



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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Seattle, WA 98101

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Reply To
Attn Of: OW-130

Ken Koch
Water Quality Assessment Coordinator
Water Quality Program
Department of Ecology
P.O. Box 47699
Olympia, Washington 98504-7600

Re: Washington's 2004 Draft Section 303(d) List and 305(b) Report (Integrated Report)

INSERT GRAPHIC:

Thank you for the opportunity to review Washington Department of Ecology's (Ecology) draft 2004 Section 303(d) List and 305(b) Report (Integrated Report. I hope the following comments support Ecology's efforts to provide updated water quality information to the public.

The Environmental Protection Agency (EP A) appreciates all of the continued hard work and time Ecology has invested into the development of the Integrated Report. The online report continues to be very accessible and easy to use, contains a tremendous amount of information, and certainly will be an excellent historical record of all Washington's water bodies.

As of today, the close of Ecology' s public comment, EPA has not completed its review. We expect to complete our review in early January. Nonetheless, we have identified most, if not all, of our potential issues. To date, we have the following areas of concern regarding the Integrated Report:

1. Insufficient Just Cause: Several of the water bodies Ecology is de-listing do not give all of the information that Water Quality Program (WQP) Policy 1-11 requires. More information is needed to provide just cause for de-listing.
2. Natural Conditions: For all water bodies that are proposed to be de-listed because of "natural conditions" for any parameter, Ecology must include the analysis and any documents that are part of the analysis with their IR submittal.
3. Evidence of Impairment: WQP Policy 1-11 states that for temperature and dissolved oxygen (DO), a water body will be placed on the 303(d) list when these data show a violation of the water quality standard on at least one day in a least three different years. This change appears to cause numerous de-listings. Ecology should explain why the previous listings are erroneous.

4. Evidence of Impairment – Sediments: Many of the sediment listings that were moved from Category 5 to Category 2 have one or more samples that exceed the SQS and may have one or more sample exceed the CSL. It would appear that this combination of sampling results indicates contamination is present and the water body impaired.
5. Category 4b: Has a Pollution Control Plan: Supporting information needs to be provided for all waterbodies listed in Category 4b.
6. Category 4a: Has a TMDL: Water bodies can placed on this list only if they have an approved TMDL for the specified pollutant.

These areas of concern, if not adequately resolved, could cause EP A to disapprove portions or all of Washington's 303(d) List.

We also have comments on two additional topics: pollutant identification for bioassays, and water classifications.

The attachment to this letter provides further information on these topics. We would like to follow up with you to discuss our comments. Please feel free to contact me at (206) 553-6977, or Lisa Jacobsen of my staff at (206) 553-6917 or via email atjacobsen.lisa@epa.gov.

Sincerely,



Paula vanHaagen
Manager, Standards and Planning Unit

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Enclosure

cc Melissa Glidersleeve, Department of Ecology
Susan Braley, Department of Ecology

ATTACHMENT
EPA Concerns and Comments

EPA Concerns

1. Policy 1-11 Incomplete information Policy 1-11 describes the number of excursions, number of samples taken, and what span of time is required before a water body can be listed or de-listed. Several of the water bodies Ecology is de-listing do not give all of the information that Policy 1-11 requires. More information is needed to justify the categorization of the following water bodies:

	Name	Comment
6632	Dakota (Rebel) Creek	How much data was there? What is the span of time and data collected?
6633	Dakota (Rebel) Creek:	Same as above
8636	Padilla Bay, Fidalgo Bay	Same as above
13713	Bear-Evans Creeks	Mercury. Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
7341	May Creek	Copper. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
13151	Duwamish Water	Fecal Coliform. - It describes the monitoring station but does not give number of samples. More information is needed for just cause.
13152	Duwamish Water	Fecal Coliform. - It describes the monitoring station but does not give number of samples taken. More information is needed for just cause.
13168	Newaukum Ck	Fecal Coliform. - It describes the monitoring station but does not give number of samples taken. More information is needed for just cause.
8187	Springbrook CK	Cadmium. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
8647	Springbrook Ck	Cadmium. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?

28186	Springbrook Ck	Chromium. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
8644	Springbrook Ck	Chromium. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
8648	Springbrook Ck	Copper. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
8189	Springbrook Ck	Zinc. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
40091	Case Inlet and Dana	Fecal coliform. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
8694	Dyes Inlet and Port	Information should be provided when a study is cited. Excerpts from the study need to be part of the IR submission. This is needed to be able to define the term "suspect" data and why it should not be used.
8698	Dyes Inlet and Port	Fecal coliform. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
39971	Nisqually Reach	Fecal coliform. - Too little data provided for just cause. How many samples were taken to determine that chronic criterion was met?
7061	Boulder Creek	Temperature. - How much data was there? More info is needed for just cause.

2. Natural Conditions: For any water body to be de-listed for any parameter that Ecology has determined to be "natural conditions," Ecology must submit its analysis and supporting documents with the IR in order to provide a basis for just cause to de-list. (It may be appropriate to provide relevant excerpts that reference the information that addresses the water body in question, instead of the full supporting document.) The documents or excerpts must be easily accessible, such as provided by a direct weblink to the document or the excerpt. Ecology and EPA must include the analysis and supporting documents as part of their administrative records and to provide future access to it for review and reference.

Ecology's Policy 1-11 states: "... A decision not to list a water body segment because the

impairment is from natural conditions will require, at a minimum, identification of a likely natural source or process sufficient to produce the impairment and reason to believe that there are no human impacts or none in excess of the allowable limits on such impacts."... .

"Documentation will be required that addresses the natural source or process and how it relates to the impairment of uses. Documentation should also include modeling results and related studies, whenever available. The assessment may include well-reasoned best professional judgement, but this must be accompanied by data that supports the determination."

More information is needed to justify the natural condition basis for de-listing the following water bodies:

7148	Indian (Big) Slough	If the measured excursions beyond the criterion are a natural condition per the 15 October 2004 recommendation by Jan Newton, Dept. of Ecology, then this citation must be available for review by EPA and must be part of the submittal, not just referenced.
7407	Snohomish River	Temperature - changed to Category 1 "These excursions beyond the criterion are a natural condition with no direct human caused influence due to the solar heating of the surface water based on the 6/97 judgement of Jan Newton (ECY)" more information must be provided for natural conditions -discussion of what analysis was used to determine it is due to solar heating.
8712, 8709	Sinclair Inlet	Arsenic - fish and clam tissue - total arsenic - natural high arsenic so natural conditions.
7152	Joe Leary Slough	Temperature - brackish, marine waters, warming sediments low tide so natural conditions (no study sited)
7243	Stillaguamish River	Temperature - brackish, marine water, warming sediments low tide so natural conditions (no study provided)
7657	Miller Lake Creek	Temperature - beavers raise the temp of the stream, station in bad place and doesn't represent the stream and natural condition for high time
8726, 8725	Port Orchards, Agate Passage	Arsenic - total organic was sampled and now believed to be Natural Conditions but no analysis was provided - fish tissue

3. Evidence of Impairment Temperature and Dissolved Oxygen. Policy 1-11 states that for temperature and dissolved oxygen (DO), a water body will be place on the 303(d) list

when these data show a violation of water quality standards on at least one day in a least three different years. EPA understands this to mean that if there are less than three years of data the water body will not be listed for temperature or DO impairment. What is the rationale that makes 3 years sufficient and less than 3 years not sufficient? This rationale must be provided for each water body that is de-listed or the source of Ecology's decision to use three or more years referenced. How is this consistent with using one year of data to identify impaired water bodies during TMDL development? How is the three year limit connected to Ecology's monitoring plans, either in general or in connection with monitoring water bodies in Category 2?

7058	Bender Ditch Road	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7059	Bender Ditch Road	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7065	Clearbrook Creek	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7067	Dakota (Rebel) Creek	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7068	Dakota (Rebel) Creek	DO - 4 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7069	Dakota (Rebel) Creek	DO - 4 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7070	Deer Creek	DO - 3 out of 10 excursions in 1989, no sampling since then. Put in Cat 2 as priority for monitoring.
7075	Depot Road Ditch	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7076	Duffner Ditch	DO - 2 excursions in 1992, no sampling since then. Put in Cat 2 as priority for monitoring.
7079	Hoff Creek	Temperature - numerous excursions in 1991 at 4 stations, no sampling since then. Put in Cat 2 as priority for monitoring.
7135	Carpenter Creek	Temperature - 3 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study

and monitoring indicates the status of the water.

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|------|-----------------|---|
| 7134 | Carpenter Creek | Temperature - 3 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
| 7138 | Coal Creek | Temperature - 2 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
| 7139 | Cumberland Ck | Temperature - 2 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
| 7140 | Day Creek | Temperature - 2 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
| 7141 | Fisher Ck | Temperature - 3 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: "Listing will be placed in waters of concern category until further study, and monitoring indicates the status of the water. |
| 7145 | Hansen Ck | Temperature - 2 excursions in '97 no new data removed based on policy 1-11 Remark\ in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
| 7145 | Hansen Ck | Temperature, - 2 excursions in '97 no new data removed based on policy 1-11 Remarks in report state: Remarks in report state: "Listing will be placed in waters of concern category until further study and monitoring indicates the status of the water. |
4. Evidence of Impairment - Sediment. A substantial number of sediment listings were moved from Category 4, the impaired waters list, to Category 2, Waters of Concern. Many of these listings report samples of two or more which exceed the State's Sediment Quality Standards (SQS) and may have one sample or more that exceed the Contaminated Sediment Limit (CSL). Toxicity effects always occur in bioassays when the CSL is exceeded. It would appear that contamination is therefore present, and in some cases at high levels. What is not

clear is the point at which cleanup or other action is warranted to differentiate this category from a listed impairment. This must be clarified further in the definition supporting the listings.

5. Category 4a. The water bodies listed in Category 4a need be addressed in an approved TMDL. The following specific comments resulted from our review of category 4a and were, for the most part, contained within our March 15, 2004 comments to Ecology on the integrated report. In addition to the water body specific comments below, EPA's March 2004 comments to Ecology gave examples of numerous waterbodies covered by approved TMDLs, but which are not listed in category 4a (or anywhere else in your report). Inclusion of these waterbodies on category 4a is recommended in order to maintain an accurate record of waters that are covered by TMDLs in Washington. Those comments are not repeated here.

WRIA 39

Numerous Listing IDs

As explained in the 1997 Lower Yakima TMDL, the pesticide targets developed in this TMDL are derived from the chronic aquatic life criteria, and not the more stringent human health criteria. EPA's approval letter (11/25/98) specifically approves the Lower Yakima TMDL for chronic aquatic life (not human health). Because the TMDL was not written to meet the more stringent human health criterion, those waters for which data exists showing that human health standards are not being met need to remain in Category 5 until a TMDL is developed to meet a human health target. This comment applies to DDT, DDE and DDE listings on the Yakima River, Snipes Creek, Spring Creek, Granger Creek, Sulphur Creek, Side Hollow Creek and Moxee Drain.

6323 Wapato Lake

The Wapato Lake TMDL (WRIA 12), which was approved by EPA on 4/9/1993, was for TP and did not cover fecal coliform and should therefore not be listed in category 4a for fecal coliform.

8919 Wilson Creek

The turbidity / suspended sediment impairments in Wilson Creek (W A-39-1020) have been addressed by an approved TMDL; the dieldrin impairment, however, has not been addressed by an approved TMDL and should therefore not be listed in category 4a for dieldrin.

16696,3756,7406
Snohomish River

The Snohomish River (WRIA 7) is not addressed by the Snohomish River Tributaries fecal coliform TMDL approved by EPA on August 8, 2002, and should therefore not be listed in category 4a for fecal coliform

40938 Teanaway

A turbidity TMDL has not been completed for the

Teaway River (WRIA 39); this waterbody should therefore not be listed in category 4a for turbidity.

13774, 13732
Duwamish Waterways

The Duwamish Waterway and River TMDL (WRIA 9) addressed these two waterbodies for ammonia-nitrogen impairments, and was approved on January 14, 1993. The TMDL approval date is incorrect for one waterbody (13732); the TMDL is not referenced for the other waterbody (13774).

7742, 7740, 7741, 7743
Wildcat Creek

The TMDL approval date is incorrect for the Wildcat Creek dissolved oxygen listings (WRIA 12). This TMDL was approved on February 12, 1993 - not July 17, 2000. The Simpson TMDL (approved on July 17, 2000) addressed temperature impairments in Wildcat Creek (not DO).

7659, 7660, 16734, 7663, 7662, 7661
Skokomish River &
Purdy Creek

The approval date for the Skokomish fecal coliform TMDL should be corrected to read October 16, 2001 (not 2002) for the Skokomish River and Purdy Creek waterbodies listed in category 4a.

WRIAs 14, 26, 22

None of the 28 TMDLs covered by the Simpson temperature TMDL (approved by EPA on July 17, 2000) is listed on category 4a. This TMDL included in the following waterbodies Rabbit Creek (WRIA 22), Wildcat Creek (22), Glenn Creek (22), Overlook Creek (22), Frigid Creek (22), Beaver Creek (22), Dry Bed Creek, (22), Outlet Creek (22), Bingham Creek (22), Sandstone (22), Cook Creek (22), Bell Creek (22), Replinger Creek (22), Stouder Creek (22), Kennedy Creek (14), Gosnell Creek (14), Rock Creek (14), Decker Creek (22), Stillwater River (22), N.F. Skokomish (16), Wynoochee River (22), N. Mountain Creek (22), Vance Creek (16), E.F. Satsop River (22), W.F. Satsop River (22), Canyon River (22), Little River (22), M.F. Satsop River (22).

6. Category 4b. Numerous waterbodies located within the Gifford Pinchot National Forest and Entiat watershed (including the Okanogan & Wenatchee National Forests) have been placed in Category 4b, including Yellowjacket, Greenhorn, Iron, Woods, Cispus, East

Canyon, Pumice and 1918 Creek. The Entiat waterbodies placed in 4B include the Entiat and Mad River. Ecology must submit the analysis that supports these 4b categorizations, and any documents that are part of the analyses, with the IR in order to justify listing' these waterbodies in Category 4b. Ecology's Water Quality Program Policy (September 2002) establishes seven criteria that must be met in a pollution control plan in order for that plan to qualify a waterbody for category 4b; each of these criteria must be addressed in Ecology's analysis. EP A also believes it is critical for Ecology to address the following specific questions during their evaluation:

- Enforceable. What commitment has been made to amend the Land and Resource Management Plans (Forest Plans) to incorporate the Yellowjacket Water Quality Restoration Plan (WQRP), and those portions of the Entiat that lie within National Forests? What authority exists to require implementation of the Entiat Planning Unit's Coordinated Natural Resource Management Plan and Watershed Plan for those areas that lie outside the Federal Forests?
 - Attain Water Quality Standards. Demonstrate the adequacy of BMPs to achieve standards. This documentation shows that the BMPs are sufficient to attain the applicable water quality standard in a reasonable period of time. This documentation could rely on a range of approaches including scientifically based best professional judgment, simple predictive analyses, or complex cause/effect modeling.
 - Problem-specific and waterbody-specific. Describe the watershed, current water quality issues, water quality standards, and identify significant pollutant sources.
 - Reasonable time limits. The period of time needed to achieve water quality standards and interim targets should be identified.
 - Adaptive Management. If monitoring demonstrates that BMPS aren't adequate, what assurances are provided that adaptive management will take place? Adaptive management and revision of BMPs could also occur by amending the Forest Plan, or in site specific project analysis/NEP A documents that make site-specific amendments to the Forest Plan BMPs as indicated by the WQRP.
 - Successful Implementation. How will the Forest Service ensure that future activities (e.g. timber sales) are conducted in accordance with the water quality restoration plan? What assurances are provided that controls/BMPS will be implemented? Such assurances could include demonstrating that the practices are a requirement of a watershed plan, identifying the BMPs as part of a Record of Decision for an EIS, or providing documentation that the controls are included in a particular Forest's budget for implementation.
7. Columbia River. There is a 1998 dissolved oxygen listing in WRIA 53 for Lake Franklin D. Roosevelt that has completely disappeared from the list. (Township 28N, Range 33E

section 8) What happened to this listing?

8. Columbia River (8578). This Lake Roosevelt dissolved oxygen listing (WRIA 61) has moved from category 5 to category 2, and no explanation has been provided.
9. Walla Walla (WRIA 32). Water column data published in Ecology's "A Total Maximum Daily Load Evaluation for Chlorinated Pesticides and PCBs in the Walla Walla River" October 2004, Ecology Publication No. 04-03-032 supports additional listings in this WRIA. Below are some, but possibly not all of the listings that these data might support. Did Ecology consider these data?

	Total DDT	Total Chlordane	Dieldrin	Hexachloro benzene	Heptachlor Epoxide	Toxaphene	Total PCBs
Upper Mill			?				X
Upper Walla Walla	?	?					X
Yellowhawk Creek	X	X	X		?	X	X
Garrison Creek	X**	X	X	***	?	X	X
Lower Mill Creek	X	X	X			?	X
Middle Walla Walla	X	X	X		?	X	X
Dry Creek	X	X	X	X	X	X	X
Pine Creek	X	X	X		X	X	X
Touchet River	X					X	X
Lower Walla Walla	X*	X*	X*	*	?*	X	X*

* Currently listed based on fish tissue data.

** Currently listed based on water column data.

10. Walla Walla (WRIA 32). There is a 1998 listing for heptachlor in the Walla Walla River that is not in the proposed 305B list in any category. What happened to this listing?
11. Walla Walla (6589). There is a temperature listing on the proposed 305B list category 5 for the Walla Walla River; the listing indicates that it was not on the 1998 list, but our records show that it was.
12. Lower Yakima (8854). The basis for listing segment 8854 indicates that the data was collected from Granger Drain. Should this be a Granger Drain rather than a Yakima River listing?

EPA Additional Comments

1. Pollutant Identification for Bioassay. For Category 5 listings, some of the impairments are listed because of sediment bioassay. Bioassays do not define which parameters are

the cause of the listings. Further investigation under the TMDL will define the listing. It would be clearer for the pollutant parameter to be identified as "unknown". If identifying that bias says involvement is important information for Ecology, perhaps a combination of "unknown-bioassays" would work. This situation is similar to the listings in Idaho where bioassessments show impairment but chemical analysis and source control studies have not been completed.

2. **Water Classifications** Water classifications or criteria are not identified for water bodies in the Integrated Report. Yet this information is necessary for the public to determine if sample values are above or below the criteria for the specific water body that is being de listed. It is onerous for the public to determine the relevant criteria in order to determine if waters are impaired or not based on their classification. We encourage Ecology to include this information or make it easily accessible. .