two would allow activities that caused no more than de minimis pollution to occur.

Criteria Changes

For more information on the final changes to temperature, bacteria, and ammonia criteria, please see the focus sheet, decision memo and final environmental impact statement (FEIS). The changes revise criteria numbers and metrics for temperature and bacteria criteria.

Temperature

Temperature criteria are expressed as a "seven day average of the daily maximum, " or 7-DADMax. Automatic, continuous temperature monitoring devices are recommended for entities determining compliance with the criteria. Additional notes on implementing and measuring temperature are provided in WAC 173-201A-200(c)(i)-(viii).

A new narrative temperature criteria is intended to protect summer char and salmons spawning areas. Development of a formal policy to determine how waters will be identified for summer spawning, as well as maps and/or a table showing the identified areas, will be necessary after the rule becomes adopted.
Additional guidance from Ecology water program staff on application of the temperature criteria will be necessary to ensure that the criteria are consistently applied in permitting, 303(d) listing policies, and resulting TMDLs.

Bacteria

Ecology is proposing to change the bacteria indicator for secondary contact recreation in marine waters (former marine class B and C waters). Ecology will continue to use fecal coliform for primary and secondary contact recreation in freshwater and for primary contact in marine water. Enterococci will be the new indicator in marine water for secondary contact recreation. Fecal coliform would continue to be used for shellfish protection programs. For marine waters with both contact recreation and shellfish as designated uses, the fecal coliform criteria will apply. Additional notes on applying the bacteria criteria is available in WAC 173-201A-200(2)(b)(i)-(vi).

Additional guidance from Ecology headquarters water program staff may be necessary to ensure that the new enterococci criteria are consistently applied in permitting, 303(d) listing policies, and resulting TMDLs.

Ammonia

Waters protected for salmonids (either spawning or rearing) would use the chronic "salmonids present" formulas in WAC 173-201A-240 to calculate allowable ammonia concentrations. These criteria do not change from the current rule. In other situations the new EPA criteria would be applied as specified in the table below.

Recommended freshwater ammonia criteria and areas of application.

Criterion	Area of application
1999 update acute criterion	All freshwaters
1999 update chronic criterion for "fish early life stages absent"	Freshwaters with no early life stages present and not designated as salmonid habitat

1999 update chronic criteria for "fish early life stages present"	Freshwaters with early life stages of non-salmonid fish species present and not designated as salmonid habitat
Existing chronic criterion for "salmonids present"	All freshwaters with salmonid habitat as a designated use

Incorporating and Implementing Rule Revisions

Approval of the New Standards by EPA

After rule adoption, the rule becomes effective for the state after 30 days. However, the state water quality standards must also be approved by EPA to determine that rule complies with the Clean Water Act , and in turn EPA must consult with the federal services (National Marine Fisheries Services and the U.S. Fish and Wildlife Service) to determine that the rule complies with the Endangered Species Act (ESA).

Upon submittal of the final rule package to EPA, they have 60 days to approve or 90 days to disapprove the state's rule package, as required by the Clean Water Act. However, the timing of this action is complicated by the ESA consultation that must occur on the rule, since the federal services have a longer time frame to work under, and often are not able to complete their consultation within that timeframe.

This, unfortunately, leaves Ecology, and the rest of the state, in a difficult position with regard to what standards should be applied in the interim (between state adoption and final EPA approval). EPA is committed to working closely with the state to close the gap on the amount of time the new rule is held in "limbo". EPA can take 3 courses of action on the state's new rule:

1. Approve within 60 days of submittal;
2. Conditionally approve pending ESA consultation within 60 days of submittal; or
3. Disapprove within 90 days of submittal.

Ecology water quality staff will work with other Ecology staff and the public to keep them up-to-date and informed on how federal approval of the new rule is proceeding.

List of impaired waters - 303(d)

Periodically, Ecology produces a list of impaired waters that do not meet the water quality standards. This list is commonly called the 303(d) list, since the requirement comes from Section 303(d) of the federal Clean Water Act. The current (1997) water quality standards are being used to develop the 303(d) list for 2002. Future 303(d) lists will use the water quality standards that have been adopted at the time the 303(d) list is compiled. These new water quality standards will be used to determine impaired water bodies for future listings.

TMDLs

There is continuous ongoing TMDL work that will be in various stages of completion once the standards are finalized. This chart describes how Ecology plans to manage that work once the standards become effective.

TMDL Status	Transition Solution
1. TMDL formally approved, submitted, or ready to be submitted	• Keep TMDL in place, even if criteria in the new rule is different • Continue implementation measures • Monitor compliance with TMDL allocations • Compare TMDL targets to new criteria, but not required to change targets • Water body will be placed in category 4a: Has a TMDL - in accordance with the new 303(d) listing policy
2. TMDL not yet approved, but field work completed and report may or may not be completed	• Proceed with submittal of TMDL package prior to the effective date of newly adopted standards • The Summary Implementation Strategy in the TMDL needs to address monitoring plan to pick up new criteria if possible • Possible exceptions requiring closer evaluation involve point source dominated TMDLs
3. TMDL study in progress and field work begun but not completed	• Continue study but include new criteria, if possible • Analysis may still be based on old criteria • Extent of inclusion of new criteria depends on individual study and the difference between the old and new criteria • Develop monitoring plan that incorporates new criteria
4. TMDL study planned and no field work yet begun	• Include new criteria in study design and sampling and drop old criteria
5. 303(d) listed but no priority set for doing study	• Retain on 303(d) list • Continue to scope and schedule projects. When projects are selected for work, the project would be treated the same as in (4) above

Permits

Change in format to use-based: Permit writers will need to refer to the new tables in WAC 173-201A-602 & 612 to determine what uses and related criteria apply to the waterbody the discharge is proposing to go into.

Antidegradation: Permit writers will need to incorporate new requirements of the antidegradation section into permit applications, fact sheets, public notices, and information needed to conduct a Tier II analysis. This will be an additional workload for permit writers, but it should be noted that antidegradation requirements have been

streamlined to be consistent with the current permitting process so that the additional workload is minimized to the degree possible.

It is also noted that much of the information needed for a Tier II analysis is already a part of the current permitting requirements. For example, most of the information suggested for the alternatives analysis described in 173-201A-320(4)(b) is already required as part of the AKART process and accompanying engineering reviews required for new and expanded actions requiring a permit. Information suggested for determining that the potential lowering of water quality is in the public interest should be available by the applicant if they have done any kind of an analysis to determine that their activity or business will be successful.

Permit writers will need to be aware of Tier III waters as they get designated, so that proposed discharges are prevented or minimized in these protected waters. There are currently **no** Tier III waters designated in the state.

<u>Criteria changes:</u>
Criteria for temperature will need to have new metrics applied to permit discharge requirements.
A new narrative temperature criteria to protect summer char and salmon spawning areas will require permit writers to determine whether the application for discharge is located in a summer salmon spawning area, and whether stricter criteria will apply for temperature as a result. Development of a formal policy to determine how waters will be identified for summer spawning, as well as maps and/or a table showing the identified areas, will be necessary in order for permit writers and others to implement this new narrative criteria.

Since the indicator for bacteria in Class B and C marine waters (see Table 612 in the rule) is changing, Ecology, in collaboration with other entities, may choose to determine technology-based limitations for enterococci that are equivalent to the current fecal coliform limits. Water quality-based effluent limits for enterococci would be developed similar to how as fecal coliform limits are now.

Ammonia criteria should not affect current permitting efforts since all waters will be required to continue to apply the “salmonids present” formula, except for acute.

Changes to all criteria will be implemented when permits are renewed or when new permits are issued.

Permits
There is continuous ongoing permit work that will be in various stages of completion once the standards are finalized. This table describes how Ecology plans to manage that work once the standards become effective.

Permit Status at the Date of Adoption	Transition Solution
1. Public notice completed	Issue permit but make sure applicant understands that new rules were just adopted and might cause changes in the next permit.
2. Entity review completed but public notice not started. New standards don't affect reasonable potential or the limits.	Go to public notice with permit
3. Entity review completed but public notice not started. New standards cause reasonable potential and effluent limits	Go to public notice with the permit. Prior to notice, Ecology will first estimate whether the reasonable potential determination would likely change if the standards become effective (get approval from EPA), and whether it would make a significant difference to our decision and conditions.
4. Entity review not begun	Use new criteria to do reasonable potential and effluent limits.

401 Certifications

Certifications will be issued based on the standards that are in effect when the certification is issued. When we go to public notice, we can estimate how the certification might change if the standards become effective (get approval from EPA) prior to issuance of the certification, and whether it would make a significant difference to our decision and conditions.

All certifications that go to public notice after the standards are revised should be based on the new standards.

Monitoring

Monitoring for temperature will need to switch from grab samples to continuous monitoring in order to effectively measure compliance with the 7-DADMax metric.

Ecology and other entities currently monitor for fecal coliform. Since the indicator for bacteria is proposing to change for Class B and C marine waters, entities monitoring in these areas will gradually need to switch over to monitoring for enterococci. All other monitoring for bacteria will be using the existing fecal coliform indicator. The laboratory analysis procedures are different for enterococci. For facilities using technology-based

permits, Ecology will need to provide guidance on how long fecal coliform monitoring will continue.

Other

Tools

The final standards include a procedural discussion of tools that can be used to adjust water quality criteria for individual waterbodies, or to adjust uses on a waterbody. The rule language references the federal requirements so that it is clear what is required to meet the Clean Water Act. Guidance for how and when to use some of the tools will need to be developed once the rule is complete. Ecology will work with key internal and external interests to develop that guidance. It is not easy to use these tools, and obtaining EPA approval requires careful analysis. It will be important for Ecology to make this fact clear to all parties interested in applying them.

Describe how the Agency intends to inform and educate affected persons about the rule.

Previous Activities

Affected persons and the public have been informed and educated about the proposed changes to the water quality standards over the past several years. Since this rulemaking began in the early 1990's, there have been numerous advisory panels, technical and policy work groups, stakeholder discussions, and public workshops and meetings. Statewide public workshops were held on two occasions on early drafts of the rule, with the latest held in seven locations around the state in January 2001. The most recent comprehensive stakeholder meetings were a series of five all-day meetings held from December 2001 to June 2002.

For the formal rulemaking process, notices were mailed to approximately 4,000 individuals informing them of Ecology's final changes to adopt the water quality standards. Public workshops and hearings on the formal rule proposal were held in eight locations around the state in January and February 2003. The purpose of these workshops and hearings was to inform and educate the public on the reasons for the proposed changes and to give the public an opportunity to formally testify on the proposal. During the public comment period, Ecology also consulted directly with tribes.

All of the formal changes to the water quality standards are available to the public on Ecology's website (www.ecy.wa.gov/programs/wq/swqs). This material includes the final regulatory language and supporting documentation. The water quality standards ListServ will continue to provide updates. Interested persons can obtain written material upon request.

Future Activities

After rule adoption, Ecology will work with interested parties to prioritize guidance document needs. Currently, it is anticipated that Antidegradation Implementation Plan and Use Attainability Analysis guidance will be the initial primary focus for guidance development.

Ecology will continue to be available to external interests to explain the formal rule changes.

Ecology will also prepare a formal package with the final rule and all supporting documentation, including biological information related to criteria changes, to the submit to EPA for approval. Until EPA gives written approval of the state's new standards, they cannot be used for federal actions (including NPDES permitting and 401 certifications).

Describe how the Agency intends to promote and assist voluntary compliance for this rule.

Ecology will continue to work with key interests that are covered under the water quality standards. Ecology will also work with a broad group of interests on the development of Use Attainability Analysis guidance, Antidegradation Implementation guidance and any other guidance that is necessary to help comply with the standards.

Ecology continues to encourage voluntary compliance with the water quality standards. Ecology supports numerous water quality programs that, at least in part, promote voluntary compliance:

TMDLs
Nonpoint Pollution Programs
319 Grant Programs
SRF and Centennial Grants and Loans
Watershed Planning
The Engineering Assistance Team

These programs provide a great deal of financial and technical support to entities voluntarily complying with the water quality standards.

Describe how the Agency intends to evaluate whether the rule achieves the purpose for which it was adopted, including to the maximum extent practicable, the use of interim milestones to assess progress and the use of objectively measurable outcome.

The purpose of the water quality standards is to restore and maintain the chemical, physical, and biological integrity of Washington's waters. More specifically, the water quality standards are designed to protect public health, public recreation in the waters, and the propagation of fish, shellfish, and wildlife. The numeric and narrative criteria in the water quality standards are intended to protect those beneficial uses.

The formal changes to the water quality standards will be considered to have achieved their purpose if they fully protect the beneficial uses. The water quality standards should also protect those beneficial uses in the least burdensome way.

Many aspects of the formal rule change include interim milestones in the criteria themselves. This includes nonpoint source and stormwater control programs, compliance schedules for permits, and 401 certifications for dams.

Switch to Use-Based Format for Fresh Waters

The purpose of changing from the class-based to use-based format for fresh waters is to set up a format to make future application of the water quality standards more meaningful and less burdensome. More specifically, the current class-based system allows little flexibility in deciding which uses and associated criteria to assign to a particular waterbody. Ecology will consider the use-based format a success if it allows future removal of uses not existing or attainable on a waterbody in a manner that is reasonable and less burdensome than the current class-based system, and if removal of uses not existing or attainable then allows the agency to accurately reflect the correct beneficial uses for a waterbody.

Antidegradation

The purpose of the antidegradation plan is to:

- protect existing and designated uses of a waterbody and ensure water quality standards are achieved,
- for waters that have higher water quality than the standards, allow a lowering of water quality only where it is necessary and in the overriding public interest, and
- provide a mechanism to protect waters that are an outstanding resource water.

Water quality is monitored by Ecology and other entities. This monitoring will help show if the antidegradation plan is successful. If it is successful, there will be a decrease in waters that violate the standards and an increase in overall water quality. Of course, the antidegradation plan is only part of a much larger attempt to improve water quality.

The antidegradation plan was designed to be as non-burdensome as possible while still accomplishing the goals of protecting water quality and meeting the applicable federal requirements. Thus, the success of the antidegradation plan can also be measured by how smoothly it fits in with existing permit and program procedures and requirements.

The number of 303(d) listed waterbodies should decrease over time as a result of the implementation of the antidegradation component of this rule.

Criteria Changes

The temperature and are designed to protect aquatic life, especially salmonids. Compliance with these criteria will be evaluated through monitoring by Ecology and other entities. It should be noted that temperature is one parameter that affects the long-term health of aquatic life.

Ammonia and bacteria changes were made to update the standards with EPA guidance and requirements.

Describe how the Agency intends to train and inform Ecology staff regarding new rule or rule amendment.

Throughout the rulemaking process, Ecology staff have been informed of the proposed changes to the water quality standards. Headquarter's water quality standards staff have visited each regional office and held informational meetings for staff a number of times. These meetings will continue on a regular basis to achieve successful rule implementation. Staff working directly with the water quality standards, especially the formal changes, will receive additional training and involvement in guidance development. Additional training will take place in various forums such as: the permit writer workgroup, TMDL implementation workshops, engineers' workgroup, permit writer unit supervisors workgroup, and a variety of other groups where staff implementing the standards can get up-to-date rule information.

Training on implementation of the revised water quality standards will also be made available to those that request training.

Identify supporting documents that may need to be revised because of the rule amendment. Or Identify new supporting documents that need to be developed because of a new rule.

Documents that will need to be revised:

- Permit Writers Manual
- TMDL guidance manual
- Permits and applications will need to be updated to reflect the new citations
- 303(d) listing policy for future listings will need to reflect new rule

Guidance documents that need to be developed:

- Antidegradation Implementation Guidance

- Applying new tools for criteria or uses (e.g., variances, site specific criteria, use attainability analysis)
- Guidance on application of new criteria as needed
- Other guidance that internal and external interest groups request

Documents in support of temperature criteria changes:

- A formal policy on how summer char and salmon spawning areas will be identified in order to apply the narrative temperature criteria to protect summer spawning
- Maps and/or a table identifying summer char and salmon spawning areas, to be used by Ecology and the public in application of the temperature criteria