



Water Quality Program Policy

Chapter 1

WQP Policy 1-11

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*References: Federal Clean Water Act
Section 303(d)
40 CFR 130.7
40 CFR 25*

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Assessment of Water Quality for the Section 303(d) List

Purpose: The state is required under Section 303(d) of the Clean Water Act (CWA) to prepare a list every two years containing waterbody segments not expected to meet state surface water quality standards after implementation of technology-based controls. The list contains the "water quality limited segment(s)" defined in 40 CFR 130.2(j). The state is required to complete a total maximum daily load (TMDL) for all waterbody segments on the list. Guidance provided by the EPA does not deal with many issues related to decisions that must be made to prepare the list. This policy was developed to address these issues.

Application: To Water Quality Program Staff when conducting assessments for the Section 303(d) List.

1. General Approach

The state is required under Section 303(d) of the Clean Water Act (CWA) to prepare a list every two years containing waterbody segments not expected to meet state surface water quality standards after implementation of technology-based controls. A review is conducted by Ecology staff using new information to revise the last list approved by EPA. A new list is then proposed for public comment that incorporates this new information. The federal regulations for public notice requirement (40 CFR Part 25) will be used to solicit information collected by interested and affected parties for revision of the proposed list.

Information received will be assessed against the criteria described in the water quality standards and this policy for identification of waterbody segments for the proposed Section 303(d) list. The criteria were developed to identify only those waterbody segments for which there is good documentation that water quality standards are not being met or will not be met within the next two-year listing cycle.

All potential pollution sources to the problems identified for waterbody segments proposed for listing will be assessed for the level of pollution control currently in place. Waterbodies with standards violations because of natural conditions, with no direct human causes will not be proposed for listing. If any of the water quality problems identified would not be corrected by implementing technology-based controls or through required best management practices, the waterbody will be included on the proposed list submitted to EPA for approval.

2. Tribal Coordination

In accordance with the Centennial Accord, this policy is intended to facilitate intergovernmental cooperation between the State and the federally recognized tribes in Washington State in the development of the state's Section 303(d) lists.

Tribes have independent authority for setting water quality standards and implementing regulations for waters on reservation land under the Clean Water Act and Washington State is bound under the Supremacy Clause of the United States Constitution, article VI, cl.2, to carry out the provisions of the United States Treaties and relevant federal court rulings. This policy is not intended to and does not enlarge, diminish, or define the jurisdiction of the state or the tribes. Nor does this policy limit the right of the State or any tribe to act in other forums to protect its rights.

WQP Staff will cooperate on a government to government basis with the staff of each interested tribe with affected natural resources during the following three steps in the development of the state's Section 303(d) list: 1) policy development, 2) data assessment, and 3) preparation of responsiveness summaries. Cooperation on other Section 303(d) listing tasks such as gathering data, public involvement, and list submittal to EPA may be negotiated as desired.

If a tribe is interested in identifying impaired waters on-reservation in coordination with the state, the water quality program staff will cooperate with tribes who enter into an agreement to: a) use the state's 303(d) process for a joint State and tribal submittal of 303(d) waters on reservation, or b) establish a tribal listing process. However, a tribe may elect to work directly with EPA to develop an on-reservation list and need not cooperate with the state.

The goal of the Water Quality Program is to make decisions by mutual agreement through timely sharing of information, clarification and discussion. Disagreements

will be primarily handled at the staff level. The state and each individual tribe are responsible for making their own final listing recommendations to EPA within its respective delegated Section 303(d) program, insofar as program funding permits.

Areas of specific cooperation during Section 303(d) listing process that are described in writing in a signed agreement with a tribe within Washington State will supplement this policy.

3. Criteria for Information Used in Listing

A. Data received must meet one of the following criteria (1 through 8):

1. For water measurements of temperature, dissolved oxygen, pH, turbidity and total dissolved gas in 10% or more of the measurements and a minimum of at least two measurements are beyond the numeric state surface water quality criteria within the most recent 5 year period that data has been collected.
2. For water samples of toxic pollutants, a minimum of at least two samples exceed the numeric state water quality criteria or the national toxic rule criteria (40 CFR Part 131) and must be sampled:
 - (1) within the same waterbody segment, **and**
 - (2) within the most recent three-year period that data has been collected.
3. Marine sediment samples that do not comply with sediment management standards under WAC 173-204-320.
4. Bioassay tests on freshwater sediments, low salinity sediments, and water column samples show adverse effects as measured by a statistically significant response relative to a reference or control (WAC 173-204-200(15)(b)(i) and WAC 173-201A-040(2)). These tests will be evaluated for use in listing by Ecology staff on a case-specific basis consistent with WAC 173-204-340 and WAC 173-201A-040.
5. Fin fish muscle tissue and whole shellfish fish tissue samples with at least two excursions of single-fish samples or one excursion of a composite of at least five separate fish exceed criteria calculated for human health impacts based on EPA's bioconcentration factors and water column criteria established under the national toxics rule (40 CFR Part 131)
6. The narrative standard for impairment of characteristic uses will be interpreted from three pieces of information:

- (1) documented environmental alteration using a generally accepted method based on site specific information, with literature thresholds appropriate to the situation or with reference sites, **and**
 - (2) documented impairment of a characteristic use on the same waterbody segment, **and**
 - (3) identification of a direct human caused contribution to the environmental alteration.
7. The narrative standard for impairment of characteristic uses of fish and fish habitat due to low instream flows will be interpreted from the four pieces of information shown below. Listing for inadequate water flows will be based only on considering the needs of instream designated uses, and not on out-of-stream uses or needs.
- (1) Instream flow measurements, including but not limited to hydrographs (synthesized hydrographs need to be based on actual flow measurements from the specific stream), **and**
 - (2) documentation of how the specific stream's fish habitat is related to flow (e.g. Instream Flow Incremental Methodology, Toe-Width, minimum flows set in rule or as conditioned by water rights, or other methods that may be appropriate in cases such as falling water or wide delta areas), **and**
 - (3) documented impairment of a fisheries use on the same waterbody segment (e.g. as shown by SASSI, WDFW, or Tribal data, NWPPC Subbasin plans, Ecology Basin Assessments, etc.), **and**
- identified human contribution to the reduction of instream flows below the acceptable level indicated (e.g. evidence of water rights or diversions above the water body segment).
8. A modeling analysis of an existing or proposed activity shows that standards will likely not be met within the next two years. For example, a site specific analysis of a discharge that shows that water quality standards may not be met at the edge of the mixing zone could form the basis for listing.

A. Waterbody segments can be excluded from the proposed list for any one of the following:

1. New information showing that water quality standards are being met. This may include more recent or more accurate data, more sophisticated analysis using a calibrated model, identification of flaws in the original assessment, or changes in standards, guidance, or policy. New data showing standards are now being met should at a minimum be collected at about the same time of year or during the most critical period for the parameter and at the same frequency as the monitoring that was used as a basis to list the water.
2. Appropriate Ecology staff identifies using best professional judgment waterbody segments on the proposed list based on excursions beyond criteria that were caused by natural conditions with no significant human-caused sources. An insignificant human-caused source is one where the excursions beyond criteria would occur if the source were not present. The rationale for each of these judgments will be documented with the list submittal to EPA.
3. Appropriate Ecology staff using best professional judgement and/or appropriate analytical tools identifies that pollution controls which have been completed or are scheduled for implementation will achieve water quality standards on waterbody segments proposed for listing (under 40 CFR 130.7(b)(1)). Per EPA guidance, the following specific information about the controls will be provided to EPA with the list submittal:
 - (1) The controls are specific to the solution of the problem and will result in attainment of applicable water quality standards.
 - (2) The controls are required by permit, license, contract, grant conditions, or other means to assure their completion.
 - (3) The schedule or timeframe for implementation is identified and reasonable.
 - (4) Planned monitoring is identified and/or collected data are evaluated to check the implementation and effectiveness of the controls towards meeting water quality standards.
4. Waterbody segments for which there is a TMDL approved by EPA for a specific parameter will not be placed on the list submitted to EPA. The following information on waterbodies with approved TMDLs will be provided to EPA with the list submittal:

- (1) TMDL parameters and goals
- (2) Implementation status
- (3) Assessment with ambient monitoring if goals are being met.

5. General Considerations

A. The following quality assurance requirements must be met by all data used as a basis to support listing a waterbody segment. Persons submitting data during the public comment period must either provide the relevant quality assurance documentation with the submittal or state that the documentation is available for Ecology staff to review:

1. Sampling and analysis were conducted under a documented quality assurance plan. Guidance documents on preparing quality assurance plans are available from Ecology (publication 91-16) and EPA (publication EPA 841-B-96-003).
2. Laboratory samples were analyzed at a state accredited laboratory (per WAC 173-050 and Ecology Executive Policy 1-22). Field kits using chemical tests are not acceptable. However, use of the Winkler titration method for dissolved oxygen measurement is acceptable from a laboratory that is not accredited by the state, if the detectable difference is less than or equal to 0.2 mg/l (see Standard Methods for the Examination of Water and Wastewater for method details).
3. Field instruments that do not require chemical tests for operation were operated and calibrated according to the manufacturers recommendations, or other acceptable, demonstrated method.
4. Data were reviewed and documented to assure that the objectives of the quality assurance plan were met.
5. Parties submitting information collected by others must also include a statement that documentation showing that the required quality assurance criteria exist and will be provided upon request.

B. Data will be interpreted according to the following policies:

1. Measurements of instantaneous concentrations are assumed to represent the averaging periods specified in the state surface water quality standards for acute and chronic criteria.

2. Sample data that are below detection limits will not be used with criteria that are also below such detection limits.
3. Nondetected analytes will not be used as a basis for listing.
4. Sample data collected below the quantitation limit, but above the detection limit, will be used with criteria that are below the detection limit.
5. Sample data collected between the quantitation limit and the detection limit will not be used with criteria that are also between the quantitation limit and the detection limit, unless replicate samples confirm the result.
6. Decisions on the fish stock status for listing waters under the narrative standards will be using the most recently published information from authorized fisheries management agencies. Newer data submitted for listing decisions will be assessed by Ecology staff. Other fisheries management agencies may be consulted for opinions on impairments of designated fisheries uses. Final decisions on the support of designated uses will be made by Ecology.
7. Sample data of fecal coliform from freshwater will require a minimum of 5 samples collected within a 30-day period to calculate the geometric mean. Sample data of fecal coliform from marine waters will require a minimum of 30 from a systematic random sampling survey or 15 samples from a storm event sampling survey to calculate the geometric mean. If sample sizes are less than that specified, data from two single samples can be used with the criterion for 10% of samples used in calculating the geometric mean (e.g. 100 cfu/100mL for Class A freshwaters or 43 cfu/100mL for Class A marine waters) to list a water segment.
8. Data collected over 10 years old will not be used for listing, unless specific information is identified and/or rationale can be posed that shows these older data likely represent current conditions.
9. Waters where the designated use is impaired solely by physical obstruction will not be listed (per EPA guidance).
10. Under any given situation, Ecology reserves the right to make listing decisions that are not in complete accordance with this policy. The ultimate judgement in listing decisions will be based on

whether designated uses are being supported per the water quality standards and relevant federal regulations or guidance.

DEFINITIONS:

- CFR - Code of Federal Regulations
- CWA - Clean Water Act
- EPA - U.S. Environmental Protection Agency
- TMDL - Total Maximum Daily Load
- WLA - Waste Load Allocation assigned to point sources
- LA - Load Allocation assigned to nonpoint sources
- WAC - Washington Administrative Code
- WQP - Water Quality Program

Approved:

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Date