NORTHWEST ENVIRONMENTAL ADVOCATES

November 7, 2005

Karla Urbanowicz
Oregon Department of Environmental Quality
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Re: **Draft 2004 Integrated Report on Water Quality Status**

Dear Ms. Urbanowicz:

The following comments are submitted on behalf of Northwest Environmental Advocates (NWEA) on Oregon's draft Clean Water Act § 303(d)(1) list, including but not limited to the methodology established to prepare the list. Our comments on the listing methodology should additionally be construed as comments on the proposed § 303(d)(1) list. We hereby incorporate by reference the 60-day Notice of Intent (NOI) to sue the U.S. Environmental Protection Agency (EPA), dated December 13, 1996, regarding the federal agency's approval of Oregon's 1994/96 § 303(d)(1) list including but not limited to the specific issues in it which are referenced below.

I. Failure to Use All Readily Available Data and Information

Please see the above-referenced NOI for NWEA's comments on Oregon's failure to use all readily available data and information as required.

II. Failure to Interpret and Apply the Legal Definition of Water Quality Standards Including Narrative Criteria, Designated Use Support, and the Antidegradation Policy Requirement to Protect Existing Uses

Please see the above-referenced NOI for NWEA's comments on Oregon's failure to apply all aspects of the legal definition of water quality standards when evaluating its data and information for the purpose of assessing water quality in the state. Specifically, Oregon's draft list fails to apply the designated use support requirement, narrative criteria, and the requirement to protect existing uses as part of Tier I of the antidegradation policy.

III. Assessment Methodology for Oregon's 2004 Integrated Report on Water Quality Status

The document entitled "Assessment Methodology for Oregon's 2004 Integrated Report on Water Quality Status," (hereinafter "Methodology") dated August 12, 2005, is the basis for most of

Oregon's proposed Category 4 and 5 listing decisions. This document states that the methodology set forth therein is "consistent with the key elements of Oregon's water quality standards including designated uses, narrative and numeric criteria, antidegradation requirements, and implementation procedures associated with the standards." Methodology at 1. This is false for the reasons set forth in these comments and therefore should be removed from the document. Not only are the draft listings inconsistent with this statement but the methodology on its face is as well. Sayings things are true does not make it so. This theme is continued on page 4 of the Methodology where DEQ explains that that exceedence of narrative criteria and evidence of beneficial use impairment or a declining trend in water quality would merit listing. Even this, however, does not properly establish the theoretical basis upon which the state should establish a listing. First, it is unclear what is meant by an "exceedence" of a narrative criterion and nothing in the Methodology explains this. Moreover, in its discussion of the specific water quality parameters, the Methodology offers scant information on how such criteria can be deemed to have been exceeded; instead, in most cases in the discussion of particular parameters, the narrative criteria are ignored. Second, the Methodology does not shed light on how the Department intends to determine that beneficial uses are impaired. Last, the Department does not establish how it will determine if there are declining trends and does not note whether, in fact, it has conducted such any such analyses. There is no further mention of beneficial use support, designated or existing, nor is there any further mention of declining trends in the remainder of the Methodology document nor do there appear to be any listings on this basis.

The Methodology also fails to address numerous issues set out in EPA's Guidance on the subject. So, for example, Oregon does not state how it is addressing threatened waters, waters for which there are fish consumption advisories, waters for which no specific pollutant has been identified,

A. Data Evaluation Process

In its discussion of the metadata requirements, the Methodology does not explain how the requirements for geographic information apply to use impairment data and information. Not only is this an example of how the Methodology falls short but it is a strong indication that the Department has ignored the few references to beneficial use impairment in its own Methodology as a basis for listing.

QA/QC

Likewise, the reference to ODEQ requiring submission of the analytical method with the data submittal demonstrates that the Department has not used all readily available data and information. Information frequently does not have an analytical method and the Department has not explained how it will assure the quality of such information.

QA/QC - Conventional Parameters

The requirements for precision and accuracy are acceptable for new data submissions but they cannot be used as a basis for de-listing previously listed stream segments. The Methodology does not state whether the Department has, in fact, done this, which it should. The document also states that for grab data to be used for the 2002 Integrated Report duplicate samples must be collected at 10 percent of the total monitoring sites. (The reference to 2002 may be a typographical error but if it is not it begs the question of what the Department will do for 2004.) This precision requirement should not apply to data collected by agencies, universities, and other similar institutions if the Department did not previously inform these entities of this data precision requirement unless this level of duplicate sampling is relatively standard procedure. Otherwise, the Department is merely using this requirement to exclude data which to which it would otherwise not have access.

The Department proposes to de-list waters on the basis of their data being deemed Level C or Level E. As stated above, where older data do not meet the duplicate requirements this should not be the basis of de-listing nor should it be applied if research institutions have not been informed of this requirement in advance. This is not to say there should be no QA/QC requirements but merely that a post-sampling set of requirements is not appropriate. Likewise, the Department does not say to what degree data have been deemed to be Level E, for which there are no duplicates or field checks, nor if it is being applied to data in retrospect. It should not be used as a basis of de-listing and it should not be applied to data for waters where there are no other data, e.g., DEQ does not conduct sampling on a regular basis.

QA/QC - Continuous Temperature Data

This section clearly establishes the data quality levels for continuous temperature data but fails to explain the relevance of data being deemed Level B. This section also does not state to what degree these new data quality levels have been used to de-list waters on the proposed 2004 list.

QA/QC - Toxic Substances

No comment.

B. 2004 Integrated Report Water Quality Assessment Categories

We object to Oregon's use of the EPA Guidance concerning assessment categories. Category 4B is overly vague in this Methodology because there is nearly nothing stated about how Oregon intends to apply it. There is a reference to EPA's Guidance but there is no indication that Oregon has adopted the federal proposal. For example, there is no reference to the EPA's Guidance regarding not listing waters polluted by point sources based on the issuance of technology-based effluent limitations required by Sections 301(b), 306, 307 or other sections of the CWA or Oregon's rationale for why they believe that these effluent limits will achieve WQS within a reasonable period of time. Likewise, the Methodology is silent regarding not listing on the basis of other pollution control requirements for nonpoint sources where the State must demonstrate that these control requirements will achieve WQS within a reasonable period of

time. The EPA Guidance contains a significant number of items which the State must use to demonstrate the likelihood of its determination and the reasonableness of its time frame, none of which are referenced in Oregon's Methodology. Without this information, any determination to not list a water body or to de-list a water body on the basis of its placement in Category 4B is without a rational basis.

Category 4C, for waters where the impairment is not caused by a pollutant but rather by pollution, are waters that by the plain language of the statute require listing pursuant to section 303(d)(1). In addition, although the EPA Guidance misstates the statutory requirement for listing it also encourages states to "schedule these segments for monitoring to confirm that there continues to be no pollutant-caused impairment and to support water quality management actions necessary to address the cause(s) of the impairment." There is no indication that Oregon has done this. Therefore, no waters should be placed in Oregon's 4C Category.

This document should make reference to Oregon's regulatory definition of " water quality limited" (WQL). Although there are one or two references to Oregon's list of WQL waters as being broader than the 303(d)(1) list that is the focus of the document and the process, it is not made clear how the assessment categories fit with Oregon's own categories. This defeats the purpose of having a state guidance that makes it clear how the Department is interpreting its rules, both what it considers to be its water quality standards and its implementing rules, and how they relate to federal requirements. By failing to make this information clear, it puts reviewers in the position of having to guess at what DEQ is doing and perpetuates misunderstandings in the future. So, for example, Category 3, insufficient or no data, is by Oregon rule WQL. We urge the Department to add a section in this document that clarifies this point.

Figure 3: Integrated Report Categories

Figure 3 should be amended as follows, moving down from the top box on the right-hand side:

- Upper Category 3 box: should clarify these are WQL under Oregon rules.
- Second down Category 3 box: should clarify that older data cannot be de-listed on this basis.
- Potential Concern category: should clarify this is WQL under Oregon rules. The document should state that after two listing cycles if no new information has been collected, these data will be used as the basis for placement on the 303(d)(1) list. The policy concern here is that placement on the list of waters of Potential Concern is the same as not listing or de-listing. Given Oregon's dwindling water quality monitoring resources, such data are not likely to be supplanted with higher quality data. The burden should be to demonstrate these data are not sufficient to demonstrate non-attainment of criteria because otherwise the Department will take no action to assess the waterbody or to clean it up.
- Category 2: This should be parameter-specific information.
- Category 4C: As stated above, this is an incorrect reading of the statute. In addition, the

Department is required to use its professional judgment to take the readily available information and make a finding related to attainment of standards for placement on the 303(d)(1) list. Where, for example, the Department knows there is inadequate flow in a stream, it can deduce through professional judgment that temperatures are too high and dissolved oxygen is too low. Where the aquatic habitat is impaired, the Department is required to apply its narrative criterion at 340-041-0011 for biocriteria and determine whether the water is of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.

- Category 4A: We appreciate the Department's inclusion of the information that waters where a TMDL has been completed but the water is not in attainment are WQL.
- Category 4B: See comments above.
- Category 5: This should be reworded to state that the water body/parameter is placed on the 303(d)(1) list.

C. General Policy Discussion

De-Listing Water Bodies

This section focuses on interpretation of data used to assess compliance with numeric criteria. It fails to consider that in evaluating new data the Department is also obligated to consider whether the new data demonstrate compliance with narrative criteria, beneficial use support, and the antidegradation policy including both existing uses and no degrading trends.

1. The statement that new "information" is used to show standards are met is probably incorrect as DEQ elsewhere demonstrates it intends to only use data. We agree that the data quality and sample requirements must be met, the statement regarding the use of "similar data" is not entirely clear. We agree with the example that if a listing is based on two years of data a de-listing should similarly rely upon at least that amount of data but the example begs many issues regarding data similarity. For example, the fact that standards are not met one year is not negated by a single year's worth of data for the next year. The location of the sampling device, seasons it is employed, air temperature, and many other factors could lead to de-listing where the water quality has not actually changed. In other words, this question needs further elucidation by the Department so as to not cause confusion or lead to inappropriate de-listings. In doing this, DEQ must ensure that the data accepted prove that the waterbody is in compliance with standards, not just that there are competing sets of data.

2. The example of correcting a flaw is not clear. Specifically, it is not clear how this situation differs from that immediately above, where new data appear to suggest compliance with standards. The mere fact that the new data meet the Department's new QA/QC requirements does not negate the earlier finding that the water was not in compliance with standards.

3. We agree that where standards have been changed, the lack of data that conform to the

new criteria should not lead to de-listing.

4. We appreciate the Department's comment that waters that are the subject of a TMDL but which are not in compliance remain WQL. We caution, however, against the statement that where a TMDL has been developed on a watershed scale that all waters within that watershed can be de-listed. First, it is not entirely clear if this means only that previously listed waters can be removed or if it also applies to not listing any waters for which there are new data that would, but for the TMDL, lead to a listing. Second, this fails to clarify the role of seasonality in de-listing where TMDLs have been completed. Third, we disagree that basin wide TMDLs are specific enough basis upon which to de-list waters.

5. As stated above, the statute requires listing on the basis of pollution, not pollutants.

6. We strongly disagree that the Department has the unfettered discretion to determine that a water body will achieve standards in a "reasonable period of time." In cases where TMDLs have been developed for one or more pollutants or parameters, and they are treated as a surrogate for other pollutants or parameters, the TMDL should so state. Otherwise, this is just a post hoc justification. Moreover, DEQ sets out a very broad basis upon which to de-list waters and then proceeds to use a very narrow example, giving no further information on its intent to de-list on what amounts to total discretion.

Segmentation

The third element to DEQ's segmentation methodology states that where there are several sampling stations, a segment length will be determined based on whether the results of the data collection demonstrate that the water body is in a "different status." We assume that this means a different status – i.e. WQL or high quality – on the basis of individual parameters. Given Oregon's definition of WQL the status of most waters is not likely to be different but this is not addressed, nor is the parameter-related nature of the finding. In any case, the more sampling stations, the more DEQ will chop the waterbody into bits meaning that segments will change from listing to listing based on their status which is not at all helpful for determining trends or establishing consistency. It also means that upstream contributions to downstream problems, by definition, are excluded from the finding of the violation. This is antithetical to good public policy, to the scientific understanding of how water quality is impaired, and to the requirements of the federal regulations that require standards to protect downstream uses. We strongly object to this approach to segmentation.

Fish Beneficial Use Segments

The document does not explain how segmentation by fish use is integrated with segmentation as described immediately above. While we agree that if data on any point on a segment does not meet criteria that the entire segment is deemed to be in violation, this is merely a reflection of the concept of segmentation and does not answer the question. Moreover, in the Department's discussion of this only temperature and dissolved oxygen are specifically mentioned leaving it

up to the reader to conclude whether any other parameter or pollutant will be addressed in this same fashion. If not, the Department should explain why it treats those two parameters differently than any others. It also does not explain how segmentation by fish use ensures that upstream sources of parameters that affect downstream designated uses are addressed. It further does not explain if the established numeric criteria apply to the entire segment of a particular fish use or if they are graded in such a way as to require cooler water upstream in the segment in order that the criterion may be reached at the most downstream boundary, although it appears to say only the actual numeric criteria are used ("ODEQ compared available data to the specific numeric temperature criteria for each fish use"). Nor does this explain how the criteria are set if the Department concludes, in a TMDL, that natural conditions would have exceeded the adopted numeric criteria. Last, DEQ has failed in this section or elsewhere in the document to explain how it intends to apply all the numerous exemptions, exceptions, and other narrative language in the water quality standards rules. For example, these various narrative considerations can be deemed to remove from the list certain waters which would otherwise be found out of compliance with the numeric criteria and/or these considerations can be deemed to be aspects of the standards that require data or information in order to make the initial finding of compliance or non-compliance. None of this is clear; in fact the reader would not even know the degree to which the standards and implementation methods for the standards, depending upon one's perspective as to what they are, affect listing because they are not even quoted or referenced in the Methodology.

Tribal Waters

No comments.

Schedule

The statement that EPA only approves (or disapproves) Category 5 is somewhat misleading in that it does not set out clearly that the agency will review the waters included in other categories to ensure they were correctly omitted from the 303(d)(1) list.

D. Parameter-Specific Assessment Methodologies

For some parameters, this document sets out some information on how the Department has conducted the listing determination, how new data and information will be used to change or not change previous listings, what actual listing have been done. For others, DEQ is silent. We strongly recommend that the Department set out this type of information for all parameters and pollutants in order that reviewers, including EPA, can make more reasoned comments and judgments on the proposed assessment methodologies.

Aquatic Weeds or Algae

Based on the assessment methodology set out ("frequent herbicide treatments to control aquatic weeds"), we assume that the Department has listed all the waters in the nearly 265,000 acres of

irrigation district land included in the Klamath Irrigation District, Hermiston Irrigation District, North Unit Irrigation District, Ochoco Irrigation District, Owyhee Ditch Company, Owyhee Irrigation District, Stanfield Irrigation District, Vale Irrigation District, West Extension Irrigation District, and Westland Irrigation District. If not, this should be corrected as the Department has sufficient information upon which to base such an assessment of noncompliance with the narrative criterion. It is not necessary for a member of the public to submit such readily available information to the Department for it to be the basis of a listing.

The document also discusses the EPA phosphate phosphorus benchmark. However, DEQ does not explain why this benchmark of 50 ug/L is not used to determine violations of its narrative criterion but rather is used only to identify waters that are to be placed on the useless category of waters of "Potential Concern." This is an error.

Bacteria - E. coli

The discussion of determining attainment is irrelevant to the 303(d)(1) list but nonetheless we will make the comment that determining a water body is not violating is not the same as determining that it is clean. If a person is exposed to water exceeding the numeric criterion for the ten percent of the time when it is above the criterion, the water is obviously not safe for that person. Therefore, DEQ should not be making determinations that limited exceedences are the same thing as determining waters are clean and safe. This comment applies to a number of parameters in this Methodology.

We disagree that DEQ can arbitrarily determine that 5 samples per season or 5-9 samples per season with one exceedence are not sufficient data with which to make an assessment determination, thereby placing a waterbody in Category 3. Data sufficiency determinations must be explained in light of the amount of data likely to be gathered. So, for example, if data are collected monthly and on a regular basis the number of monthly samples would not be considered sufficient under DEQ's proposed data requirements, this would be an arbitrary and inappropriate data requirement. While it might be a statistically and scientifically preferable to have more data, if the data are more likely than not to fall short of the requirement, it amounts to a de facto non-listing. DEQ should explain what the likely data availability are for each pollutant or parameter as a basis for its decisions on the sufficiency of data upon which it makes assessment determinations.

We concur that listing on the 2004 list based on the old criterion must be retained unless and until new data demonstrate compliance. Again, it would behoove DEQ to explain how many years of data are required to demonstrate this.

Bacteria - Fecal Coliform

Same comment as above regarding the category of inadequate data. We strongly support the Department's conclusion that the fecal coliform standard applies to waterbodies with recreational shellfish harvesting as well as commercial harvesting.

Biocriteria

The Department is incorrect in its conclusion that it can ignore the biological data collected during the 2004 assessment season until it has numeric criteria available. A narrative criterion, such as the one set out in this document, is not a lesser form of legal requirement than a numeric criterion. This is particularly true where, as here, there is no other applicable legal requirement. (We do commend the Department for making this observation in the Methodology as more often than not this document is silent on what the Department has chosen to do, leaving it to the reviewer to attempt to determine the actions on the basis of the proposed listing and de-listing.) The reference to removing waters from the 303(d)(1) list if a "TMDL addressing the listing" has been approved by EPA. This TMDL should specifically address how the biocriterion is met or it cannot be used for de-listing.

Compliance with the existing biocriterion should also be based on the degree to which the resident biological community has been disrupted by invasive species. While some invasive species are addressed through the Department's aquatic weeds standard, others are not. For example, the New Zealand mudsnail can be so prolific that they carpet the bottoms of streams, competing with native invertebrates for both food and space and/or can literally form a living streambed which does not provide for fish. Invasions of this species are known to be present at the Deschutes River, Snake River, Rogue, Umpqua and New rivers, and portions of the Columbia River estuary, and areas of the coast including coastal lakes such as Coffenbury Lake at Fort Stevens State Park near Astoria, Devil's Lake in Lincoln City, Garrison Lake in Port Orford and Floras Lake in Langlois south of Bandon. *See* "Small critter, big problem," Henry Miller, Statesman Journal, October 26, 2005, http://www.statesmanjournal.com/apps/pbcs.dll/article?AID=/20051026/OUTDOORS/510260312/1034; "Tiny snail poses a big threat to waterways," Richard Hill, November 2, 2005, http://www.oregonlive.com/science/oregonian/index.ssf?/base/science/113089473970050.xml&coll=7#continue. It is not clear whether the Department has contacted Paul Heimowitz, the aquatic invasive species and research coordinator for the U.S. Fish and Wildlife Service office in Portland, for readily available data and information on aquatic species invasions such as but not limited to the New Zealand mudsnail.

Chlorophyll a

DEQ sets out the seasons but does not provide any information on how the seasons affect the evaluation of the data.

Dissolved Oxygen

The comments above considering the amount of data likely assembled for the time period for which the determination is made are applicable here. For example, the "time period of interest" for resident trout is five months and the finding of insufficient data is where there are fewer than five samples for such a period or five to nine samples with only one exceedence. Given that the exceedence is most likely in transition periods during the time period of interest and highly

unlikely during the majority of the time period, does this requirement make sense? Given that the time period is five months and the time period of interest may be as short as five months, does this make sense? There is no discussion of these matters such that a reviewer can see the rationale, if any, behind DEQ's proposed assessment methodology. Again, what is statistically preferable may not make any sense in light of the amount of monitoring that is likely to take place or is actually taking place. Some practicality must be factored in.

The document also lacks clarity. For example, on page 30 it states that the spawning periods for bull trout and resident trout are combined and "the spawning criterion" is applied but it doesn't state which criterion applies.

The DEQ does not explain how the numeric criteria in its standard can be applied on the basis of daily means of continuous DO data to represent one data point. At a minimum, since the standard contains a number of different data requirements (e.g., seven-day minimum mean, absolute minium, 30-day minimum mean), it is difficult to understand how one finding can be made as to what constitutes a "data point." In addition, measuring 24 hours of dissolved oxygen and then calling that one data point will mask the low levels of this parameter that actually cause harm to aquatic life. DEQ needs to revise its assessment methodology to take that into consideration. This is particularly true where DEQ has evidence of dissolved oxygen-suppressing matter present in the waterbody.

In addition, the document does not explain why the cool water criteria are applied in non-spawning time periods in areas designated as salmon and trout migration corridors, as stated on page 31.

pH

DEQ does not explain how it makes the determination that an "exceedence would not occur without the impoundment and that all practicable measures have been taken to bring the pH in the impounded waters into compliance with the criteria." Nor does it explain how it addresses pH measurements higher than 8.7 when it does not have the resources to determine if the values are anthropogenic or natural in origin where such trigger applies to a basin. As discussed above, there is no rationale provided as to the requirement of two exceedences for a time period of interest in light of the number of data points likely to be obtained for that same time period and the relevance of transition periods to likely exceedences.

Sedimentation

The discussion of the New Zealand mudsnail applies to the plain language of the narrative criterion on sedimentation as well as the biocriterion. It also applies to the accumulation of sediments contaminated with toxic pollutants and heavy metals. Neither of these instances is discussed in the document. The assessment methodology is limited to two sentences that discuss the wholly past listing on the basis of this standard leaving the reader unclear about whether these also represent DEQ's treatment of data and information for the current list. In addition, the

lack of information on the degree to which the Department used information on the status of aquatic communities and fisheries leaves it unclear whether the Department's reference to these methods of determining beneficial use impairment are theoretical or applied.

The discussion of the Department's approach to de-listing waters based on new data and information demonstrating that beneficial uses are supported does not explain whether it will use independent lines of evidence, i.e. will it require all evidence to demonstrate beneficial use support or will it require only one? Will it require the same type of evidence that was used to list the water in the first place?

Moreover, why does the Department make reference to its using best professional judgment here but not with regard to listing or de-listing for other parameters and pollutants?

Temperature

Unlike other parameters, the description of data in the Category 5 determination makes no reference to seasonality. The document is silent on data that are not continuous. It is equally silent on the matter of location of samples whereas it is obvious that stream temperatures can vary considerably by location within a particular waterbody. The temperature methodology fails to address the large number of exemptions and exceptions present in the temperature standard (which are not even listed in the methodology), such as the air temperature exclusion, and explain how DEQ plans to apply them and how it will do so. The same is true for a large variety of other narrative conditions, such as the coldwater refugia requirement. An indication of how sloppy the Department's thought is to this all-important parameter is indicated by the sole comment under Category 3, for insufficient data, that data will be considered insufficient where "insufficient data is available to calculate the seven-day-average maximum temperature."

Total Dissolved Gas

No comment.

Toxic Substances

As usual, DEQ is incapable of reading its own standards, particularly when it comes to toxic substances. It starts with the failure of this document to list "wildlife" in the section on "beneficial uses affected." This, of course, is an on-going problem of DEQ's but it appears the agency simply cannot read since the word "wildlife" is in the narrative criterion quoted directly below to say nothing of the fact that wildlife are designated and existing uses that require protection.

As usual, DEQ quotes its narrative criteria for toxic substances and provides absolutely no information on how it intends to implement these criteria other than a reference to which numeric criteria it would apply. Oregon does not explain why, given the plain language of its revised numeric criteria, it has chosen to apply its extremely old and clearly non-protective

criteria in the majority of situations where there is no question that the revised criteria, while not protective, are at least an improvement over the old ones. It, of course, does not explain why Oregon feels it is free to ignore its narrative criteria given its decision to apply its old and unprotective numeric criteria. (At the very least, the state could use any more protective criteria it has adopted through its narrative criteria.) The Category 5 water quality limited determination consists of one sentence that requires two exceedences of the criteria. It fails to state what DEQ will do with "information" as required by federal rules. It fails to consider that the "exceedences" may require some interpretation for sediment levels and tissue residues. In fact, unlike the last DEQ listing methodology, in which the agency simply admitted what it wasn't going to do, this one is silent. There is no rationale presented on why two exceedences are required for this potentially very expensive set of pollutants, particularly if all quality assurance and quality control measures have been used.

The same is true for the Category 3, insufficient data, where DEQ does not take into consideration that obtaining five "valid" samples may be too expensive and not necessary. In fact, there is no rationale given for this level of data nor any discussion of the practical ramifications of it.

All references to the "most stringent" of the criteria ignore the narrative criteria and requirement for beneficial use support, both of which have the force of law. The statement that if no total analysis was available, then a dissolved analytical result was used to compare against the criteria ignores the translators that EPA has. There are no references to the old listing methodology, no references to tissue residues and no references to contaminated sediments. There are no notes as to any results of listing practices and de-listing issues. For example, the Methodology does not reference how it intends to address sediment contamination but the database demonstrates that sediment contamination is not considered a valid concern unless it is also accompanied by bioassays of the contamination. The Methodology should set this approach out so that reviewers do not have to determine this by scanning the database. Moreover, that a beneficial use must be demonstrated to be impaired in addition to a measurement of an unsafe level of contamination is a fallacy of DEQ's listing methodology and should be changed. This section completely fails to be informative or sufficient.

Turbidity

The description of the assessment methodology is deficient because DEQ failed to complete the section on the turbidity standard, which ends in mid-sentence regarding the findings that must be applied. Moreover, there is no information in the methodology on how the Department is making these findings in evaluating data and information for the list. There is no information on how it determines what constitutes "an emergency," "essential dredging," or the use of "all practicable turbidity control techniques" for example. There is no rationale presented for the statement that an increase in turbidity must be on a "persistent basis" or what this means, short of two unhelpful examples and why it is an appropriate interpretation of the standard which makes no references to persistence. There are no notes regarding how the turbidity standard has been applied and what will be done with data submitted for the purpose of obtaining de-listing results.

Appendixes

Appendix 1

This appendix, by its name and its content, fails to explain how the Department treats "information" for listing and de-listing decisions. The first bullet that requires precise sampling locations does not apply well to some data, such as fish tissue samples. In addition, it is lacking in that, for example, it does not discuss data requirements for such data as tissue where the Department should want to know what portion of the fish was analyzed (e.g., full body, fillet, steak, organs).

Appendix 2

The document does not explain the relevance of the letter dated June 22, 1998 that comprises Appendix 2. It also does not state which aspects of this letter are considered by the Department to have been invalidated due to new standards that have been adopted by Oregon and approved by EPA.

Appendix 3

We concur with the examples listed on pages 1 and 2 of this February 3, 2004 letter regarding identification of natural conditions. Information such as this should be made a part of the main document. We disagree that the formal process of 303(d)(1) and TMDLs is adequate for public and federal agency review of the two-step process discussed in the letter – of making a finding of the natural level and documentation of the natural processes that contribute to that level being present – because currently neither process is subject to consultation with the Service agencies pursuant to section 7 of the Endangered Species Act.

DEQ's reference to modifying designated uses does not include a reference to the required Use Attainability Analysis process which applies to making this adjustment. This is also true with regard to its comment that DEQ will "continue to refine" its use designations for resident trout and bull trout spawning.

Draft 2004 Integrated Report Database

Reliance on the Methodology is useful because searching the Department's electronic files can be cumbersome and because, compared to some previous databases, the information is presented in a very obscure manner so that the reviewer cannot tell its provenance. It is also difficult to search, for example, to identify what waters have been de-listed on the basis of being removed to the Category 4B list. Nonetheless, we offer here a few additional comments.

Waters show up as de-listed due to "drought years" having been determined by the Department. There are several problems with this. First, there is no reference to "drought years" in the Methodology and no indication of how the Department came to determine which years are

"drought years" and why these data can be excluded based on Oregon's temperature standards. These waters should be placed on the 303(d)(1) list.

Reviewing the data base demonstrates DEQ's inadequate listings of toxic contaminants. The data base supports decisions to not list waters where sediments have been found in elevated levels in sediments when compared to certain guidelines or criteria by stating that "sediment toxicity does not correlate well with sediment contaminant concentrations and is dependent on local conditions." Therefore, the database informs the reviewer, toxicity can only be demonstrated if there are also beneficial use impairments based on bioassays. This effectively removes most sediment contamination from the list based on the Department's overly restrictive and arbitrary methods, which it does not even establish or support in its Methodology. Considering the CERCLA status of the Lower Willamette River, DEQ's choices appear absurd.

A review of the database searched on waters de-listed demonstrates that many waterbodies have been removed from the 303(d)(1) list on the basis of "use modification or criteria change." In some instances the database "supporting data" indicates that there is "no salmon or steelhead spawning use." This indication does not establish if the use is currently designated and in the listing process the Department concluded there was no use there and, without conducting a Use Attainability Analysis (UAA), proceeded to change the standards or if the use was considered present in previous 303(d)(1) lists but was removed through the standards-setting process in which spawning uses were identified with time and place information. The failure to conduct UAAs in this instance, when the Department had some basis to conclude that spawning was a use to be protected in those waters, would similarly be contrary to law. The Methodology should identify both of these possibilities and state with precision what DEQ has proposed in its listings and de-listings. Moreover, it is nonsensical to state that the de-listing occurred because of a use modification or criteria change" and then to cite as support "2004 data." If the de-listing is on the basis of new standards, why is the supporting information data? Are these fish use data or water quality data? This needs to be clarified.

Conclusion

Thank you for this opportunity to comment. Please consider our comments on the Department's methodology as comments on the failings of the proposed § 303(d)(1) list as well as on the methodology itself. In addition, we incorporate by reference the comments of the Columbia River Intertribal Fish Commission and the Northwest Environmental Defense Center.

Sincerely,

Nina Bell
Executive Director

Attachment: Northwest Environmental Advocates' 60-day Notice of Intent to sue the U.S.

Environmental Protection Agency (EPA), December 13, 1996.