

File 2
**Comments on First Draft of the *Guidance for Use Attainability Analysis* released by
Ecology on May 24, 2004**

Letter 1:

Grant Country Public Utility District

Letter 2:

Kalispel Tribe Natural Resources Department

Letter 3:

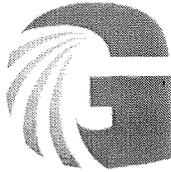
Kittitas County Water Purveyors

Letter 4:

Nooksack Indian Tribe

Letter 5:

Northwest Environmental Advocates; American Rivers; Lands Council, The; Puget Soundkeeper; Trout Unlimited - Spokane Chapter; Sierra Club, Upper Columbia River; People for Puget Sound; Lake Spokane Protection Association; Center for Justice



Grant County
PUBLIC UTILITY DISTRICT
Innovation & Excellence...Yesterday, Today and Tomorrow

August 16, 2004

Cheryl Niemi
Department of Ecology
Water Quality Program
P.O. Box 47600
Olympia, WA 08504-7600

Re: Comments on May 24, 2004, Draft UAA Guidance for Washington State

Dear Ms. Niemi:

Grant County PUD appreciates the opportunity to comment on the Department of Ecology's May 2004 "Draft Use Attainability Analysis Guidance for Washington State." We commend Ecology for taking the initiative to develop this Draft Guidance. It holds out the promise of a truly workable UAA Program.

Grant PUD is interested in the UAA Guidance document because it owns and operates Wanapum and Priest Rapids dams on the Columbia River. It also operates two low-head hydro projects on irrigation canals in the Columbia Basin that operate during the irrigation season. We look forward to further discussions with Ecology on this important subject through the Water Quality Partnership Program.

Grant PUD has actively participated in the water quality standards setting and EPA Regional Temperature Guidance processes. At that time, we appreciated Ecology's willingness to seek out additional science and river management expertise in refining the standards that were approved in July 2003. One factor that contributed to the success of that effort was Ecology's recognition that beneficial uses may be protected through a number of different regulatory mechanisms, not just numeric water quality criteria. Due to the scope of the statewide standards and the status of various protection agreements, many special characteristics of watersheds and river reaches could not be taken into account, so that the resulting numeric criteria are aspirational in many instances. Subsequent to that rulemaking, the on-going ESA consultation process for each of the 5 dams on the Mid-Columbia River culminated in special protection measures for steelhead and salmon associated with all the Mid-Columbia Projects.

We have the following general comments on the Draft UAA Guidance document:

1. The UAA Guidance Should Provide Appropriate Flexibility.

Because the statewide standards did not address special characteristics of individual watersheds or river reaches, the UAA Guidance document should promote flexibility (1) to increase the ability of Washington to tailor water quality management decisions to reflect the

special characteristics of their watersheds, and (2) to enable Washington to make adjustments to the water quality program that reflect the state's policy of promoting scientifically sound site-specific standards when a use may be fully supported through various measures although a numeric criterion is not met. The Guidance document should provide for this mechanism when alternative performance-based criteria and other measures exist to protect the designated uses through a streamlined UAA or other process.

The Guidance document identifies that numeric criteria may be altered to achieve the highest use attainable when (1) natural conditions are less stringent than the numeric criteria and (2) when the use is less sensitive than originally contemplated, then alternate criteria may be established that are fully protective. We believe that the UAA Guidance document should also be flexible enough to recognize other approved special characteristics of the river reach as a basis for setting alternate criteria. If it will not do this, then we recommend that separate guidance documents be established that will discuss the additional tools to establish site-specific criteria including special conditions, water quality off-sets and variances.

2. Attainment of a Use is Demonstrated Primarily Through Performance Based Standards, Hatchery Improvements and Off-Site Habitat Improvements.

Each of the three Mid-Columbia PUDs has recently completed a comprehensive agreement for the protection of the River's salmon and steelhead resources. NOAA Fisheries' Biological Opinion for Grant PUD and the HCPs for Chelan and Douglas PUD's provide for performance-based standards towards achieving a 95% juvenile dam passage survival, 93% juvenile project survival and 91% combined adult and juvenile survival. Additionally, with the support of upstream operators, NOAA, WDFW, and the Colville Confederated Tribes, Grant PUD completed the Hanford Reach Fall Chinook Protection Program Agreement to provide increased salmon spawning and rearing habitat over what would naturally occur in the absence of the Project. In addition to the performance standards that will be met through improved turbine operations, advanced turbines and new fish by-pass facilities at Wanapum and Priest Rapids Dams (among other measures), the common objective of the various programs are to achieve "no net impact" for various salmonids affected by the Mid-Columbia Projects, after accounting for the enhancement affects of hatchery programs and habitat improvement programs.

3. Performance-Based Standards Provide a Clear Alternative to Existing Numeric Criteria and a Net Ecological Benefit.

The performance standards can provide a net environmental benefit over strict compliance with water quality standards. This is demonstrated in (1) the Lake Chelan Settlement Agreement and 401 Certification where more habitat was created by using biological objectives rather than the attainment of numeric criteria, (2) the HRF CPP, where flows are managed on a system-wide basis to provide more spawning habitat than would occur under "natural" river flows; and (3) the NNI standard in comprehensive agreements for the Mid-Columbia Projects, which provide greater protection than would be required for TMDLs under 33 USC 1303(d) providing only for the protection of a "viable population of fish..." or mitigation for project-caused effects.

To achieve the flow control for spawning protection under the HRF CPP, for example, power generation at Priest Rapids Dam is shifted from daylight to night-time hours to promote

salmon spawning at elevations so that protection-level flows can be sustained by the hydropower system. If additional water is needed for protection of redds, the Hourly Coordination Agreement is invoked to provide that water. Any reduction in the already limited storage capacity of the Mid-Columbia Projects due to single-minded efforts to achieve some nominal numeric criteria, without regard to the effects on these habitat protection measures, could eliminate the ability of the Mid-Columbia PUDs to provide the necessary water for the protection of fall Chinook salmon

This "net-ecological benefit" approach is recognized in the appendix to the draft UAA Guidance document in the context of wastewater discharges into streams located in arid areas EPA has likewise recognized the "net environmental benefit" approach in its "Project Excel" programs; and Washington State has adopted this approach under the Aquatic Resources Mitigation Act (ARMA), which requires Ecology to consider whether a "mitigation plan provides equal or better biological functions and values compared to existing conditions. . . ." RCW 90.74.010(2). It is also recognized by Ecology and the PCHB in the Lake Chelan 401 Certification.

In contrast, compliance with water quality standards under RCW 90.48.422 requires FERC licensed hydropower projects to mitigate or remedy only a water quality violation or problem to the extent there is substantial evidence such person has caused such violation or problem. Similarly, the Washington State Supreme Court held that the antidegradation policy requires mitigation for project impacts and not restoration to pristine natural conditions. Port of Seattle v. PCHB (Airport Communities), 2004 WL 1075236, Slip Op at 18, (Wash 2004).

4. The Mid-Columbia PUDs Presently Perform a Monitoring and Evaluation Process That is More Than Adequate to Measure the Net Ecological Benefit as Suggested In Exhibit A to the UAA Guidance Document.

The Mid-Columbia PUDs presently perform a monitoring and evaluation process that is more than adequate to measure the net ecological benefit as suggested in Exhibit A. In this regard, the Biological Opinion for the Priest Rapids Project requires a performance evaluation program to measure the contribution of each action toward the desired objective, provide a basis for identifying new priorities, annual progress and implementation plans, periodic performance evaluations to measure progress toward attainment of the performance standards, coordination with fishery agencies and tribes through the Priest Rapids Coordinating Committee on study plans, implementation plans and performance evaluations.

For the past 20 years, Grant PUD has been doing this analysis in connection with its operation of the Vernita Bar Agreement and more recently in determining its baseline dam and project level survival estimates through the Mid-Columbia Coordinating Committee.

Specific project modifications that include new Advanced Turbine designs and fish bypass facilities will be evaluated to measure increased survival over existing turbines and spill passage routes. In addition to pre-construction hydraulic model studies and survival studies, detailed survival and water quality studies are planned to evaluate fish passage and water quality

after construction to measure performance compared to the overall objective of achieving higher survival rates and improved water quality.

The Guidance document should confirm that these are the types of measures that will provide reasonable assurance that the Project will provide a net environmental benefit for designated uses within the Project area. The Washington State Supreme Court in Port of Seattle v. PCHB (Airport Communities), 2004 WL 1075236 (Wash) recently stated in an analogous context that Ecology may rely on the future submission of revised studies, plans, and reports in determining reasonable assurance under Section 401 of the CWA. Slip Op at 14-16.

5. The Adaptive Management Plan Should Contain Alternative Criteria for Compliance with Water Quality Standards.

When the biological objectives have been met, but a numeric criterion has not been met, Ecology committed to “initiate a process to modify the applicable standards through rulemaking or such alternative process as may otherwise be authorized under applicable state and federal law.” Lake Chelan Section 401 Certification at 6. Similarly, if some or all of the biological objectives have not been met, but the utility has taken all known, reasonable, and feasible measures to achieve those objectives, Ecology committed to “initiate a process to modify the applicable water quality standards to the extent necessary to eliminate non-compliance with such standards.” Lake Chelan Section 401 Certification at 7. As the PCHB held, the “primary aim of the section 401 certification is to meet the state water quality standard by complying with the intent and substance of the standard rather than its numeric form.” PCHB Findings of Fact, Conclusions of Law, and Order, at 15.

To guide future processes, the UAA Guidance document should incorporate language from PCHB decisions focusing on biological results as an alternative to strict compliance with numeric water quality criteria where there is an enforceable monitoring and evaluation process like those involved in the recent Biological Opinions for the Mid-Columbia Projects.

6. In Particular, the Guidance Document Needs to Clarify the Scope and Application Of Subcategories Of Uses And Special Conditions.

The table on page 3 of the Guidance document states that “A site specific criteria [*sic*] must demonstrate that local biota are less sensitive to a pollutant than the biota used to establish the national or state criteria.” In addition to being an overly narrow interpretation of the factual basis for a site-specific criterion, during the water quality standards setting process many interested parties provided detailed information to show that fish simply respond to a condition differently in the project area than in a laboratory setting. For example, fish exposed to relatively high levels of total dissolved gas (TDG) in a test pool have developed gas bubble trauma, however, when fish are exposed to the same levels of TDG in the Columbia River, the observed risk and severity of GBT symptoms have been low or not present at all. It may not be that the local fish are less sensitive, but that their natural environment provides significant differences from an artificial laboratory setting.

During the water quality standards setting process, Ecology indicated that it would seek this type of site specific information through the UAA or a site specific standard process to incorporate instances where fish were physically able to compensate for higher levels of TDG or

water temperature to prevent disproportionate impacts to industrial uses. Accordingly, we recommend that the table on page 3 be revised to clearly indicate that a site-specific criterion may also be established in a wide variety of factual contexts beyond where the local biota are shown to be less sensitive. One possible test would be that a site-specific standard may be used where there is credible biological evidence that the fish population in the project area would not, in fact, be significantly harmed by modifying the criterion and/or where measures provide greater off-setting benefits, such as increased spawning and rearing habitat, such as that being provided under the new Hanford Reach Fall Chinook Protection Program Agreement.

Moreover, Ecology has the discretion to apply site-specific criteria in the event that compliance with existing criteria is not reasonable and feasible. The PCHB has recognized that in the event of an exceedance of certain numeric criteria "correction may not be practically achievable, and may require site specific water quality criteria to be established for the Project" Friends of the Cowlitz v. Ecology (2003)." In this regard, Ecology deferred determinations under the Clean Water Act on the "use and value for public water supplies, agricultural, industrial and other purposes" with respect to hydroelectric dams and other large industries until the site-specific information could be brought forward into the UAA process.

We believe that the conflict that exists in the UAA guidance that identifies certain structures as "irreversible human developments" can be reconciled with standards that require attainment of "natural conditions" when there are a set of alternative standards and measures to protect the designated uses.

- 7. The Guidance document should provide flexibility so that it may be refined as Ecology and the regulated community gain experience in the use of UAA/site-specific standard processes.**

To the best of our knowledge, Ecology has never completed a UAA process (and EPA has only approved of UAAs involving water bodies such as irrigation drainage ditches and canals to our knowledge), and there has never been a UAA undertaken on a major river like the Columbia nationally. This suggests that the Guidance document should avoid detailed requirements that may not later be supported by experience and avoid prescriptive answers to questions that have not been fully explored. Instead, we suggest that the Guidance document build on what we have learned so far through years of field research.

In closing, Grant PUD supports the comments filed by Chelan PUD and the Bonneville Power Administration to the extent not inconsistent with these comments. Based on years of research, Grant PUD has developed detailed plans to attain numeric water quality criteria that are integrated into the measures for improved survival for listed and non-listed species. Various fish protection and water quality programs will rely on future studies to verify attainment of applicable water quality standards and fish passage survival. We recommend that the UAA Guidance document should also be flexible enough to use this information in setting alternative site specific standards as appropriate. When the water quality standards were set in 2003, Ecology representatives acknowledged that the UAA process should be flexible enough to incorporate site-specific information consistent with the regulatory requirements for individual river reaches.

Very truly yours,

A handwritten signature in cursive script that reads "Cliff Sears".

Cliff Sears
Regulatory Compliance Coordinator

cc: Laurel Heacock, Grant PUD, Manager, Licensing and Compliance
Tom Dresser, Grant PUD, Manager, Fish, Wildlife and Water Quality
Bob Clubb, Douglas PUD
Steve Hayes, Chelan PUD

Niemi, Cheryl

From: John Gross [jgross@knrd.org]
Sent: Thursday, August 12, 2004 3:20 PM
To: Niemi, Cheryl
Cc: fwilshus@nwifc.wa.gov
Subject: uaa guidance comments

Cheryl,

This email contains the Kalispel Tribe's comments on Ecology's DRAFT Use Attainability Analysis Guidance for Washington State. We appreciate the time and effort you've taken in developing this guidance and soliciting comments on it.

We support Ecology's efforts to inform and consult with affected tribes on upcoming and developing UAAs. At this early stage in UAA development in the State of Washington, the Kalispel Tribe is interested in being informed about any potential UAAs in that we are interested in the development of this process.

We are concerned that Ecology's effort to clarify the UAA process occurs so soon after the state's adoption of newly revised water quality standards. Also of concern is that the newly adopted standards call for tribal consultation for UAAs but are silent on this point for variances and site specific criteria. However, we are pleased to hear from Ecology that a particular use's attainability is not at all dependent on whether or not that use is designated or currently existing.

We appreciate the Ecology has recognized flow as a critical component of water quality and water quality standards in, for example, primary contact recreation. We encourage inclusion of streamflow in assessing appropriate uses of aquatic life as well.

Your economic impact analysis section is apparently largely unbiased toward positive or negative economic impacts and from whose perspective this is defined. However, page 25 includes that statement that private sector entities "should consider many of the same socioeconomic conditions (as public sector entities should - income, unemployment, debt, property value)." Also applicable are positive impact of responsible natural resources stewardship. Many public and private sector entities enjoy positive economic impact due to proximity to or use of healthy aquatic ecosystems.

Finally, we appreciate the effort that Ecology has put into soliciting public comment on this draft guidance. We encourage Ecology similarly to solicit public comment, as well as that of appropriate agencies, when reviewing submitted UAA proposals.

Again, thank you for the opportunity to comment. We look forward to responsible development of this guidance.

John Gross
Kalispel Natural Resources Department
P.O. Box 39
Usk, WA 99180

8/25/2004

Niemi, Cheryl

From: Kathleen Satnik [krdwq@elltel.net]
Sent: Friday, August 13, 2004 1:33 PM
To: Niemi, Cheryl
Cc: Braley, Susan; Creech, Jane T.
Subject: UAA comments

Ms. Niemi~

At this point I cannot fully comment on the Draft UAA Analysis because it is incomplete. When the sections currently marked "WITHHELD" are finished, including the section on irrigation water, I will submit my comments to you.

I will say that I am exceedingly concerned about the document protecting illegal, potentially existing uses and the stated unwillingness to group waterbodies (such as an irrigation district or districts) into a single UAA.

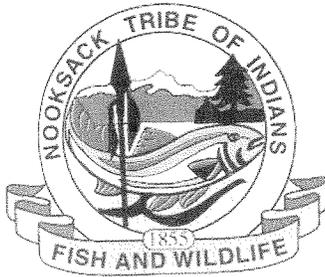
I look forward to reading a completed copy of this document. Irrigation entities in our valley recognize that while this particular draft absolutely precludes them from conducting a UAA, there may be a point in the future where Ecology will allow irrigation districts to conduct a UAA or a similar study.

Please contact me if you have any questions. Thank you for your willingness to answer my previous questions regarding the draft.

Sincerely,

Kat

*Kathleen Satnik
Kittitas County Water Purveyors
krdwq@elltel.net www.kcwp.org
(509) 925-6158
PO Box 276 Ellensburg, WA 98926*



Nooksack Indian Tribe Natural Resources

5016 Deming Road • P.O. Box 157 • Deming, WA 98244
(360) 592-5176 • Fax (360) 592-5753

Department of Ecology
Water Quality

AUG 16 2004

August 11, 2004

Cheryl Niemi
Department of Ecology
Water Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

RE: Comments on draft Use Attainability Analysis Guidance for Washington State

Dear Mrs. Niemi:

We appreciate the opportunity to provide comments on the Draft Use Attainability Analysis Guidance for Washington State. Since many of the sections most critical to the Nooksack Tribe are yet to be drafted, we would like the opportunity to provide additional comments when the completed Draft UAA Guidance has been developed. We also strongly recommend that Ecology consult with the tribes while drafting such sections as Water Supply Uses, Fish Harvest Uses and Wildlife Uses. Below you will find a table that summarizes our comments by page number and section of the Draft UAA Guidance.

Involvement and consultation with affected tribes early in the UAA process is critical not only because of the critical link to our treaty resources, but also because the Tribes in many cases have the most reliable and complete data on fish uses, distributions and periodicity, habitat, and water quality.

Thank you for consideration of these comments. We look forward to working with you on the continued development of this guidance. If you have any questions please contact our *Water Resources Specialist*, Sara Kinney by phone: (360) 592-5176 or e-mail: skinney@nooksack-tribe.org.

Sincerely,

Robert Kelly
Nooksack Natural Resources Director

UAA Guidance for Washington State

| Page and Section | NNR Comments |
|---|--|
| Pg. 11, Unattainable Designated Uses...remediable physical barriers... | The UAA should explicitly require an assessment of downstream man made barriers, and instead of only saying “uses should generally be considered obtainable” (upstream of blockages including culverts), fisheries co-managers should be consulted. |
| Pg. 14, Regulatory approach... Use-protection, situation #1... use of the terms Core and Non-core... | Ecology has yet to define the terms Core and Non-core, and that problem is compounded here. In the absence of doing so, our interpretation would be EPA’s definitions. |
| Pg. 14, Regulatory approach... Use-protection, situation #2 “water quality could be allowed to degrade to the 6.5 mg/l dissolved oxygen criteria” | Ecology needs to be careful here not to contradict the anti-degradation rules, and saying “water quality could be allowed to degrade” suggests this, and is also counter to habitat and water quality improvements needed for salmon and trout recovery. |
| Pg. 15, specific examples, item #2, second line... | Shouldn’t the statement say “...but it can <u>not</u> meet the criteria established... ” instead of “...but it <u>does not</u> ...?” |
| Pg. 18, Should uses be applied in very small or very large areas based on a UAA?... “When evaluating this situation Ecology will consider the following types of information” ... | This statement should include tribes and read something like... “When evaluating this situation Ecology with assistance from fisheries co-managers will consider the following types of information” since fisheries managers collect and maintain the data on these fish uses being evaluated. |
| Pg. 20, Can flows be regulated to improve water quality? | UAA’s need to address instream flows, both current and historic flow conditions, and without addressing this issue, the UAA will be inadequate. |
| Pg. 21, What is the relationship between Threatened and endangered Species and UAA’s?... | The first sentence should include language that includes might inhabit or use waters where or <u>waters down gradient</u> of the proposed UAA |
| Pg. 23 | There needs to be required notification to affected Tribes and WDFW of proposed changes to the state standards. |
| Pg. 23 Step six | In addition to EPA’s consultation for ESA, you should mention EPA’s Trust Responsibility to protect Treaty Resources. |

| | |
|---|--|
| Pg. 24 Last sentence on page | Should it read the affected area might... or the unaffected area might...? |
| Pg. 27 Aquatic Life Uses | There are problems with some of the definitions. Char – early tributary rearing... (Juvenile rearing (150 mm) by char is better wording, and this also occurs in rivers) Core and Non-core have yet to be defined by ecology. |
| Pg. 28 Last paragraph | This section should be deleted, as it suggests low fish use does not constitute use. This ignores the impact that degraded habitat, water quality and water quantity have had on fish populations, and the fact that it is impossible to even “determine whether “one fish wanders into a waterbody on an occasional basis”. The term “threshold” should not be used – if there is use there is use and it is inappropriate to apply a threshold. |
| Pg. 29 Reference sites... | For reference sites, <u>undisturbed</u> should be added to the reference stream conditions |
| Pg. 31 | There appears to be a strong need to sort out what is naturally occurring and what is the result of human activities. |
| Pg. 31 Indicators Related to Aquatic Life Uses (Last paragraph on page) | Where applicants are urged to discuss the study design with both Ecology and EPA prior to any fieldwork, fisheries co-managers need to also be included as they manage the fisheries resource and maintain the data. |
| Pg. 33 Biological Indicators Section | This section is poorly developed... It doesn't take into account study design, necessary take permits, methodology, how to sample, or seasonality of fish use... Ecology should include co-managers to help in developing this section. |
| Pg. 33 Habitat Assessment | The meaning of the sentence “Continuous exposure to the localized condition presents an historical view of a stream's quality” is unclear. It should be noted that while SSHIAP is a good source for data, it is not completed for all geographic areas (like Fraser River tributaries) and cannot be solely relied upon. |
| Pg. 34 Aquatic Habitat Checklist | Needs a lot more development – include fisheries co-managers in developing this. |
| Pg. 36 Data Sources | SSHIAP should be listed first and should be the only map source recommended of those listed the other two data sources provide some useful fish information, but are poor fish distribution maps. NWIFC maintains distribution maps in the SSHIAP system for west-side and WDFW for east-side streams. |

| | |
|---|---|
| Pg. 36 Spawning Survey Database | <p>The WDFW office in Olympia maintains most co-manager spawning survey records and it should be noted that not all streams are surveyed and very few are fully surveyed. Additionally, the affected tribes within geographic areas of interest and local WDFW offices should also be consulted. Many historical records are not integrated into the Olympia database, especially those traditionally managed by the old Dept. of Game such as steelhead.</p> |
| Pg. 36 The Natural Resource Information Portal | <p>The first sentence in this section should read; “The website provides a place to access available salmon and watershed data in Washington State”. Main point is to get rid of language that says that it is a <i>single place</i>, because there many are other resources that need to be considered.</p> |
| Pg. 36 Tribal Fish Biologists | <p>First sentence should read more like; “In Washington most Tribes collect comprehensive information on watershed condition, water quality, habitat data and fisheries uses of waterbodies throughout the state, in co-managing the fisheries resources.”</p> |
| P. 37 QAPP | <p>QAPP’s need to be required instead of suggested.</p> |
| Pg. 38 Sampling & Analysis - Biological Parameters | <p>Missing a fish data subsection all together</p> |
| Pg. 39 Information Assessment | <p>Historic conditions need to be included in the assessment. Also, in the last sentence of this section replace “not interfere with” with “support” downstream uses and criteria.</p> |
| Pg. 41 Determining the attainable uses | <p>Who determines what is a “reasonable” BMP? Use of this term is open to interpretation, and should be dropped.</p> |
| Pg. 41-42 Criteria for removing a designated use, if it is not an existing use... | <p>#(4) How is feasibility determined? #(5) when referring to the natural features of the waterbody, what is considered natural? Historic conditions? Current conditions? While this is in the CFR, what is important is that habitat degradation can change some of these “natural features” including flow, pools and riffles and cover.</p> |
| Pg. 44 Data Sources | <p>With boat shops, sporting good stores should be included, and Tribes need to be</p> |

| | |
|--|---|
| | listed. |
| Pg. 45 Indicator Measurement: Planning | A QAPP <u>needs to be prepared and approved</u> |
| Pg. 45 Information Assessment | Same as Information Assessment on Pg. 39 and therefore the same comment applies. |
| Pg. 47 Reserved sections (Water Supply Uses, Wildlife Uses, Fish Harvest Uses) | Theses sections are the most critical as they relate to tribal reserved rights and since they are not even drafted we cannot provide comment at this time. However we recommend that Ecology consult heavily with the Tribes while drafting these sections. |
| Pg. 49 First Sentence on page | Insert text after "If Ecology", that reads " in consultation with the Tribes and WDFW" has chosen... |
| Pg. 49 | Replace the interested tribes with <u>affected tribes</u> . |

Northwest Environmental Advocates: American Rivers;
Lands Council, The: Puget Soundkeeper; Trout Unlimited
- Spokane Chapter; Sierra Club, Upper Columbia River;
People for Puget Sound; Lake Spokane Protection
Association: Center for Justice

August 13, 2004

Cheryl Niemi
Surface Water Quality Standards Unit
Water Quality Program
Washington Department of Ecology
Olympia, WA 98504

Via e-mail: cnie461@ECY.WA.GOV

Re: **Draft Use Attainability Analysis (UAA) Guidance for Washington State, Version 1.0, May 2004**

Dear Cheryl:

I am writing on behalf of Northwest Environmental Advocates, American Rivers, The Lands Council, Puget Soundkeeper Alliance, Spokane Chapter of Trout Unlimited, Upper Columbia River Group of Sierra Club, People for Puget Sound, Lake Spokane Protection Association, and the Center for Justice to comment on Ecology's first draft Use Attainability Analysis (UAA) guidance. Draft Use Attainability Analysis (UAA) Guidance for Washington State, Version 1.0, May 2004 (hereinafter "guidance"). We appreciate the opportunity to have early input into this guidance and your accommodating our request for an extension of time in which to provide it.

Given that the Department of Ecology (Ecology) is likely to seek more than one additional round of public comment on its guidance, we suggest that sections be further identified so that it is easier for those who are providing comments to associate their comments on a given section with the section itself. Use of an outline form, numbered lines or paragraphs, or other methods would be helpful.

Part 1. How to Use This Document

This section encourages entities other than Ecology or the U.S. Environmental Protection Agency (EPA) to be involved in the conducting of UAAs that will subsequently be used as the basis for changing Washington's water quality standards. Guidance at 1. We strongly urge that Ecology focus on improving the protection provided by its current standards rather than expending any public funds whatsoever in reducing that protection.

In addition to the list of items included in the guidance document is a statement that entities or persons seeking to conduct a UAA are "strongly recommend[ed]" to "discuss the proposed study with Ecology and EPA prior to development of the study design." *Id.* at 1. Given that these studies will be used as the basis of scientific, regulatory, and/or policy basis for downgrading use protection in Washington state, we agree with this statement but would go further. Ecology should strongly recommend that any such study, particularly being done by an entity with a vested economic interest in the outcome, be required to sponsor a public process to obtain public interest and tribal government input prior to proceeding with the study design, as well as to present the

results to the public upon completion. The first of these items is essential because, after significant funds have been spent, particularly with Ecology's approval of a study design, the agency will feel some political pressure to act upon the UAA. The public is a rich source of information on what data should be collected, what constitutes "existing uses," and other waterbody-specific information. Study design can heavily influence the outcome of any process of data collection; if vested interests are in charge of the collection, they should be required to have public input at the outset. Without impugning any government employees, NWEA has seen many instances over the years when state and federal staff did not recognize an existing use, understand the role of a particular species in the food chain, or comprehend the importance of a species to certain cultural groups.

Part 2. The UAA Process

We object to the use of the word "applicant" in discussing the conduct of a UAA because it implies that the entity has some regulatory role in the process, as if it were an applicant for an NPDES permit or 410 certification. *Id.* at 1. Instead, a UAA is a process by which a State can, but is not required to, should it determine at the outset that for policy reasons it is in the best interests of the state, downgrade protection of its waters. The entity seeking to influence Ecology to change its uses is not, therefore, an applicant but a supplicant. We agree that members of the public can "assist in the development of a UAA." We also agree that Ecology should establish a process, with sequential steps, to avoid wasting time and resources. We don't believe that the guidance accomplishes this goal.

Part 3. Is a UAA Right for Your Waterbody?

We object to the language used in this guidance with regard to their being a "number of approaches an entity can take to comply with water quality standards." *Id.* at 2. This discussion implies that there are no policy distinctions for the public waters between the two fundamental options (comply or change the standards), a flaw that is found throughout the document. In other words, Ecology implies that if an entity can demonstrate that the rules of the federal UAA provision and its guidance have been met, there are no other considerations that might lead the Department, acting in the interests of the State and its citizens, now and in the future, to deny the UAA request. However, this is not true. Uses are intended to be designated beyond what uses are existing, in that a state has a policy reason to aspire to protecting and improving water quality, and therefore the protection of its uses, beyond what was present at the time the Clean Water Act was passed by Congress. Those policy reasons include, but are not limited to, wanting to protect water quality for future human uses (industrial assimilation, clean drinking water, clean industrial intake water), assuring that species do not become threatened or endangered in order to avoid extinction and to avoid future societal costs associated with species' T&E status, wanting to provide the highest levels of protection for water quality and

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 3

species, anticipating loss of flows due to climate change that will decrease dilution capacity of streams, increase naturally-occurring concentrations of pollutants, and stress species beyond current environmental conditions, among a myriad of reasons.

There are, in short, innumerable policy reasons for the State of Washington to designate its uses in ways that set high goals for the present and the future. Use designations are currently not met throughout the state yet this is not a reason in itself to lower the State's goals (and is precluded to the extent those uses are existing within the meaning of 40 C.F.R. § 131.3). For example, the belief today that a farmer cannot significantly alter his or her conservation of water, that a dam will never be removed or significantly modified in its operation, these are short-term beliefs that may well be altered over time as technologies change, beliefs are altered, and circumstances evolve. To downgrade designated uses in order to accommodate the short-term desires of polluting entities to look as if they are not causing environmental and public harm is to remove from public discussion those actions which should, in fact, be discussed in the future.

In addition, we strongly object to Ecology's encouraging the use of variances and site specific criteria, in addition to UAAs, for the same reason. We believe, however, that the short-term nature of variances do not have the same effect on the State's long-term goals for water quality and the protection of its aquatic-based uses as UAAs.

Moreover, the distinctions drawn by Ecology in the description of the three tools, while accurate, fail to discuss the short- and long-term policy implications of these choices. For example, a decision to, for an indefinite period, redefine the designated uses may be justified from both a scientific and economic basis, but that does not make it a correct decision. States are free, within limits set out in the regulations, to not protect uses that were not existing from 1975 on but that is not necessarily good policy. In addition, the description only includes a passing reference to the federal requirement that any uses that do not include § 101(a)(2) uses must be reviewed every three years for possible upgrading. This too is a cost to the agency and the public that should not be borne unnecessarily.

Ecology observes that "UAA's [sic] are generally undertaken in areas where the designated uses for the waterbody are suspected to be inaccurate." *Id.* at 3. This is true, however by encouraging the development of UAAs by entities capable of paying for data collection and making no provisions for Ecology to conduct such studies for those interests that lack the resources to engage in extensive data collection, Ecology has established in this guidance a State policy of downgrading uses. For example, there is no evidence that Ecology has any intention of complying with 40 C.F.R. § 131.10(I), which requires that uses be upgraded where use designations are less than those presently attained, or 40 C.F.R. § 131.11(a) that requires Ecology to protect the most sensitive uses, or 40 C.F.R. § 131.12(a) that requires Ecology to protect existing uses and the water quality necessary to support them. This is discussed further,

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 4

below, in response to references by Ecology that imply existing uses are currently protected by the State and the criteria in its water quality standards that are similarly protective. (In point of fact, since the State has no antidegradation implementation methods for Tier I antidegradation, protection of existing uses and the level of water quality necessary to protect the existing uses, it currently does not protect existing uses.) Within the context of Ecology's ongoing failures, the State's contemplating spending any resources at all in the evaluation of whether some designated uses should be downgraded is bankrupt.

In addition, Ecology is misleading about what situations allow for UAAs. The draft guidance states that "[i]n water bodies throughout the state designated uses are supported at both optimal and less than optimal levels by the current conditions of the water body[]." *Id.* at 3-4. It is not clear what point Ecology is trying to make here. If a designated use is being protected at an optimal level, then it is obviously attaining its designated use, and its designated use is also an existing use by definition, in which case it is not a candidate for downgrading. The guidance also states that "If the designated use currently exists and is supported at an optimal level by the quality of the water, then that use may not be downgraded." This misstates the federal requirement to protect "existing uses" because it implies an existing use is defined as currently present. We agree with the statement that existing uses cannot be removed with a UAA. However, Ecology proceeds to fudge here and elsewhere in the guidance by overlapping the element of attainability with that of existing use protection: "Existing uses include uses that are only partially supported (the use may be negatively impacted by current conditions, but the use is still present in the waterbody). All existing uses must be protected to attainable conditions." *Id.* First, it is not clear what these statements mean. Second, they are wrong.

Throughout most of the document, with few exceptions, Ecology defines existing uses as "in existence after November 28, 1975." *Id.* at 4. This is incorrect. It should read: "on or after November 28, 1975."

In the first bullet discussing the "dual focus" of the UAA, Ecology states that existing uses include uses that are "only partially supported (the use may be negatively impacted by current conditions, but the use is still present in the waterbody)." *Id.* at 4. We agree that a partially supported use is existing. The problem with the statement Ecology makes, however, is that it is ambiguous and misleading. First, it speaks of "partially supported," "current conditions," and "is existing," all of which are a reference to the status of the uses in 2004. The status of the uses in 2004 is *only* relevant if those uses have just established themselves for the first time since 1975 or are at their maximum presence in 30 years. Otherwise, the discussion should be referencing existing uses in the context of their legal definition. The question Ecology's statement begs is what the relevance is of uses that were only partially supported in 1975 or any time thereafter; the answer is that they are classified as "existing uses." If the use has subsequently been impaired or even extirpated, it still cannot be downgraded because it is an

existing use. The guidance should make this clear. In addition, it makes no difference when the use might have been impaired by conditions.

Ecology goes on to state that “[a]ll existing uses must be protected to attainable conditions.” *Id.* at 4. This is an incorrect reading of the law. Ecology is not free to, while requiring the continued designation of existing uses, use a UAA to establish criteria that are not fully protective of those uses and, instead, represent “attainable conditions.” To the extent that Ecology may be allowed to not fully protect existing uses it can only do so in the context of variances or site-specific criteria.¹ It cannot pretend to protect the existing use through a UAA procedure while adopting criteria that provide less than the protection required by federal regulations based on its idea of what is “attainable.” This sentence appears to be an attempt to allow the downgrading of existing uses without actually doing so.

Ecology’s guidance omits several critical issues with regard to UAAs. First, the guidance fails to discuss the assumptions and, second, it fails to discuss the burden of proof. These are two issues that exist, regardless of whether Ecology discusses them or not. By not discussing them, not only can the guidance be misleading but it might imply certain policies and legal interpretations that are incorrect. The federal regulations make clear where the burden falls: “States may remove a designated use ... *if* the State can demonstrate that attaining the designated use is not feasible[.]” 40 C.F.R. § 131(g) (emphasis added). The use of the word “if” means that Ecology may not remove designated uses unless it can make an appropriate demonstration. This is further supported by the federal rules which forbid removal of designated uses if they “will be attained [by various controls].” 40 C.F.R. § 131.10(h). EPA rules leave no room for doubt where the burden falls. Proof of non-attainability must be demonstrated and cannot be assumed. Moreover, federal regulations prohibit the removal of lack of protection of existing uses in no fewer than four references: 40 C.F.R. § 131.10(g) (“States may remove a designated use which is not an existing use.”); 40 C.F.R. § 131.10(h)(1) (“States may not removed uses if: they are existing uses.”); 40 C.F.R. § 131.12(a)(1) (“Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”); 40 C.F.R. § 131.12(a)(2) (“[T]he State shall assure water quality adequate to protect existing uses fully.”). Nowhere is there any of the ambiguity that Ecology seeks to introduce in its guidance that would lead one to believe that attainability tempers the protections afforded existing uses dating to November 28, 1975.

¹ Ecology is required to adopt criteria to protect the most sensitive uses. 40 C.F.R. 131.11(a)(1). It is also required to protect existing uses that have not been designated. 40 C.F.R. 131.10(I) and through implementation of Tier I of the antidegradation policy (“Existing instream water uses and the level of water quality necessary to protect the existing uses *shall* be maintained and protected.”) 40 C.F.R. 131.12(a)(1) (emphasis added).

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 6

The second bullet on the dual focus of the UAA discusses attainability. *Id.* at 4. Again, the statement is made that “technical and economic limitations on human sources” will govern the level of uses and water quality that can be attained. This statement makes no reference to the fact that existing uses must be protected, regardless of whatever technical and economic limitations might exist. Without clarification, it appears that Ecology will allow for the downgrading of existing uses.

Similarly, in the examples of surprises that might arise in the process of conducting a UAA, Ecology discusses the possibility of more sensitive uses being “present,” without also noting that there is a possibility that more sensitive uses have been present at any time over the last 30 years having the same regulatory result. *See*, 40 C.F.R. § 131.11(h). The comment that the detection of a presence of a use, not expected, “thus [might warrant] more protective criteria” is a correct statement but a disturbing one. As Ecology is well-aware, the uses that it has designated are based on relatively flimsy evidence, it has no method of implementing the Tier I protections for existing uses when it applies its water quality standards through regulatory actions, its numeric criteria frequently are not protective (e.g., they are not intended to protect birds and mammals, subsistence and tribal fish consumption), and it generally fails to implement its narrative criteria and designated use support to fill the gaps in its numeric criteria. So, to comment that more protective criteria “might be warranted” is odd. It is quite evident that more protective criteria are warranted. Under the scenario described, “might” is an understatement; it should read “likely.” Second, since the criteria used by Ecology are currently not protective, it could equally be presumed that the criteria would have to be made more protective. Third, given the failings mentioned, there is no reason why Ecology should spend a single tax dollar conducting UAAs; instead it should be assuring that it is protecting the existing uses by conducting monitoring of sensitive uses, upgrading its criteria to protect designated uses not currently protected, developing an implementation methodology for Tier I of its antidegradation policy, among other ways to spend precious public resources.

The statement that a short-term variance might be merited where a UAA is not fails to discuss the policy implications of Ecology’s issuing variances. *Id.* at 4. In fact, while variances are frequently mentioned in this UAA guidance, there are no discussions of the policy implications of downgrading pollution control goals in the short- or long-term anywhere in the document.

Ecology’s guidance states that upgrading use designations does not require a UAA. *Id.* at 5. We concur. However, it would be nice if Ecology would inform the public as to what it is doing to ensure existing uses are being protected through its current regulatory program, as required by federal rule, what it should do that it isn’t doing to upgrade its use designations, and to further explain how members of the public could assist Ecology in conducting these upgrades.

Are UAAs used only to lower protection under the water quality standards?

Ecology's guidance states that a "UAA must include sufficient information to answer the question of whether any existing or attainable uses occur at the site that are not being protected by the designated uses." We agree. This begs the question, however, of whether the criteria assigned to those designated uses are, in fact protecting either the designated or the existing uses. There are many instances where Ecology knows or should know that its criteria are not protective of the uses (e.g., failure to protect birds and mammals), and many instances where Ecology simply does not have sufficient scientific knowledge to know if they are (e.g., amphibians). Therefore, in answering the question about whether designated uses can be removed, leaving only protection of existing uses, Ecology must also address whether its criteria are adequately protective of either the existing uses or new use designations.

Can an existing use be downgraded?

The guidance states that "credible evidence [might exist] that documents the [existing] use after November 29, 1975." *Id.* at 5. This, too, begs the big questions. To what degree does the "applicant" seeking to downgrade Washington's designated uses have to seek such credible evidence? Upon whom is the burden to demonstrate that a thorough investigation was done? Upon whom is the burden to demonstrate whether the evidence is "credible"? Whose burden is it to demonstrate existing uses and what are the operating assumptions? The answer is, in all cases, that the burden is on Ecology to prove that designated uses to be removed would not also remove an existing use. Because Ecology has made clear its intent to not spend state resources on UAAs, the guidance must make equally clear that the burden of proof rests on the entity seeking to downgrade the use designations. This means that Ecology and the entity must demonstrate that the designated use did not exist on or after November 28, 1975. The assumption, unless and until proven otherwise, is that the designated use did exist. Contrary to Ecology's assertions elsewhere in the guidance that a photograph of fish caught in a waterbody would demonstrate an existing use and, by implication, the absence of a photograph would demonstrate the use was not existing, the UAA requires an entity and the State to demonstrate the use did not exist. That is the meaning of the word "if" in 40 C.F.R. § 131.10(g), as discussed above.

Strikingly, the guidance very infrequently mentions "enhanced water pollution control options" as a possible alternative to UAAs, variances, and site-specific criteria. See, e.g., *Id.* at 5. There is no discussion in this guidance of what constitutes such "control options." For example, there is no discussion of the need to look in other regions or other countries for new and possibly more cost-effective technologies. There is no discussion of the use of trading with nonpoint sources to address point source problems, the range of control options that must be examined, or whether they also include maintaining more instream flows. There is nothing about the time frame for

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 8

implementation of controls or achieving the results from control options. In short, the guidance leaves the reader with the impression that the entity conducting the UAA can ignore many issues related to pollution controls.

We recommend that each time there is a reference to "downgrading" a designated use, where it is also relevant, that reference should state that such a downgrading might be temporary due to the requirement of federal regulations that at each triennial review any waterbody with less than CWA § 101(a)(2) uses. 40 C.F.R. 131.20(a). In addition, where any downgrading triggers this requirement, Ecology should require the "applicant" for the UAA to provide a plan and funding for continued post-UAA monitoring in order to create data and information upon which Ecology can base a future review. New information and changed policies are the only reasons that would make it valuable for Ecology to conduct the mandatory upgrade review required by federal regulations. In order to give this provision any meaning, new information must be obtained

Can a UAA to downgrade an aquatic life use be done in waterbodies with ESA-listed species, such as some salmonid runs?

The guidance mentions the low likelihood of UAAs being approved given proposed changes to designated uses that might affect the recovery of T&E species. *Id.* at 6. We completely agree. However, it would be helpful if the guidance discussed this further as in our experience many entities have not yet grasped the role of the ESA with regard to water quality standards. In addition, with the attention to the temperature standards in the region, it might not be grasped that Ecology's statements with regard to the ESA concern a wide array of pollutants not just temperature. Moreover, this should make reference to discussions on existing uses and the geographic ranges required for the recovery of T&E species, as discussed elsewhere in these comments.

Part 4. General Information About UAAs

What is a UAA?

The guidance does not include a discussion that explains the purpose of use designations that exceed existing uses. In other words, Ecology has not explained the public benefits of establishing protection goals for the State that would restore water quality and the uses that depend upon water to a level that exceeds those that were roughly present at the passage of the Clean Water Act (i.e., 1975). Since there is a great deal of confusion about what this benefit is, and some considerable pressure to simply protect only what is present 30 years later, setting out the purpose of use designation, as opposed to existing use protection and protection of current uses, would be a helpful foundation to this document.

When is a UAA needed?

Ecology's discussion of species that are expected to occur should clarify that the agency means "native species." *Id.* at 7. As Ecology is well aware, and is discussed further below, non-native species of all sorts (e.g., plants, fish, invertebrates) are a form of pollution frequently capable of causing impairment of native species. It should not be the intent of the water quality standards to protect nonnative species, particularly to the extent that they interfere with native species including the protection and recovery of T&E species.

Grouping multiple waterbodies in one UAA

Ecology discusses the potential for entities to conduct UAAs for multiple waterbodies as a single unit or to treat some waters as representative of others for which a UAA is being sought, regardless of geographic location. *Id.* at 9. We strongly object to this approach. While UAAs may be done on more than one waterbody at a time, data and information are required for each waterbody. The UAA is, by its very nature, a geographic-specific exercise making the idea of "representative" waters an oxymoron. If, for example, an entity found that nobody swam in a polluted waterbody that it termed "representative" of other similarly polluted waters, it would not prove that people had not used another waterbody for swimming over the last 30 years. Representative waters might be used to demonstrate the likelihood of a use, not its absence. Moreover, geographical positioning is an essential part of the analysis of downstream uses and downstream impairments of many types including but not limited to those that Ecology discusses in its guidance. Therefore, to say, as Ecology does, that some type of stormwater channel shares many characteristics and therefore makes a likely grouping for a UAA is to negate the analysis Ecology has stated already is necessary. Not only is positioning everything in a watershed or drainage basin but, again, the absence of a use in one location does not mean the absence of a use in another. One channel could be screened or otherwise include physical barriers to fish, to wildlife or to humans whereas others could be attractive or available to those same species for a variety of reasons. Polluted waters have been known to contain attractants, they may contain chemicals that confuse migrating fish, other alternatives may be closed to them. In short, there are many location-specific issues that reflect on human and non-human uses of waters. Ecology ends this discussion with the possibility that groupings could not adequately address potential of individual systems to support aquatic uses. The same should be stated for human uses.

Future re-evaluation of use assignments

We are pleased that Ecology recognizes its obligation to review non-CWA §101(a)(2) use designations at each subsequent triennial review. *Id.* at 9. We disagree with the guidance's conclusion that the triennial review "does not require the collection of new data," only because it is well within Ecology's purview to ensure that subsequent triennial reviews do, in fact, have

new data and information upon which to conduct this review. As recommended above, we believe that any entity that seeks and successfully obtains a UAA downgrading a use from that which the public supports, and which benefits from this lowering of protection, should be required to provide further funding for ongoing monitoring. This is not dissimilar to how NPDES permit holders monitor to ensure the results of their permits to pollute public resources comply with the law.

The discussion of designated uses in this section needs some additional information about the purpose of use designation, as discussed above. *Id.* at 10.

What are existing uses?

The discussion of existing uses is extremely deficient. First, Ecology does not explain why anecdotal account can be used “to a limited extent” in order that the reader of the guidance understands Ecology’s concerns. It should explain why they can be used to a limited extent to meet the burden of proving uses existed as well as to prove they have not existed. For example, the statement of a single person who states that he fished through 1980 on a waterbody should not be treated the same as the statement of a single person who claims there were no fish in a waterbody in 1980. The reason relates to the burden of proof discussed above. Moreover, Ecology’s statement that existing uses should be determined through “[w]ater body surveys, historic records, and to a limited extent anecdotal accounts” does not explain what happens if there are no such sources of information. Does Ecology believe that it is excused from the fundamental responsibility to protect existing uses dating to 1975 just because it has conducted insufficient monitoring over the last three decades? In addition, Ecology completely omits the use of best professional judgment (BPJ) and the analysis of populations by biologists. For example, BPJ could be used, for example, where: 1) there was a clear-cut and it can be inferred that prior to the clear-cut aquatic uses were significantly different; 2) there were roads, culverts, dams, or other fish passage barriers installed after 1975; 3) water rights and/or withdrawals changed after 1975; 4) population ranges are known to be inadequate to support a population.² The guidance certainly implies that an absence of information equates to an assumption of no uses.

Analysis by biologists is required in order to examine what it means to protect existing uses. For example, protection of existing uses means that the existing uses will neither become extinct nor locally extirpated. Taking the issue of extinction, if a population of bull trout currently living in an isolated area cannot interbreed with a similarly isolated area (say, because the waters that link the two areas are of poor water quality), those bull trout are part of the larger population of bull

² This discussion is not intended to alter the comments made concerning the burden of proof made in this letter.

trout that require a greater habitat range in order to not go extinct. Therefore, regardless of whether there are any data on the range of those bull trout on or after 1975, Ecology knows that the existence of the species requires broadening the geographic range. Therefore, the definition of existing use requires a greater number of waterbody miles than those in which the bull trout currently reside and possibly greater than they occupied in 1975, if indeed that information is known. The lack of knowledge about the exact dates and locations is not a complete barrier for properly designating the use because as an existing use without that greater range, the existing cannot continue to exist. Likewise, if certain known populations, whether T&E or not, would be extirpated because of the need for a greater range – due to the need to interbreed, the need to avoid localized environmental risks or other similar reasons – the definition of existing use also encompasses ensuring that the existing use continues. The mere fact that in 1975 or any time thereafter the habitat/water quality of an existing use was being deteriorated, and already had an effect on the populations, does not allow Ecology to adopt that downward trend in its use designations. To the contrary it must broaden the use designations to ensure survival, recovery, and the ability to harvest the existing use.

One minimum requirement for the protection of existing uses is a geographic range that corresponds to the designated critical habitat for ESA-listed species. That is a good starting point to ensure that existing uses are sufficiently protected in their range to assure survival and recovery. Critical habitat designations can but likely do not ensure a population size sufficient to sustain harvest, a use that will have likely been made of the species thirty years ago.

What are attainable and unattainable uses?

Ecology not only fails to discuss critical issues such as where the burden falls, the policy purposes of use designations, but also the time frames associated with the goals of water quality standard. Therefore, when it discusses the issues associated with attainability, such as pollution, dams, mining etc., it fails to put them into a broader context. *Id.* at 11. Ecology hints at issues related to the scope of fixing problems when it discusses “remediable physical barriers (i.e., a culvert)” but it does not elaborate further. *Id.* By contrasting, without discussion, dams and culverts, it implies that human caused problems that are smaller are remediable and dams are not. This is simply not true. More and more, across the country, not only is there active discussion about removing or substantially modifying dams but dams are being removed and are being modified. Therefore, implying that anything larger than a culvert is not remediable is simply, factually, incorrect. Moreover, Ecology does not discuss the underlying benefits associated with maintaining unattainable designated uses for long periods of time. There are many water quality and use-related issues that are very long term. Recovery of T&E species, restoring levels to support harvest to many species, achieving numeric and narrative criteria, protecting existing uses, protecting humans, fish, and wildlife from the ravages of multiple pollutants, restoring natural conditions to badly deteriorated, denuded, channelized, streams; growing trees to provide

sufficient shade to cool streams; creating assimilative capacity to accommodate future communities and industries...many protection and restoration actions related to the Clean Water Act are very long term propositions. To remove used designation to accommodate short-term goals and create a "feel good" atmosphere for sources of pollution and habitat degradation is not consistent with the long-term perspective Ecology and Washington's citizens must have. Use designations have never been intended to mirror current conditions, or even current conditions in 1975; use designations set out goals to which to aspire. Without aspirations, there is no impetus to improve. Without improvement, we will see more species listed pursuant to the ESA, more costs associated with treating drinking water, more health care costs associated with illness caused by pollution, etc.

What are subcategories of uses?

Ecology discusses how the specification of subcategories may result in making the criteria more or less stringent. *Id.* at 11. This is a curious statement because Ecology's existing criteria do not protect all the designated uses, let alone the existing uses. If Ecology goes to rulemaking to alter uses based on the results of a UAA, will it also fix the unprotective criteria? If not, the guidance should provide the rationale. If so, is Ecology prepared to take on that financial burden? If a UAA demonstrates that wildlife is an existing use, not protected by current toxic criteria, how can Ecology proceed without development of criteria that are protective of that use? Likewise, Ecology states that subcategories must not endanger "support of more sensitive downstream waters uses or any more sensitive uses that occur at different seasons" yet it does not now provide that protection for its uses. How will it ensure that this happens in the future? We recommend that Ecology give more consideration to this issue. Currently, the guidance tries to shake it off with examples such as one where, despite the existence of trout, Ecology insists it could adopt a warm water use. Ecology's attempt to dodge the critical issue makes the document misleading to the public.

Ecology discusses seasonal uses but makes no mention of edge seasons. *Id.* at 12. We support the idea that Ecology's protection of uses, both fresh and marine, protect overall aquatic communities, however, these statements seem internally contradictory with other statements in which Ecology suggests it can remove individual species from the use designations.

It is also unclear how Ecology squares its discussion with that which follows that describes developing "new attainable uses" that apply on a seasonal basis. *Id.* at 12. What would be the rationale for removing overall aquatic community protection on a seasonal basis? Could Ecology provide some examples of what it is proposing?

Ecology goes on to say that seasonal human uses apply for recreation, however this discussion falls short of reflecting reality. *Id.* Humans use waters regardless of how polluted they are and

they have more ability to use waters for recreation in all seasons due to technology. Therefore, for example, people water-ski in the middle of winter. In addition, the guidance's discussion of recreation does not appear to take into account how fish handling presents a hazard from polluted water at all times of the year (e.g., adults and children handling fish and then touching their mouths). Neither does Ecology explain how it would go about ensuring that removal of seasonal uses would not affect other seasons, downstream waters in other seasons, and edge seasons (which are notorious for their unpredictability).

Ecology's explanation of what its standards are is confusing. *Id.* at 13. It claims that the uses are "stream-uses" and "not specific fish-life-stage uses" but that seems disingenuous when the stream uses are labeled by life cycle stage, Ecology discusses removing these uses and replacing them with new uses, and the criteria adopted are intended to protect the fish life cycle stages not the entire range of species found. For example, there is no evidence that Ecology has made any attempt to identify the existing and needed ranges of amphibians and to establish criteria to protect them. In fact, Ecology notes that these species "are often equally or even more sensitive to water quality degradation than salmon and trout." *Id.* Yet it cannot say where they exist or defend the criteria as protective of them. So, before embarking on UAAs, has Ecology ensured that the habitat ranges associated with these uses are sufficient to protect the uses and the criteria are sufficient? Given Ecology's own concerns, it seems to be an improper use of resources to pursue UAAs instead of improvements to the agency's own admittedly inadequate standards.

The discussion on "discrete categories" of uses is confusing. It appears that "discrete" refers to individual species within the assemblages that currently comprise the designated uses, but it's only a guess. This entire paragraph needs to be rewritten to be more clear so that we can comment on it.

In this discussion, Ecology again confuses the issue of protecting existing uses by making the following statement: "It is clear that the goal under a UAA is to protect the highest attainable use." *Id.* at 14. Starting with the statement that "it is clear," does not clarify how Ecology thinks that it can meld attainability with the mandate to protect existing uses. The further discussion of "discrete use type" is confusing. The goal, to be clear, is to protect the highest attainable uses above and beyond protecting the existing uses.

The three situations set out in the guidance raise more questions than they answer. *Id.* at 14. The first example starts off with the following statement: "If existing uses include spawning and the attainable water quality condition is between the core and non-core spawning and rearing levels, then the question would typically be whether there is other information to suggest that the waterbody is core for rearing." There are many problems with this opening statement. First, the distinction between "core" and "non-core" is an arbitrary artifact of Ecology's unwillingness to establish water quality criteria across the state that are sufficiently protective of salmon. The

designation of “core” rearing is, in theory, to ensure that at least some waters in the state are protected at a more optimum rearing temperature rather than a very high optimum – and therefore unprotective – level. In other words, Ecology could not establish non-core rearing across the state and hope to gain EPA and ESA approval. The establishment of the use of core rearing might be driven by protection of existing uses not by attainability analyses because core rearing is essential to survival and recovery of T&E species. The example goes on to posit information that “suggests the waterbody does not provide for core rearing.” *Id.* The problem here is that Ecology is now saying that the protection of uses is as of 2004, not protection of existing uses. So, the question put forth in the guidance is stated incorrectly. The questions should be: to what degree was the waterbody used for “core” rearing in 1975 or thereafter *and* is the waterbody needed for core rearing in order to prevent extirpation or extinction *and* to ensure survival, recovery, and harvestable populations? The question is distinctly not how bad is the water quality today and are people inclined to spend the funds needed to make it better?

The example also raises significant concerns about the ability to model water quality conditions that are between “core” and “non-core” as is implied by the guidance. What is the level of uncertainty in the modeling? Why wouldn’t the outcome of the model be a site-specific criterion instead of a UAA? And why does Ecology then go on to talk about “allowing degradation to the non-core rearing criterion” if it’s re-designated? If it were designated as “core” rearing in the first place it was likely due to the fact that it was needed as core rearing to support salmonid recovery and/or it wasn’t sufficiently deteriorated to “non-core” status. What is the policy goal of allowing further degradation, particularly when the designations are based on professional judgment in the first place?

Ecology goes on to introduce a concept called the “special condition footnote” without explaining what this means. *Id.* This appears to be a site-specific criterion but for some unknown reason Ecology does not use this terminology and does not explain the rationale behind its new idea. In any case, the questions concerning the specificity of the modeling exercise are the same here as above, and the questions about changing long-term water quality goals to meet the desires of polluters at taxpayers cost now and in the future come up again. What is the policy problem with maintaining a higher goal? And, how does Ecology intend to honor the promises made just pages earlier concerning protection of the entire range of aquatic species in the community when it changes the criterion in its “special condition footnote”? Is Ecology still planning on protecting amphibians and an ecological assemblage in this situation? How will it do that?

The third example, raises the same issues with regard to degradation. In this example, spawning is not existing and “spawning is not identified as an attainable use” so Ecology concludes that the downgrade could occur. The quoted language is ambiguous as to how rigorous the attainability analysis was and it appears that the lack of spawning as an existing use is driving

the determination. Again, based on the language in the guidance, the lack of spawning as an existing use in this example is likely based on 2004 and not on professional judgment as to the needs of the species to survive, to recover, and become harvestable, but, be that as it may, the conclusion is, once again, to allow degradation. What is the policy basis for degradation when the attainable level of water quality is the current water quality?

It is not clear what example the Figure 2 on page 15 refers as it does not say in the title and it is not referenced in the text.

Ecology discusses the other species that depend upon the use designations that are labeled with fish life cycle stages, their relative sensitivities, and how the absence of fish may be a factor in their survival. *Id.* at 15. This discussion is helpful but none of this interpretation of Washington's standards is contained in the previous examples, leading to questions about what Ecology intends. It goes on to say that perhaps in non-fish rearing headwater streams a new use subcategory could be appropriate. It does not explain how taking this approach would be a good use of state taxpayers' money, what benefit it would create for anybody including an interest vested in maintaining current pollution levels or increasing pollution, nor does it establish how much information would be needed. If this were to be a meaningful exercise to provide regulatory relief for polluters, Ecology would likely also have to change the criteria. Given all of the other standards needs, such an exercise would be a waste of Ecology's resources.

The second example that discusses core and non-core rearing also fails to take into account the purpose of establishing these two uses. *Id.* at 15. The purpose is to avoid a widespread adequate protective criterion that would point to the necessity of more pollution controls. In other words, the use of core and non-core is essentially arbitrary. The amount of core temperatures is driven by the need to protect threatened and endangered cold water species. Therefore, a statement that non-core might be a better fit for a particular waterbody is really irrelevant; the issue is whether the species requires the area for its habitat range. The description of the "directive to protect the highest attainable uses" speaks as if fish come in core and non-core. *Id.* at 16. They don't. We agree with Ecology's conclusion that it would be best to simply retain the designated use; we don't agree that changing the criterion is called for, desirable, necessary, or allowed by law.

The third example demonstrates serious problems with Ecology's thinking. *Id.* at 16. Here, Ecology suggests that even though a cold water species exists in a waterbody, it could consider downgrading the use to a warm water fishery because, as staff explained in a meeting on July 19, "there would be a better fit." If Ecology's transition to a use-based standards system was less than complete, such that it retains many attributes of a classification system, that is its own problem. It cannot use its choices to justify any loss of protection for existing uses. A warm water fishery is not protective of the existing uses; therefore the designated uses cannot be downgraded to a more convenient classification. This is a very simple idea but Ecology has got

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 16

it wrong. Ecology compounds the problem by discussing the next step as determining the attainable condition. It is irrelevant if the attainable condition is not as desirable for trout as it could be; if the use was existing, that is all that matters. This is particularly true if there are issues concerning the range of habitat available to the trout, and especially if it is threatened or endangered. As for tinkering with the criteria (the reference to a "special condition" presumably means a site specific criterion) it seems to be an extraordinary waste of Ecology's resources. Considering the unlikelihood that Ecology can accurately predict what the water quality was in 1975 and the degree of the trout use thirty years ago, it is a far better policy to protect the use that is there now rather than trying to establish an intermediate point between one criterion and another. The appropriate criterion is that which is fully protective of the existing use.

Ecology goes on to discuss the error frequently made that assumes that criteria "represent the benchmark from which to consider the ability of the waterbody to attain a use." *Id.* at 16. It states that "[m]ost water quality criteria are developed to provide high levels of support of the use they address." *Id.* This is simply not true. Many numeric criteria fail stunningly to provide a high level of support. Some seek to provide a high optimal level which is still on the risky side of protection, particularly for depressed populations such as T&E species. And, all numeric criteria fail to take the effects of multiple pollutants into account by their very design. We agree with Ecology that "[i]t is inappropriate to assume that if a waterbody is not capable of meeting criteria for a specific use that the use is unattainable." Obviously, uses manage to survive with less-than-ideal criteria. On the other hand, many uses are very stressed, as demonstrated by plummeting populations, unhealthy individuals, and even species that have been locally extirpated or are in danger of extinction. For this reason, providing full support of uses requires the best possible criteria for multiple pollutants. We frankly do not believe that when Ecology says that it will maintain the trout fishery in this example by changing the use to a warm water fishery and providing a "special condition" to "maintain the highest possible water quality condition" that this is what will happen. In any case, it is simply incorrect to change the use designation, regardless of what criteria apply. Meeting criteria is frequently not suggestive that full protection of uses has or will be achieved.

The guidance provides extremely little assistance to those entities attempting to obtain sufficient data with which to convince Ecology, and the federal agencies subsequently, that a use change should be made because designated uses overstate existing uses. *Id.* at 17. This compounds the problem Ecology has with its water quality standards, namely that it has failed to meet the minimum federal requirements for antidegradation by failing to provide an implementation methodology for protection of existing uses as Tier I of antidegradation policy protections. The guidance states that "[a] simple comparison between the uses that exist at a site and the categories of designated uses established in the water quality standards is typically all that is required for this analysis." *Id.* This is a complete misstatement of the law. First, checking to ensure the designated uses protect existing uses is not "simple." As you will see from our

explanations of what this entails, it is a complete misnomer. Second, while the guidance elsewhere discusses the legal definition of “existing uses” as dating to November 28, 1975, this paragraph, in a section ostensibly specifically focused on examining existing uses, makes no mention of the benchmark of thirty years ago but instead repeatedly speaks of the present (e.g., “spawning occurs at the site”).

Not only is any entity seeking to remove uses required to ensure that current use designations protect existing uses but they are required to prove that downgrading the designated uses will not remove an existing use. The burden of proof is upon that entity and that burden will shift to Ecology when and if it seeks to remove the designated uses through rulemaking. What does this mean? It means far more than assessing whether the use is taking place currently, as Ecology well knows. It means proving that the use did not exist in 1975. Without proof that it did not exist, Ecology must accept the assumption that its use designations were proper. It is not acceptable to operate on the assumption that because the use is currently not existing that it probably did not exist thirty years ago. This would improperly shift the burden on the public to prove that it *did*. It is our impression that, in the meeting held on July 19, Ecology specifically stated it would make the assumption that all designated uses were existing. This, however, is not only not stated in the guidance but is actively undermined by statements such as those found in this section and elsewhere.

In addition, the process of identifying existing uses in order to meet the legal requirement that a UAA downgrading use designations not also remove any existing uses requires an analysis of the applicable criteria. As Ecology is also well aware, making determinations about the sufficiency of criteria protections is not an easy task.

To the extent that Ecology states that a UAA requires a determination of any existing uses that may not currently be protected under the existing use designations or under any proposed changes in use designations, it is correct. This is an ongoing obligation on the Department the importance of which is heightened in the UAA context.

In sum, Ecology misconstrues the requirement to protect existing uses. Instead, the guidance should make the following requirements clear:

- The burden is on the entity and Ecology to prove that any designated use did not exist in 1975;
- Ecology cannot make the assumption that all existing uses have been protected by use designations. EPA has specified that “no activity is allowable...which could partially or completely eliminate any existing use.” PUD No. 1 of Jefferson County v. Washington Department of Ecology 114 S. Ct. 1900 (1994), citing EPA Questions and Answers on

Antidegradation, number 8, at 3. The requirement to protect existing uses through the antidegradation policy is a gap filler based on the certainty that the establishment of water quality standards is not perfect. Just as it cannot be assumed that numeric criteria, adopted through formal rulemaking, are sufficiently protective of uses, use designations cannot be assumed to be completely protective of all existing uses. That is why antidegradation requires an implementation methodology that is triggered each and every time Ecology interprets and applies its water quality standards.

- Protection of existing uses does not mean just uses that have charisma or uses upon which Ecology has typically based its criteria. It does include uses that Ecology has typically ignored, such as amphibians, birds, mammals, people consuming fish at a higher than average rate, other environmental justice issues, etc. Therefore, not only must the UAA entity establish these uses have not existing since 1975 but any change in use designation that would harm these uses as existing uses through changed criteria must be evaluated in that context.
- Protection of existing uses means more than knowing what uses have existed where over the last 30 years. It also includes adequate protection of a geographic range of habitat and water quality necessary to support the uses.
- Use protection requires a determination of the level of protection of a use. For example, is the use protection for a population size and range that remains threatened or endangered, is it to support survival, recovery, harvest?

Ecology goes on to explain that its not-yet-approved standards “were developed to protect the most sensitive uses that would occur in the waterbody where that category of uses applies.” *Id.* However, there is no indication that this is true. Ecology did not know where the other-than-fish designated uses were present since 1975 or even at the time of promulgation when it established the new semi-categorical standards (uses and criteria), any more than it knew where the fish uses were present since 1975 or at present. Ecology states that it will “generally assume that all other uses within that category are also protected,” but when queried it states that it has no lists of other species that exist within the broad use categories it seeks to protect through its new standards. Without these other species having been identified, how can Ecology state unequivocally that the criteria are sufficiently protective of the other species? We do not suggest that Ecology is required to identify every last aquatic species or that it has erred in establishing use designations that seek to support ecological assemblages but it is in error when it states something that is not true and not supported by the facts. In the context of the UAA process, therefore, it is incorrect for Ecology to imply that assumptions can be made about use designation and criteria for which there is no support.

It is also incorrect to assume that criteria assigned to a use category are sufficiently protective. First, Ecology has not updated its toxic criteria and it is obvious that the National Toxics Rule (NTR) criteria are not protective of all species that are existing or designated. Second, Ecology has not evaluated whether its criteria are protective of the unidentified other species. Last, Ecology has not evaluated the effects of multiple pollutants on the uses. Until it does so, it cannot make the statement that the most sensitive uses are protected.

How do you determine if water quality criteria that apply to seasonal uses are allowing uses in other seasons to be harmed?

We agree with Ecology's explanation of how it looks at seasonal uses. *Id.* at 17. However, this begs the issue that human technology and recreational interests have blurred the idea of seasonal uses. In addition, the discussion does not mention the issue of determining the level of existing uses so it provides very little real guidance.

Should uses be applied in very small or very large areas based on a UAA?

As Ecology knows, there are significant policy ramifications associated with the scale at which standards and other water quality regulatory actions are established. The guidance does not discuss the policy ramifications but rather merely recites some of the technical issues. *Id.* at 18. We think it is extremely misleading to imply that Ecology would not include these policy issues in its consideration of the geographic scope of a UAA. In the alternative, if the guidance's omission of a reference to these policy considerations means that Ecology does not plan to consider them, we think Ecology needs to reconsider this approach. One of the cornerstones of use designation is that the use designations represent state policy and do not merely mirror existing uses. One of the ramifications of focusing on small areas is the possibility of ignoring the relationship of those small areas to larger issues, whether the status of uses or the water quality outside the immediate area. One of the ramifications of using larger areas is the tendency to not focus on details. In giving its example, involving spawning at locations along a 30-mile stretch, the first issue should be whether there is any policy rationale for even using state resources to evaluate making changes at this level. Under this approach, Ecology could go down a path of tailoring standards to deal with minutia or individual sources. It could, for example, look at attainability by mixing zones, rather than overall waterbodies. This is clearly contrary to the intent of Congress in establishing the requirement to set water quality standards.

It is inconceivable that Ecology or any other entity could know where in a stream 30 miles long containing some spawning, spawning has taken place over the last three decades. Even if the spawning sites had not changed for the last 10 years, that would not be a basis upon which to conclude that spawning was not an existing use for the waterbody as a whole. Moreover, in the likely event that the spawning species under consideration is threatened, endangered, or

sensitive, Ecology should, as a matter of policy if not law, seek to enlarge the range of spawning, not confine it. In other words, the discussion in the first bullet is simply irrelevant and should be replaced with a statement that this is not a use change that Ecology thinks merits the use of any resources, particularly scarce state resources, nor is it consistent with the policy and regulatory objectives of the agency. Likewise, while the discussion in the second bullet is thoughtful, it should be irrelevant because Ecology should not even entertain such an objective.

This single example does not cast any light on the question, regarding the size of the area under consideration that Ecology has posed which is a good question. We suggest that the guidance actually address it.

Do all sources (including structures) that contribute to impairment of a water body need to be addressed in a UAA?

We agree with Ecology's general conclusion that the answer to this question is "yes." *Id.* at 18. We also agree that if a single source overshadows the potential effect of cleaning up a set of smaller sources, only the single source need be considered in the economic analysis. That said, the guidance implies that if there is a change in use designation the smaller sources also would not have to clean up their contribution. It is a faulty perspective to believe that smaller sources are not required to comply with the law, do not themselves exacerbate local problems that compound the larger problem or affect uses locally, or that a change in use designation leads to what is in essence no cap on pollution. In other words, if attainability is the driving factor in the decision on how to set designated uses, all attainable improvements at a large and small scale must be achieved. Ecology cannot allow the pollution from a large source to eclipse the legal responsibilities of smaller sources to clean up to meet the technology-based effluent limitations and water quality standards which should be set at the absolute most protective level attainable (i.e., not the next best category of uses). Reading the guidance one might come away with the impression that widespread degradation by nonpoint sources upon which an entire watershed might rely could be used to deregulate pollution from all point sources in that same watershed. Finally, Ecology's says that "it is not appropriate to ignore the economic effects to any source that could result in an improvement to water quality." It is unclear what is meant by this sentence. It sounds as if Ecology is saying that good water quality sometimes has economic benefits (e.g., high technology manufacturing) to what are also pollution sources and this must be factored in. If so, we agree. Clean water has a lot economic benefits that balance or outweigh the direct costs to polluters of controlling their pollution of public waters.

How are site-specific criteria and UAAs related?

It isn't clear from the guidance how a site-specific criterion differs from a "special condition footnote." *Id.* at 18. This should be explained. Moreover, Ecology fails to use this section in

the guidance to explain how a change in use designation may likely require the development of a new criterion. As Ecology has conceded, the use-based standards for freshwater are not completely use-based but still retain an aspect of classification-based standards. Ecology also conceded that any change in use designation must also protect existing uses. It then proceeds to posit a situation where trout exist but the designated use could be a warm water use. *Id.* at 16. This is incorrect. Instead, Ecology would be required to develop a criterion that protected the trout. It could not remove that use by calling it a warm water use and placing a footnote that said, in essence, "oh, by the way even though this looks like it just supports warm water fishery it's also supposed to protect trout." The warm water criterion was not intended to protect trout so it could not be used.

How are water quality criteria based on natural conditions and UAAs related?

We concur with this discussion in the guidance. *Id.* at 19. This would be a good place for Ecology to discuss the flow issue inherent in evaluating existing uses, natural conditions, attainability and the protection of Washington's waters and aquatic uses.

How are variances and use changes related?

We agree with Ecology's statement that "[i]n many cases a designated but unattained use need not be removed." We strongly disagree, however, with its rationale. Ecology concludes that the reason for its conclusion is that a variance can be used instead. Strikingly, there is not even a mention in this context that greater pollution controls might be warranted, if not required by law. In addition, there may be policy reasons why Ecology would choose to maintain a higher-than-currently attainable designated use, even if attainment were not considered feasible. One reason is that Ecology has not considered the long term implications of policy changes to designated uses. For example, what is considered infeasible today for, say, economic reasons, may be considered feasible in the future for a range of reasons such as the costs of treating drinking water, the costs of activities needed for recovery of threatened or endangered species, the costs associated with preventing species from edging towards extinction, the costs of health impacts of pollution, new developments in clean-up technologies, changes in public perception (e.g., the efficacy of dam removal). To set all of a states's water quality goals on the basis of water quality in 1975 may be too low of a goal to which to aspire. The speed with which attainment can be achieved too can be very long. For example, some experts have suggested that 150 years is not an unreasonable time frame for restoration of streams badly damaged by grazing. TMDLs calling for shading may require 75-100 years to attain required heights and densities. Degradation of toxic contamination and recovery of safe tissue levels may take decades. While non-101(a)(2) goals must be revisited every three years, other downgradings have no mandatory revision requirement attached and they will establish low goals for many years into the future.

Can flows be regulated to improve water quality?

Given that this section has not been written yet, it is unclear what Ecology has in mind to include. *Id.* at 20. However, the way in which the question is posed suggests a more limited exposition than is required given the poor state of instream flows in Washington and their contribution to habitat impairment, use impairment, and pollution exceedances.

What are the relationships between UAAs, TMDLs, and 303(d) reports?

The guidance stops short of being clear about the answer to this question. *Id.* at 20. It should state unequivocally the implication found throughout the document which is that everything in a TMDL is required in a UAA with the exception of final load allocations. Contrary, however, to the conclusion that a “TMDL may also be used in the [UAA] process,” it is more likely that they cannot be. The reason for this is that TMDLs are frequently done on a much larger geographic scope with less detail that is required for a UAA. It is worth discussing this at least briefly.

We appreciate Ecology’s pointing out the legal fact that use designations are a part of water quality standards. *Id.* at 20. However, the statement that “the failure to achieve a numeric water quality criteria, even after the TMDL is developed, does not mean Ecology should or can downgrade the designated use” is rather odd. Since implementation of TMDLs is not mandatory, at least for instream flow improvement and many nonpoint sources and implementation of controls, let alone achievement of control goals, may be decades if not centuries in the making, Ecology’s statement stops well short of being clear with readers of the guidance. Yes, the statement is true but it does not explain why. Again, Ecology passes up an opportunity to explain the role of designated uses in establishing goals that are currently not achieved and may not have been achieved in 1975 but which are goals the program is striving for nonetheless. Again, designated uses are not intended to simply mirror existing uses but are something to which to aspire. This is the policy discussion that is missing from the entire guidance document.

The guidance fails to not a key way in which TMDLs as currently developed by Ecology fail to equate in any useful way to UAAs. Ecology ignores its narrative criteria, its antidegradation policy that requires protection of existing uses (which, perforce requires identification and location of the existing uses), and its designated use support when it develops TMDLs. Since it flouts the legal definition of water quality standards each and every time it produces a TMDL, there will be little overlap in the development of data and information between TMDLs and UAAs.

Coordinating TMDL studies, UAAs, and 303(d) listings

It is true that, in some cases, Ecology may be asked to postpone TMDLs. *Id.* at 20. It is equally true that, for the reasons established in the guidance as well as these comments, this is not an action Ecology should consider. While Ecology concludes that such requests will be entertained on an individual basis, it should simply state that this is not a tenable approach and that it is essential to avoid delay in the promulgation of TMDLs. Since all TMDLs are, by nature, both imperfect and subject to revision over time, this is not an unreasonable policy determination.

Toxic Clean-up sites and UAAs

Ecology states, with any basis in law, policy, or science, that “[i]n some cases the presence of extremely high levels of toxics could be a reason to modify a use.” *Id.* at 21. This is a particularly unreasonable perspective to take given Ecology’s equally unreasonable and illogical position that it can fail to include wildlife among the uses that will be evaluated in UAAs. *Id.* at page 47. Presumably, at the very least, Ecology means to place the caveats that the extremely high levels of toxics” would be restricted to those levels that were in place in 1975 and that the status of the uses affected – in terms of the health of individuals and populations of all species, including humans – would not be impaired at a greater level than was present at any time on or after November 28, 1975. However, the guidance does not state this but merely implies that Ecology is free to modify the designated uses if the pollution levels are egregious enough. This turns the Clean Water Act on its head. How toxic sites are cleaned up, whether by active or passive clean-up and the degree to which pollution controls are implemented on contributing sources, is irrelevant to the outcome of a UAA. Ecology must state that its unwillingness to evaluate wildlife uses renders it incapable of entertaining UAAs for toxic contaminants and any other pollutants with effects on wildlife.

It is equally unclear why Ecology states that variances are a “reasonable approach” to addressing waterbody clean-up where toxics are “impacting the uses of fish or invertebrate consumption.” *Id.* at 21. First, Ecology continues to ignore environmental justice and wildlife issues as it does throughout the guidance. However, it does not have the luxury of doing so under the law. Then, Ecology does not explain why a variance is a “reasonable approach.” Is it reasonable because it allows a polluter to continue to pollute even though the environment was already polluted to an excessive degree, so excessive that consumption of fish and shellfish is dangerous? This does not seem like a reasonable approach in the least but, rather, a contradiction with the clear goals and requirements of the Clean Water Act. If Ecology takes the position that changing the criteria (through a variance) even temporarily is an acceptable approach to toxic contamination levels that pose a hazard to the “uses of” fish and shellfish, it should at least explain why.

What is the Relationship between Threatened and Endangered Species and UAAs?

We strongly support Ecology’s position that UAAs that would involve T&E species are best

avoided. However, Ecology has given readers of the guidance far too little on this very important subject. *Id.* at 21. After all, many of Washington's waters are inhabited, have been inhabited, or should be inhabited by threatened and endangered species for which water quality is a primary concern. One small paragraph does not begin to explore the critical issues that will face Ecology or the entity submitting a UAA for consideration with regard to T&E species. This undermines the entire premise of the guidance which is to provide assistance and to preclude pointless efforts. The guidance states that "the WQS are not specifically designed to enforce compliance with the ESA." *Id.* That fails to recognize EPA's obligation to insure that "any action authorized, funded, or carried out by such agency...is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat of such species...." 16 U.S.C. § 1536(a)(2). We certainly agree with the statement that any proposed change that affects threatened or endangered species would likely fail. However, it is unclear if Ecology understands the full import of the requirement to protect existing uses and its interplay with the ESA. We suggest that Ecology include a discussion on this topic to demonstrate its understanding and to impart the reality that the geographic range of T&E species both today and even in 1975 could be irrelevant to the required geographic range to preclude extinction, or to avoid "take" of these species including localized extirpation in the near- or long-term.

Effluent dominated ecosystems: net ecological benefit

Ecology fundamentally misconstrues the federal regulations in interpreting the phrase "would cause more environmental damage to correct than to leave in place" as supporting its net ecological benefit test. *Id.* at 21. Even where it could be argued that there was a net ecological benefit, the outcome is not the same as preventing more environmental damage. Our remaining comments on NEB UAAs are made in reference to the appendix.

Public and intergovernmental review of UAA determinations

Because a UAA is a voluntary action on the part of an entity, and constitutes a plan to decrease the protection currently afforded public resources, including public waters, human health, and species, and because the collection of information is wholly done by an interest with a vested economic interest in the outcome, Ecology should ensure the greatest amount of public input into the process. For this reason, it is unacceptable to include the public only at the point of rulemaking when Ecology has already demonstrated its strong inclination to accept the UAA proposal findings and modify the water quality standards. There is no reason whatsoever that Ecology cannot instruct entities interested in downgrading protection of public resources that unless they include the public in the process of collecting the data and information upon which their technical case will be made that the agency will look askance at the results. There are several reasons, in addition to the general policy rationale already presented, why the entity

pursuing a UAA should be required to interact with the public well in advance of wasting Ecology's time. First, it is the public who maintains any anecdotal or other historical records about the existing uses. The public, if invited, may be able to answer questions or provide photographs and other evidence of existing uses or, more importantly, lack thereof. Requests to academics or business people may be limited in the light they can cast on the use of waters since 1975.

Second, agency personnel and academics frequently are ignorant of environmental justice issues. Repeatedly, many members of the public have had to educate agency staff about the uses made by immigrant, poor, and ethnic populations. For example, agency staff will frequently take a position, such as "people don't eat carp," without realizing that in many Asian and Eastern European cultures carp is considered a delicacy and is often cooked whole (contributing more toxic contaminants to the consumer). By including nonprofit institutions in the sampling and analysis plans for the UAA, such as immigrant groups, advocates for low income populations and migrant workers, entities pursuing UAAs and Ecology itself will have a better outcome. Likewise, by including environmental and recreation organizations, including those which focus on birds, mammals, amphibians, fish, ecological functions, etc., the outcome will be far superior. Not only should these organizations have an opportunity to review and have input into the sampling plans – the most critical decisions in the data collection process – but all members of the public should have an opportunity to contribute to the findings. Otherwise, the applicant can skew the results. Instead, Ecology proposes that the public be relegated to scrambling around at the last minute during a rulemaking public comment period although the UAA "applicant" had an unlimited amount of time in which to create its UAA record.

Ecology notes that it has resource constraints to generate UAAs. *Id.* at 23. It should also be clear that it has resource constraints to review UAAs submitted to it including limitations on its ability to create site-specific criteria.

Part 5. Economic Analyses for UAAs

Pollution Sources

Ecology makes a number of observations about public versus private entities and focusing on the party that pays for pollution controls but does not set out any conclusions or explain why it has discussed the topic. *Id.* at 24. Even after three paragraphs, it leaves the reader wondering what Ecology is driving at. In addition, there is nothing said about entities that withdraw water from instream flows thereby causing impairments and threats to designated and existing uses.

Substantial Impacts

Ecology sets out three steps necessary to doing a financial analysis. *Id.* at 24. The first is to estimate the cost of compliance with standards. It is not clear what it means to “compl[y] with standards.” Is this in the absence of any action by other pollution sources? Or, in concert with other sources? If so, to what degree (e.g., the greatest pollution reductions from the pollution source that is the most expensive to control, the least)? Does it include trading? Does it include augmentation of instream flows? Since UAAs cannot remove existing uses, why does this analysis not only focus on the increment of cost attributable to the difference between protecting existing uses (mandatory) and protecting designated uses that are not existing (that which is subject to downgrading)? That is the only cost of compliance that is relevant to this exercise. Moreover, it should also include only the increment of costs over that which is required to provide for survival and recovery of T&E species. Finally, it should only include the cost of compliance above that which is required by the statute’s technology-based approach and the antidegradation policy.

The second step is to determine how the financing will be undertaken. Who decides? It would seem that in some cases there are more than one way of financing pollution controls and the entity seeking the UAA should not decide which worst-case scenario it wants to put before Ecology. In addition, this begs the question of the timing of achieving attainment. Downgrading use designations can be for essentially “forever,” but given the time frames that may be required to achieve attainment even under the best case scenario – i.e., immediate and full performance – the time frame for achieving attainment is an important consideration. If attainment would be very slow, what is the basis for saying that slowness in implementation of pollution controls (i.e., over time in order to spread out the cost and potential economic hardship associated with those controls) should be a basis for finding that designated uses are not attainable?

The last step is to determine if the impact is “substantial.” Other than stating that in addition to showing an impact is substantial, it must also be widespread, Ecology does not elaborate on this step. How is the guidance meeting its own goals if it provides no guidance? Assuming Ecology prepares more on this subject, we reiterate our points above on time frames for implementation of pollution controls and attainment of standards.

Widespread Impacts

This section starts with the observation that “States and dischargers will need to consider” the scope of financial impacts. *Id.* at 24. It is unclear why the guidance omits references to users of water and nonpoint sources. There is nothing in the guidance about the costs above that which is required by the Endangered Species Act. There is nothing about the possibility that the costs of performance will be outweighed by the costs of not acting, or that this should be determined in the UAA. Moreover, the odd thing about this section is that it appears to assume that uses are currently protected. A quick glance at the list of T&E species and the CWA § 303(d)(1) list for

Washington would disabuse any reader of that assumption. In other words, it is not as if the uses are protected now and that lack of protection, even with use designations that some might consider not attainable, is not causing any substantial or widespread economic or social impacts. This section also does not suggest the need to evaluate the cost of doing a variance versus changing a use designation.

Part 6. Use-Specific Guidance for UAAs

Ecology observes that all of the data types mentioned in the guidance are not necessarily required for a UAA. *Id.* at 26. Likewise, not all the data types mentioned are sufficient for a finding to support a UAA. This should be stated. For example, there is discussion of the costs associated with UAAs and rulemaking proposals but there is no discussion of the public benefits associated with maintaining designated uses that are more protective than existing uses.

The guidance, while acknowledging in some sections that the definition of “existing use” is “on or after November 28, 1975” generally omits “on or.” See., e.g., *Id.* at 26. We recommend using a technically accurate version as it leaves less to the imagination about what an existing use is by anchoring it to that specific date.

As is discussed elsewhere, Ecology misreads the law when it adds its own interpretation to the requirement to protect existing uses: “All existing uses must be protected to attainable conditions.” *Id.* at 26. This is incorrect. All existing uses must be protected. Attainability does not attach to this protection.

The guidance goes on to state that the second question posed by a UAA is “[w]hat are the causes of any impairment of the uses?” *Id.* at 27. The lack of thought in answering this question is borne out by the small paragraph on page 29 that attempts to answer this question. There is no reference to the need to evaluate the relative contribution of causes, to consider natural versus anthropogenic, those causes that impair existing versus designated uses, impairments that go beyond technology-based and reasonable nonpoint source controls, causes that threaten the survival and recovery of T&E species, to what degree the question must be answered if there is little information to go on. There is simply no guidance.

The third question concerns attainability. *Id.* The reference to “technical and economic limitations of human sources” in combination with the earlier reference to attainability in the context of determining existing use protection further erodes the legal protection of existing uses. This is incorrect.

Determining the Existing Uses

While the discussion of how to determine existing uses starts with the regulatory definition, the discussion omits references to anything but current conditions. (*See, e.g.*, “The biological evaluation should describe the overall biological health of the waterbody, identify the species that currently exist in the water body....”) This is misleading and will lead to UAAs that fail to meet legal requirements. For example, while biological surveys of current conditions are necessary and helpful, they hardly can be representative of 30 years of uses and water quality. Moreover, the species that currently exist do not provide sufficient information. Ecology and the public need to know the status of the populations in the area of interest as well as elsewhere, the geographic distribution of the species, the health status of individuals, population trends, etc. The list of sources of data and information is good but it should include some sources mentioned elsewhere in these comments such as immigrant aid societies, migrant and low income advocates, etc. In addition, Ecology should require entities submitting UAA materials to list sources that were contacted in order that the public and Ecology know the extent to which information was solicited from other sources.

The discussion of the biological potential of waterbodies omits factors relevant to human uses such as recreation and shellfish harvesting. *Id.* at 28. Moreover, the discussion of biological potential does not account for use by plant and animal invasive species. The reference to the need to “identify those existing species that should be specifically targeted for protection” is obscure. What does this mean? Is the phrase “existing species” intended to mean currently existing or existing in the legal sense? What is the basis for an entity seeking a UAA making the determination of what species should be targeted for protection rather than Ecology which is charged with doing so pursuant to federal regulations?

The last paragraph in this section is vague and unhelpful. *Id.* at 28. True, it suggests to the entity collecting information that the degree of use is information to collect. But, it does not inform the reader of how Ecology will interpret the information. For example, *is* one fish wandering into a waterbody on an occasional basis sufficient to justify a use designation? It would be helpful if Ecology said something other than posing the question. The answer could, at the outset, harken back to our comments concerning threatened and endangered species, i.e. if there is any suggestion that a waterbody is within the range of a species on the brink of extinction, the use must be deemed to be existing. It could state that a species whose populations are depressed or locally depleted would also get the “benefit of the doubt” because it is in the public interest, including a substantial economic interest, to prevent extirpation or extinction. It could state that evidence of smaller numbers today suggest that thirty years ago the populations using the waterbody were likely larger, unless there is some evidence to the contrary. It could state that while it is known that the populations were nonexistent 30 years ago, it appears that the waterbody is improving and that is a good policy basis upon which to determine that improvement should continue. These are but some of the missing issues.

Identifying Causes of Impairment

Again, Ecology's guidance appears to completely ignore the legal definition of existing uses. *Id.* at 29. The guidance states that a UAA "should contain an assessment of any impairment to the system that currently occur, or any past causes of impairment that continue to exert an effect on the system." *Id.* Without information on what causes of impairment have existed over the last 30 years, how can Ecology determine the existing uses? It can neither assume that today's impairments are the worst since 1975 nor the best. Certainly, absent information to the contrary, it should be assumed that circumstances have become worse. For example, information on reductions of pollutants discharged from point sources would be a matter of public record and could easily be determined; the absence of this information would suggest the opposite. Information on nonpoint sources and water withdrawals would likely indicate that the impact of nonpoint sources is greater today than it was 30 years ago. For example, 30 additional years of grazing impacts are likely to have had a negative effect on a waterbody, increasing undercut banks, reducing riparian vegetation, decreasing sinuosity, etc. Thirty additional years of logging would have the same effect. Thirty years of discharged toxics, even at reduced levels over time, will lead to build-up toxics in sediment and tissue. Information demonstrating this is an inaccurate assumption would be specific restoration projects and the follow-up monitoring that showed water quality and use improvements as a result. The entire discussion on causes of impairment appears to be modeling today's pollution sources and impairments. And, it is silent on the matter of changes to instream flows, despite the fact that water withdrawals have a significant capacity to override all other impacts of pollution, habitat loss, and degradation.

Determining the Attainable Use

Determining the biological potential of the area

As explained above, the discussion of attainability fails to mention the time frame for pollution controls and other methods of rectifying impairments. *Id.* at 29. Some physical and biological improvements will take many decades to demonstrate benefits, even if implemented immediately. In addition, the question is not what the cost of instituting those remedies is compared to conditions in 2004 or the future but what the cost of instituting those remedies is compared to 1975 or any time since 1975 when conditions have been better. We agree that the potential conditions without any human effects is an important benchmark. We are very concerned, however, that an entity with a vested interest in the outcome is supposed to carry out the evaluation that Ecology describes. This evaluation involves determining the "biological community that should exist." *Id.* This is a role for a regulatory body charged with protecting the public resources, not an entity with an interest in reducing the costs associated with its polluting and degrading operations.

Use of reference sites in determining biological potential

We are also concerned about the use of reference sites to determine the biological potential, particularly when that work is being done by consultants who are paid by vested interests. At a minimum, the guidance should include more information on the drawbacks that must be factored into reference sites. For example, atmospheric deposition of many materials has changed in the last 30 years, affecting pristine as well as degraded waterbodies. Drought years can have an immediate and lingering impact on waters and their uses, even in pristine waters. Global climate change likewise has had effects. The guidance talks about the use of “least disturbed conditions” but does not discuss how to adjust those. *Id.* at 30.

Identify how the area could be restored

The guidance omits any reference to evaluating biological parameters that are not healthy including exotic species. *Id.* at 30. The “ability to restore the physical integrity” of a system is too limited of an exploration on the ability to restore a degraded waterbody because chemical and biological aspects are also related (e.g., the sinuosity of a stream is tied to riparian vegetation). The evaluation of “reversibility” also needs to be examined in the context of the legal definition of existing use. While full reversibility or restoration needs to be evaluated, the cost of only that which is discretionary may be included in the evaluation of attainability, as described earlier.

The guidance discusses the development of pollution control options. *Id.* at 30. These options could have very different costs depending on the level of aggressiveness and the time frame for implementation and attainment. Ecology must set out in its guidance prohibitions on choosing unrealistic and aggressive control options that have high costs intentionally derived to support a downgraded use designation. For example, active regrading and revegetation of denuded streams is much more costly than a passive restoration project. Since there are few if any regulatory requirements for an active (or a passive) project, nonpoint sources cannot take the position that they are forced into having to take any actions to control their pollution and habitat degradation. Because they are not required, their institution cannot constitute a cost of compliance that could cause widespread economic damage.

Determining the attainable uses

The guidance fails to discuss: 1) what happens if EPA has not yet promulgated 306 technology-based limits; 2) how the regulation’s reference to section 301(b), which includes 301(b)(1)©) requiring compliance with water quality standards, applies; 3) how Ecology will determine what constitutes “cost-effective and reasonable best management practices for non-point sources.” *Id.* at 30. Quoting the federal rules without additional annotation is really not helpful. *Id.* at 31.

Indicators Related to Aquatic Life Uses

This section includes things that have been written elsewhere. *Id.* at 32. Given the length of this guidance, it would be best if it did not repeat things without further elaboration.

Physical Indicators

There is no reference to evaluating the physical indicators to assess the conditions on or after November 29, 1975. *Id.* at 33. There is no information provided as to Ecology's expectations about data coverage, in terms of seasonal distribution, number of samples for geographic area, statistical relevance, amount of data and information required for up- and down-stream locations, etc.

Chemical Indicators

There is no reference to evaluating the physical indicators to assess the conditions on or after November 29, 1975. *Id.* at 33. In fact, the guidance instructs the reader to "obtain existing water quality information." There is no indication that the use of the word "existing" in this context is intended to relate to the legal definition of "existing use." For a UAA, chemical indicators are also relevant to fish and wildlife.

Biological Indicators

There is no reference to evaluating the physical indicators to assess the conditions on or after November 29, 1975. *Id.* at 33. It is not clear why the guidance is sprinkled with phrases such as "might be needed," "if appropriate," and "can be analyzed." This implies that a UAA can be done without this information. What is the purpose of the guidance if Ecology suggests that less than complete information is required before it expends substantial public resources on evaluating UAAs? It is not merely the cost of rulemaking that is at issue; Ecology's three FTE for water quality standards need to focus on many other issues besides UAAs.

The guidance omits reference to the need to obtain information on amphibians, birds, and mammals. Despite earlier references to not expecting entities conducting UAA analyses to create criteria, the guidance appears to direct that exercise. ("those conditions [that require specific or narrow ranges of high quality environmental conditions] should be determined from the literature.") Outside entities should not be determining what species are most sensitive or require the highest quality environmental conditions; this is a role for the public agencies charged with protection of water quality and species in Washington state.

The guidance divides its discussion in this section into aquatic life and recreation. It is unclear

where human uses such as subsistence fishing, bathing, shellfish harvest, and drinking water are addressed.

Habitat Assessment

There is no reference to evaluating the physical indicators to assess the conditions on or after November 29, 1975.

Checklist of Aquatic Life Indicators

This is a good list of indicators. Omitted, however, is reference to biological status including: population status of species, health of individual population members, trending of geographic range, invasion by exotic species, etc.

Data Sources

Once again, the guidance fails to make any reference to 1975. *Id.* at 36. The discussion of existing use information is spare. *Id.* at 37. As we have pointed out, this is a critical issue and Ecology's giving it short shrift bodes ill for UAAs meeting legal requirements.

Indicator Measurement: Planning, Sampling and Analysis

Planning

The guidance states that the QAPP identifies the data needed to achieve objectives. *Id.* at 37. It would be more consistent to use the phrase "data and information." It goes on to refer to the QAPP as relating to "monitoring." *Id.* The use of the word "monitoring" in lieu of "sampling" or "data collection" implies an on-going effort. Yet the guidance sets no expectations and contains no discussion concerning the length of time the data should represent before being submitted to Ecology. The guidance references 14 elements that should be addressed by the QAPP but omits to list them. *Id.* It would be helpful to include them in the guidance.

Sampling and Analysis

We repeat the comment related to the use of the word "monitoring" in this section. *Id.* at 37. In addition, we strongly urge Ecology to require post-UAA monitoring. Ecology has taken the position that it cannot require anything because this is just guidance; we agree. However, it can take the position that UAAs are a purely discretionary exercise on the part of the State and that to expend state resources it may establish certain requirements including that a decision to degrade protection for public resources requires a commitment to follow-up evaluation. Given

the paucity of data and information in the state on the beneficial uses and the wholesale degradation present in the state's aquatic resource, such caution is warranted. Once again this section fails to make any reference to the benchmark date of 1975. Moreover, protocols are not the equivalent of a sampling plan. A sampling plan establishes the goals and objectives of a study, and what is intended in terms of data collection (e.g., amount of data, averaging of data, time frame of data collection, location of data collection, species to be evaluated, etc.). This is an absolutely critical step in designing the UAA. Not only is this where obvious omissions can be caught (e.g., assumptions about how people use waters, assumptions about the relative importance of species, etc.) but where errors can be detected before funds are expended and the UAA takes on a political life of its own. Yet Ecology uses this portion of the guidance to set out the citations to various documents that appear to focus primarily if not exclusively on protocols. There is no substitute for a great deal of input at the study design stage, both in advance, in the form of this guidance, and at the time it is produced, in the form of public input.

Laboratories

There is no reference to flow metering in this section on laboratories. *Id.* at 39. There is no discussion about how entities collecting data and information are supposed to obtain information on "non-point sources." *Id.* There is no reference to stormwater and other general permits holders or to the need, on occasion, for data on internal waste streams of point sources. There is no reference to information on wetlands.

Information Assessment

Recreational Uses

Ecology includes "additional factors" to determine recreational uses. *Id.* at 40. It omits seeking information on the degree of use, the use by whom, and environmental justice concerns in identifying existing recreation uses. The list also appears to focus on formal recreational use, such as trails and roads, as opposed to informal uses. This is not only incorrect but has the likely result of creating more environmental injustice to low income, ethnic minorities etc. than already exists. The discussion in the guidance fails to consider that some people depend upon waters for washing, bathing, water supply, and fishing. It also fails to include the economic benefits of clean accessible water for drinking water, avoiding costs of future treatment, loss of assimilative capacity in the future.

Determining the Existing Uses

Again, Ecology's guidance focuses on the "formal points of access" for recreation. *Id.* at 40. Nowhere is there any indication that public meetings and/or surveys should be used to elicit

information on uses over the last 30 years.

Identifying Causes of Impairment

A one sentence description of this indicates that Ecology has given no thought to the subject or has zero expectations about how an entity collecting data and information for a UAA actually identifying causes of impairment. *Id.* at 40. This section should include: obtaining data on unknown sources such as septic systems and identifying relative contributions of sources. This would be a good location to discuss how Ecology sees the differences and similarities between UAAs and TMDLs.

Determining the Attainable Uses

Identify how the area could be restored

The guidance should clearly state that the cost of creating access for recreational purposes should not be a cost included in the evaluation of attainability. *Id.* at 41. The Guidance should state how Ecology intends to address the lack of technology-based limits for certain sources. In addition, it should state how it intends to evaluate “nonpoint sources.”

Determining the attainable uses

This section repeats what has been stated elsewhere but adds very little if anything. *Id.* at 41. It refers to “control technologies” but does not discuss the issue with regard to point and nonpoint sources, including water withdrawals. The quoting of the federal regulations does not help understand what Ecology thinks these mean.

Indicators that Characterize Recreational Uses in Washington

Extraordinary primary contact recreation

This section should reiterate the upstream extent of contamination as being at issue. *Id.* at 42.

Primary contact recreation

Ecology omits those uses that are likely made of waters by migrants, immigrant populations, low income, and homeless people in both its list of activities in which people participate (e.g., bathing and washing are not included) as well as locations. *Id.* at 43. For example, areas near migrant camps, regardless of whether they have rope swings, are likely areas used by migrant children. In addition, Ecology should not factor in “good sense” (e.g., where water depth is

unsafe) where it is known that people are not using good sense. *Id.* We agree that thinking in terms of how people actually use waters (e.g., low flows make waters more attractive to younger children) is the way in which this issue should be approached. *Id.* Ecology should be very careful in its description of “constructed systems” with physical structures. Some physical structures are known to be used by people as well as wildlife. Unless there are physical barriers, the assumption cannot be made that either wildlife or people are not using them. Ecology’s finding that modified natural systems must be treated as unmodified natural systems is consistent with the law.

Secondary contact recreation

Ecology considers fishing to be a secondary contact recreation. *Id.* at 44. We would like to know how Ecology imagines that children who are fishing maintain limited personal contact between the water and their eyes and mouth. It would also be helpful if Ecology could explain the idea of “adult-only” wading that “typically [is] associated with limited forms of industrial and commercial waterways.” *Id.*

Data Sources

The data sources offered by Ecology do not take migrants, immigrant populations, low-income people, and tribal members into account. *Id.* at 44. Therefore, this list should include: immigrant agencies, low-income support agencies, hunting and fishing organizations, civic clubs, churches, tribal offices, migrant worker advocates, among others. Again, the text here is less directive than it should be for the reasons explained elsewhere. Phrases such as “should search” and “should be done” are not helpful. Whether the use is “unlikely to occur” is not a question; the question is whether the use is precluded. *Id.*

Indicator measurement: Planning, Sampling, and Analysis

We have the same issue about use of the phrase “might need to be collected” in this section as before. *Id.* at 44. As with the aquatic use section, there is no reference to the creation of and review of a sampling plan or data collection plan. This is a huge omission.

Both aquatic life and recreation evaluations should include requirements to present information in usable form. For example, entities seeking UAAs should be required to map pollution sources and information about uses.

Water Supply Uses

Ecology does not have the prerogative of ignoring water supply uses when it considers the

possibility of downgrading its designated uses. *Id.* at 47.

Wildlife Uses

Ecology does not have the prerogative of ignoring wildlife uses when it considers the possibility of downgrading its designated uses. *Id.* at 47.

Fish Harvest Uses

Ecology does not have the prerogative of ignoring fish harvest uses when it considers the possibility of downgrading its designated uses. *Id.* at 47.

Part 7. Submittal of the UAA to Ecology

Part 8. Ecology Review and Actions

We agree that Ecology should have tribal consultation. We look forward to seeing this section when it is drafted. We do not understand why the public is not also entitled to have early input and review of the UAA, as discussed above. Ecology has noted that UAAs are purely discretionary actions using that as a basis for concluding that the guidance cannot mandate any actions whatsoever. Under this approach, Ecology could simply dispense with the guidance saying that it was all discretionary and therefore pointless. Moreover, since Ecology is not required to accept the product of any UAA, it is free to virtually require content in a UAA; it can state that UAAs that fall short of the requirements it establishes before undertaking a major expenditure of public funds to decrease protection of public resources are simply not in the public interest to review. Yet, it doesn't. Instead, it takes the position that the public has no right of input or review until the UAA goes to rulemaking. Yet, it appears the guidance may create an obligation to consult with American Indian tribes. We fully support making such consultation mandatory along with public participation.

In addition, Ecology states in its guidance that “[a] decision not to proceed towards rule-making means that the submittal is obviously deficient.” *Id.* at 48. Again, the only basis upon which Ecology appears to contemplate not moving forward towards rulemaking is on the technical basis of a UAA with no consideration whatsoever to overall policy considerations.

The guidance states that Ecology expects to complete formal review of submitted UAA materials within a “relatively short time frame (within 3 months).” *Id.* at 49. In this time period, Ecology will confer with tribes, resource agencies, EPA, and “other groups that have specific information or interests in the area being addressed.” Ecology should define the meaning of this last phrase and define it broadly to encompass nonprofit organizations that have broad interests in pertinent

issues, not just those that work specifically in the area covered by the UAA.

The guidance states that after a full review, it will inform the "UAA applicant" and EPA of its decision. *Id.* at 49. Omitted is any reference to the public.

The guidance sets out five options of actions Ecology might take. *Id.* at 49. These are: 1) the UAA is incomplete; 2) Ecology agrees with the recommendations; 3) a different use change is merited; 4) a use change is not appropriate but a site-specific criterion or variance is recommended; and 5) no use change is appropriate and no further action will be taken. Not among these options is a conclusion that more pollution controls are required, a stunning omission. Neither is option no. 3 clear that to the extent Ecology becomes informed that its designated uses fail to include protection for its existing uses, it will move to remedy that omission outside the UAA context, as required by law.

In the discussion of the agencies with which Ecology will confer and the federal laws that apply, Ecology makes no reference to the Endangered Species Act and the agencies charged with its implementation. This is a gross oversight.

Appendix X - Draft Use Attainability Analyses for Effluent Dependent Ecosystems

Summary

The summary of this appendix states that "the basis for granting an NEB UAA is a finding that the flow from the discharge creates overriding ecological benefits sufficient to justify allowing the discharge not to meet specific water quality criteria otherwise assigned to the waterbody." *Id.* at 54. This is interesting, in light of the reference to federal law and regulation on the next page, given that Ecology never cites to any law that creates the basis as set out in the guidance. We suggest that Ecology might cite to that basis and explain its interpretation. This, at the very least, would give the public and potential NEB applicants a chance to see whether they think Ecology's legal interpretation should be given any weight.

Introduction

The guidance states that the NEB UAA process is intended to "help preserve or restore scarce aquatic or riparian habitat in arid regions." *Id.* At 55. As stated above, Ecology has not made clear what provisions in the statute and EPA regulations allow for this interpretation. If not careful, Ecology could turn the Clean Water Act on its head in all arid regions. This was not the intent of Congress and presumably it was not EPA's intent to thwart Congressional will. To the extent that aquatic or riparian habitat is scarce in arid regions due to human influences such as dewatering of streams, removal of groundwater, and destruction of riparian habitat from

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 38

activities such as grazing, the solution is not to allow pollution in excess of levels which are safe for aquatic life, human health, and wildlife. In fact, such a solution is not allowed. In addition, the phrase suggests that Ecology will apply the NEB UAA in advance of future discharges that do not propose to conform to existing water quality standards. This is a significant policy decision that makes a mockery of the Act and the standards Ecology has promulgated and is inconsistent with federal regulations.

While citing to the Clean Water Act, the guidance does not establish why "effluent [that may be] creating overriding benefits to the environment" are permissible. *Id.* This omission needs to be addressed. The guidance goes on to say that this is permissible so long as the effluent is "moderately polluted." It does not specify what this means or why it is true. We agree with the further discussion that an NEB UAA must meet all the same requirements that other UAAs must meet. However, the guidance does not explain how Ecology's description of its standards as protecting ecological assemblages work when applied to ecosystems that may well have naturally been intermittent or ephemeral. Such ecosystems functioned naturally with less or intermittent water.

Ecology uses certain phrases to avoid being specific in its interpretations. So, it says that NEB UAAs will be restricted to discharges that "do not contain quantities of persistent bioaccumulative pollutants that could harm wildlife or humans due to bioconcentration in the food chain." *Id.* It is not clear what the use of the word "quantities" means in this context any more than Ecology's earlier use of "moderately polluted." One could read this as meaning that no persistent bioaccumulative pollutants will be allowed in an NEB UAA or that Ecology has in mind something more than zero. Given that the next sentence refers to limiting "types and quantities of chemicals," it appears that it means the latter. *Id.* But what quantities? By definition a chemical that is persistent and bioaccumulative will remain and bioconcentrate in the food chain. The guidance provides no guidance by suggesting that Ecology knows how much it would allow but it's not going to tell anybody else. In terms of evaluating the potential for accumulation in the food chain, a time frame must be established. Is Ecology going to try to protect a waterbody from five years of accumulation or five decades? These are policy choices that Ecology should decide in advance of an NEB UAA proposal and the public should have direct input into these policy choices. Such input requires that Ecology state its policies clearly.

It is our position that Ecology is not free to make the choice it suggests. Its use of inadequately protective water quality standards for chemicals and metals, its failure to protect all uses including T&E species, its use of mixing zones, its failure to regulate all pollution sources are but some reasons why Ecology should not establish a policy that allows it to increase the amount of persistent bioaccumulative pollutants that may be discharged with impunity.

The Focus on Flow

The NEB UAA guidance never discusses the ecological attributes of natural intermittent or low flow conditions that support natural ecological assemblages instead of those some people might consider more desirable. Nor does Ecology discuss the issue of increasing instream flows to natural conditions or even for the purpose of diluting pollution but instead merely restricts itself to discussing how to relieve polluters of the burden of protecting public waters. Both of these omissions make the guidance less than effective in achieving environmental goals and in providing guidance.

Again, the guidance states that the NEB UAA must demonstrate that there is more ecological benefit attributable to maintaining a discharge with unsafe levels of pollution than there is to removing the pollution. First, this is not the only choice but Ecology omits most of the intermediate options. Second, this is not what the federal regulations allow.

The intermediate options are required by the regulation because Ecology must demonstrate that the uses it seeks to remove are not feasible and cannot be remedied or the remedy would cause greater environmental damage than leaving the anthropogenic source of non-attainment in place. Since the issue discussed in the NEB UAA is exclusively one of water quantity and flow, the feasibility evaluation must also consider water quantity and flow. Therefore, options that look at flow augmentation, purchase of instream water rights, trading or offsets, pollution reduction combined with any of these, etc. must be evaluated for their feasibility. Second, Ecology must demonstrate that the use is not attainable in order to remove it. In its guidance, Ecology appears to focus on ways to allow criteria to be violated without discussing how this involves uses. It also appears that Ecology seeks primarily to add a use that involves protecting riparian habitat without protecting aquatic life yet it has not explained how this is possible. Does it intend that these riparian habitats that are justified by their support of non-aquatic species will exclude aquatic species through screens (for fish), nets (for aquatic birds and mammals), and fences (for people)? By making this alleged UAA procedure into one called "net environmental benefit" Ecology sidesteps the regulations to create its own regulatory reality.

Another aspect of Ecology's imaginary reality is that fish should be everywhere. Elsewhere, Ecology seeks to support natural assemblages. Here, the line between natural and manmade become blurred. In the NEB UAA context, designated uses are no longer what is best to mimic nature but to allege that if something appears to be riparian habitat it must be a higher and better use than nature intended. Therefore, there is no consideration given to the natural condition of the waterbody but just whether the polluting discharge could or does support charismatic species. So, perhaps, Ecology discusses the removal of a designated use that shouldn't have been designated in the first place (e.g., trout where trout did not naturally live) or blurs the distinction

between use designations that support the fish and assemblages most in dispute across the state (e.g., salmonids) and use designations that should be designed to support native fish or non-fish assemblages that existed under natural harsh conditions. It is, in short, hostage to its own limited use designations which it now seeks to use to undermine natural conditions.

The section of the federal regulations on UAAs upon which Ecology presumably relies is 40 C.F.R. § 131.10(g)(3): “[States may remove designated uses if the State can demonstrate that attaining the designated use is not feasible because] [h]uman caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place.” *Id.* at 56. Ecology appears to ignore the letter of the law. First, the UAA guidance says that uses can be removed if human sources prevent the attainment of the use. This implies that the use is not attainable now due to the human caused conditions, not that it will be in the future. However, the federal regulations clearly refer to past human actions that have caused conditions that prevent attainment, not future ones. Therefore, Ecology’s interpretation that allows the NEB UAA to be used in advance of an excessively polluted discharge is not consistent with the regulations. Second, nowhere in the NEB UAA guidance does Ecology call for making a determination that the use is unattainable. Instead, it simply talks about net environmental benefits, not use designations. Ecology’s examples focus on the creation of non-aquatic bird habitat yet Ecology has “reserved” the discussion on wildlife uses in its UAA guidance. How can an NEB UAA compare use designations based on wildlife when the use is not related to water quality and not even discussed by Ecology? If Ecology now wants to have use designations protected by the Clean Water Act that are unrelated to water quality but solely related to water quantity and flow, in order to perform this NEB UAA then it must also be prepared to have these same use designations that are based on flow and protect them in its CWA regulatory actions. It cannot eat its cake and have it too.

The regulations also require that either the human caused condition cannot be remedied or that to remove the human caused condition "would cause more environmental damage to correct than to leave in place." Nowhere in the NEB UAA does Ecology refer to the impossibility of fixing human caused conditions so presumably this is not contemplated in the guidance. However, it does appear to misinterpret the plain meaning of the second option. The regulation does not say that a discharge can be maintained because it makes nice habitat for one or more species. Rather, it states that removal of the discharge can be avoided only if removal would cause more damage than leaving it in place.

Ecology’s discussion in this section of the intuitively appealing but false attributes of increased flow under some circumstances is good. *Id.* at 55.

Use of a Net Ecological Benefit Use Attainability Analysis

We concur with Ecology's assessment that the NEB UAA is a "very uncharacteristic use of the federal UAA regulations." *Id.* at 56. It would be very useful if Ecology could explain how it derives its NEB approach from these regulations, as stated above. Since there is not a one-to-one correspondence between the agency's interpretation and the regulation, it leaves many other statements unclear. For example, the third principle of NEB UAAs set out by Ecology is that it will "provide for the highest attainable uses for the waterbody." *Id.* The guidance does not explain how Ecology performs this ranking of uses. Is highest attainable those uses that existed before human intervention? Are they those which seem most charming to people? Are they those which provide refuge for species that have reduced habitat, even if the species is unrelated to water and improving its habitat will degrade aquatic habitat? There are implied policies in the answers to these and a myriad other questions, policies that should be set out by Ecology in this guidance. Instead, the guidance is silent.

Under the interpretation Ecology makes of the UAA regulations, with which we disagree, we do concur that the three policy imperatives are good. *Id.* We strongly disagree with Ecology's position that this provision can be used for future discharges, as discussed above. We also concur that a discharger would have to demonstrate that all feasible methods would be used to improve wastewater quality. *Id.* As the guidance is not completely clear, we emphasize that if the discharge is allowed to stay that all feasible methods must actually be implemented; the feasibility evaluation is not merely to justify the NEB UAA. Ecology stops well short of what is good policy, however, in seeking to suspend the Clean Water Act for some pollution sources. Although the basis of the entire NEB UAA is about flow, it fails to require the source to increase flows through other methods, mentioned above. This is a gross failing of the guidance.

We agree with the guidance's observation that a wide range of interests and agencies should be included in the discussions. *Id.* at 56. We fail to understand why this exhortation does not apply equally to any other UAA covered by the guidance.

NEP Comparison Elements

I. Demonstration that all seven conditions for approving a NEB UAA are met

Ecology sets out seven conditions required to be met for a NEB UAA. *Id.* at 57. It is implied but left unstated that all conditions must be met. The first condition requires that the area in question be where "aquatic resources are limited and ecologically valuable." *Id.* While we do not agree with the NEB UAA as a starting premise, we agree that a possible justification for unsafe levels of pollution could be locations where water is scarce. The phrasing of this condition suggests that all places where aquatic resources are limited are places where water is

ecologically valuable. This is not necessarily true. Where water is not naturally present, it cannot be said to be ecologically valuable because nature has adapted to its absence. More important, the issue is how Ecology is going to determine when the supposed ecological value is greater than providing the protections afforded by the Clean Water Act. In its examples, Ecology mentions non-aquatic wildlife uses which implies that Ecology's definition of ecological value of water is very broad, going beyond anything that has ever been contemplated as a beneficial use of water, i.e. a non-aquatic-dependent species. If Ecology seeks to take the position that the beneficial uses requiring protection pursuant to an NEB UAA include such species, it must also protect those species in the setting of water quality criteria for the protection of beneficial uses by defining those uses broadly for all other regulatory aspects of its water quality program.

The second requires that the waterbody support "an ecologically desirable aquatic, wetland, or riparian ecosystem and supports native plant and wildlife species." *Id.* The language in this condition raises the same issue as the first, namely who decides what is "ecologically desirable"? The answer to this critical question is not found in the guidance. Part of the reason, no doubt, is that it is a highly subjective decision. Many people would argue that any strip of green vegetation even if it were not found naturally, would be ecologically desirable. However, such "habitat" would not be a sufficient reason to allow the violation of safety criteria. Ecology has much to do to define why the Clean Water Act should be stood on its head. For example, there should be a very high burden to overcome to demonstrate that water is desirable where it was not present naturally. We agree that only native species should be taken into account in defining what is ecologically desirable. This condition should also determine how the waterbody is supporting non-native species that compete with native species.

The guidance also calls for the discharge not to "contain quantities of persistent or bioaccumulative pollutants that may harm the health [of] humans or wildlife directly or through food chain magnification." *Id.* The use of the word "quantities" implies that some amount of persistent or bioaccumulative pollutants could be allowed. This is a faulty premise. First, the guidance is useless if it indicates that some will be allowed without providing any scientific or policy basis for determining which levels are allowable and which are not. Second, all quantities, no matter how small, build up over time. Therefore, not including a time frame in this discussion further renders it meaningless. Third, this condition does not relate back to the species the NEB UAA is purporting to protect.

The fourth condition requires that removal of the discharge be the "only remaining feasible option to meet WQS." *Id.* This does not explain what is meant by "feasible." The mere threat by a polluter that it will remove its discharge rather than treat it should not constitute a finding that removal is the only remaining feasible option. Moreover, seasonal removal may result in a waterbody that resembles that which was naturally present, in which case, the case for

suspending criteria would have to be exceedingly high. One option never discussed in the guidance is the possibility of adding more water or more flows to the effluent-dominated waterbody. This action would achieve both ends: allow the discharge to continue and preserve the benefits associated with water. Additional water is not always available but many times the problem of an effluent dominated stream is one that is human-caused: water has been withdrawn from the waterbody, leaving only the effluent. The logical response is to remedy the loss of flow, not to suspend the protections provided by federal law. Additionally, in some instances (and we are not familiar with whether such provisions exist in Washington water law), state water law prevents the removal of a discharge. In such an instance, removal itself is not feasible and therefore there is no basis upon which to conduct an NEB UAA.

The fifth condition is that the discharge “will not interfere with maintenance of the down-gradient surface water quality standards.” *Id.* As with the rest of this guidance, there is no time frame. What might not interfere today may very well interfere tomorrow. Ecology does not describe how it will ensure that this condition is met over the long term and what actions it will take to remedy any ensuing problem with meeting this condition. In addition, it does not define “down-gradient.” How far downstream will the NEB UAA apply? Will the NEB UAA segment be given a mixing zone into the down-gradient waterbody? Does this include toxics over the long-term. How does this take new pollution sources and new water withdrawals into account?

The guidance’s sixth condition is that “[a]ll practicable pollution prevention programs, such as pretreatment and source reduction, area or will be implemented.” *Id.* This does not include pollution prevention by trading or offsets which could be used to reduce pollution and/or to increase instream flows. Such programs should be explicitly included in the definition of all practicable pollution prevention programs. The extraordinary step of suspending water quality criteria as the result of an NEB UAA should also not be permanent. Given that treatment technologies and methods will change over time, as will the economics of such treatment, Ecology should build in to any approved NEB UAA a review process to be conducted every five years, the costs to be borne by the NPDES holder.

Finally, the last condition is that there be identified a “legal commitment to provide effluent in sufficient amounts and qualities to maintain the ecological benefit.” *Id.* The guidance should state what Ecology thinks constitutes this legal commitment. We are not aware of any method by which the state can force an industry or municipality to pollute. If, in fact, there are ways in which the polluter could assure sufficient water flows we believe that implies equally that the polluter could likely assure sufficient extra flows with which to dilute its effluent.

Ecology should also be prepared to prohibit any new water withdrawals to take place where NEB UAAs are likely to be asserted in the future. This approach should apply to a limited number of situations.

2. *Description of the waterbody and waterbody processes*

This section ignores the possibility that groundwater is being used for all or part of the effluent in which case the waterbody processes should include a description of groundwater and its recharge, and pollution. The reference to geographical boundaries is unclear. Is the fact that the extent of the analysis could extend to an entire watershed a suggestion that an NEB UAA could extend that far or that the analysis of impacts could be that broad? There is a big difference. If Ecology is suggesting that an NEB UAA could be used to suspend the CWA for an entire watershed, it clearly has something in mind that is broader than it has described. If it is suggesting that it could approve an NEB UAA without facts that encompass an entire watershed, or beyond (e.g., the status of a species it is using to justify the excess pollution), then it is mistaken. It is not only the purported ecological benefits of the discharge that must be evaluated but the notions of "ecologically valuable" and "ecologically desirable" that require a bigger picture. In any case, the discussion in the guidance does not distinguish between understanding the impact of the discharge on the one hand, and why the discharge should be allowed on some unique grounds, on the other. Moreover, there is no discussion in this section about evaluating the status of the waterbody at different times, including pre-anthropogenic influences, as of November 28, 1975 and the thirty years since then. Instead, it only concerns the present day.

Physical attributes

The guidance does not state what assumptions should be made about the status quo, i.e., should grazing be expected to continue as usual or should it be assumed that changes will be made that will improve the riparian habitat? Is active restoration under way? Are stream banks being fenced? Are TMDLs going to be implemented or ignored? Ecology should be clear about the assumptions that should be made and explain the policy rationale behind its decision.

Chemical attributes

The guidance sends mixed messages by stating both that "[a]ll known contaminant sources in the waterbody should be characterized" and "especially loading from the discharge." First, the word "should" should be "must." How can Ecology purport to do an NEB UAA without this information? Second, by saying that this is especially true for the discharge, the guidance implies that it is not true for the other sources. Which is it? Required or not required? For all or for some? Next, the guidance states that contaminant information "frequently proves useful" for assessing attainability of uses. It's not clear what current contaminant levels have to do with assessing attainability of uses, particularly in the absence of any statement about assessing existing uses. Where Ecology does not want to evaluate existing uses, it need not bother to assess attainability because the latter requires the former in order to comply with federal regulations. Moreover, knowing exactly how polluted Ecology has allowed Washington's

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 45

waters to become does not begin to answer the policy question of what the citizens of Washington seek for clean water goals, i.e. the designated uses. As we have stated numerous times before in comments on this guidance, the fact that a use may not be attainable is not a reason to remove the designated use; it's merely a basis upon which a decision to do so could be made. The guidance correctly notes that other pollution sources may negate the benefits of an insufficiently-treated source but it fails to require a full evaluation of other pollution sources, as mentioned above, and it fails to require an analysis of sources of habitat destruction, often pollution sources. Since the most likely NEB UAA justification will be the creation of habitat, not requiring an analysis of habitat destroyers is a big oversight. In addition, it would be helpful if Ecology elaborated on what it intends by "limiting factors" created by other sources.

Biological attributes

The guidance state that this type of UAA is "often evaluated with respect to biological resources." *Id.* at 59. This raises the question of why any NEB UAA would not be evaluated with respect to biological resources. If not, it would be helpful for Ecology to explain why not. Again, this section omits the required attribute of all UAAs, which is an evaluation of existing uses. In addition, it refers to the "proponent's description of ... valued assemblages." *Id.* This improperly puts the proponent of an NEB UAA in the position of deciding what assemblages are "valued" when it is Ecology that should be making this determination. It also begs the question, as does the second paragraph in this section, of what assemblages should be present that are not, where they should be present, what level of presence is required, etc. Again, these are not determinations for a proponent to make.

As we have discussed throughout the comments regarding existing uses, the determinations of geographic range and population health for threatened and endangered species (and this also applies to the candidate species referred to in the guidance as well as sensitive or impaired species) require an analysis that goes beyond what exists today and even what existed any time after November 28, 1975. If a geographic range of a use in 1975 would not ensure survival and recovery of a species, it is unacceptable as the definition of "existing use" today.

This section omits the following needed information: 1) the effects of pollution – in general and with regard to the specific area – on the populations evaluated; 2) implications for species if the uses are lost because the flow is removed; 3) implications for species if uses are impaired because of excess pollution; 4) other sources of instream flow; 5) the dilution potential of other sources of flow; and 6) the geographic range of animal species.

We agree that the record must be clear as to why the effluent dependent waterbody is more desirable than the "existing habitat" insofar as existing habitat means that which would exist in the absence of the discharge. *Id.* To the extent that Ecology is implying that it can do NEB

UAAs in advance of allowing a discharge which will turn a waterbody into an effluent-dependent waterbody we believe this is contrary to federal regulations. We urge the Department to review the clear language of the UAA regulations, noting that this is not simply a which feels better scenario but, rather, a question of whether to remove the discharge would cause a greater environmental harm than leaving it in place.

3. *Inventory of regional and local ecological needs and concerns*

Again, the question cannot be limited to the benefits of creating a “scarce and ecologically beneficial attribute” without evaluating the harm caused by not removing the discharge. *Id.*

4. *Description of the hypothesized environmental benefits and possible harm*

The list of “environmental benefits” should read “potential environmental benefits.” *Id.* at 59. For every one of the potential environmental benefits, there should be a corresponding potential harm. For example, the guidance lists the “maintenance” of riparian habitats. *Id.* at 60. Yet there is no potential harm from encouraging species to depend upon this human-made habitat for which there is no assurance of continuity. A corresponding harm is the potential for the effluent to be removed at some point in the future. Likewise, the reference to “resident endangered species” fails to have a corresponding harm of the frequently higher sensitivity of endangered species to pollution and the lower risks to which endangered species’ populations should be subjected. *Id.*

Ecology’s examples of potential harm are not helpful. “[I]ncreased degradation of water and habitat” is a phrase that is used in this section and repeated as the guidance goes on, demonstrating that Ecology can visualize the benefits but is having a difficult time articulating the potential harms. If the proponents of an NEB UAA come in with such nebulous-sounding harms, it won’t be a surprise when Ecology decides to grant the UAA. Ecology needs to better articulate the harms associated with removing the effects of flood cycles in ephemeral streams. We agree with Ecology’s exhortation to provide details. *Id.*

We are confused, however, with Ecology’s encouraging “other efforts to enhance an ecological benefit.” *Id.* While it makes sense to create the best possible habitat, this raises many questions. Are these other efforts going to be taken into account in the NEB UAA and if so, why? How are these consistent with the federal regulations? Are they enforceable? Will they be long-term? If they are not both of these, they are certainly irrelevant. If the polluter has the funds with which to do these other benefits, perhaps the feasibility of obtaining instream flow increases, trading, or pollution prevention options has been improperly assessed. We agree that the purported habitat benefits themselves should not be ephemeral but there is a slippery slope on which Ecology is operating.

5. *Specific NEB Comparison Objectives*

While it is the proponent's problem if it does not fully assess all the potential benefits, we do not agree that all the potential harms may go unaccounted for as implied by the guidance. *Id.* Ecology goes on to make the process more nebulous in stating that "[i]t is recommended that, whenever possible, quantifiable amounts of ecological benefits and harms be specified as NEB comparison objectives." *Id.* The guidance should state who decides whether it's possible. It should also state what cannot be quantified and how Ecology intends to evaluate that which is not quantifiable. It should explain how it intends to balance "apples" (alleged benefits to habitat) with "oranges" (projected pollution impacts).

The guidance instructs that applicants are "strongly encouraged" to enhance the benefits associated with their discharge by maximum treatment and habitat protection. *Id.* at 61. It is unclear if Ecology does not intend to require these treatment and protection options in the discharger's NPDES permit. It is not clear from the guidance whether the use of constructed wetlands and state-of-the-art treatment would preclude the need for the NEB UAA or if requiring these options would "force" the discharge to be removed. In any case, the maximum possible treatment and habitat protection must be required.

The guidance provides an example of "Benefit 1." *Id.* This benefit is the maintenance of habitat for the Gila woodpecker. The discussion fails to include an evaluation of the long-term nature of this habitat and species, assurances that it cannot be removed and any evaluation of whether this is a good location for the Gila. For example, this evaluation framework would not ensure that the tradeoff of excess pollution for habitat was not going to take place in a location slated for future development, in which case it would be a bad location to encourage the Gila.

As mentioned above, the hypothetical harms in the guidance are too vague and this one is no exception. In addition, as this example involves an endangered species, it should explain how section 7 consultation pursuant to the ESA would be involved.

The guidance goes on to explain the importance of developing objectives that can be used to demonstrate "specific relationships." *Id.* It stops short of explaining what kinds of relationships it has in mind. Sources and pollution? Pollution and species? Species and other species? It does say that these objectives will be used to define the information required, how the information will be gathered and evaluated, and the NEB UAA assessed. *Id.* This is precisely why the other agencies and the public must be able to have input into this aspect of the UAA in advance. To merely allow public comment after all the important decisions have been made, according to Ecology's own guidance, is to make a mockery of that input. Instead, the ensuing discussion appears to suggest that Ecology will have little input into the framework which will, instead, be constructed by the proponent. As with the UAA guidance as a whole, there is

discussion about QA/QC protocols and such but little discussion of sampling plans. This text specifically mentions the number of samples and the timing of samples but it omits the geographical distribution of samples, species to be considered, method of analyzing the samples (individual versus homogenized), location of samples, etc. These are the issues that can skew results. Ecology should be realistic: if it allows proponents to invest money, the agency will be under a tremendous amount of pressure to make the findings sought by the investor.

We are concerned with Ecology's statement that the presence or absence of certain organisms is sufficient to demonstrate ecological benefits. *Id.* While this may be true in a limited sense, the implication of this statement is that the presence or absence of any assemblage of species is proof of a sufficient environmental benefit to warrant the NEB UAA. This falls far short of the analysis required by the federal regulations and good policy. The fact that water allows species to exist is not equivalent to a finding that pollution levels should be allowed to exceed safe levels.

The guidance also discusses the use of reference sites. *Id.* at 62. It does not discuss the possibility that such reference sites have been locally dewatered by human actions, that species have been locally extirpated by human actions, etc. In fact, it does not discuss the pre-anthropogenic condition at all and the degradation that has taken place over time.

7. *Data and methods used in the analysis*

This discussion about starting with existing data and looking for data gaps is troubling. *Id.* at 63. It implies that, as has been done in Oregon's pseudo-UAA procedure for alternate (extra long) mixing zones, Ecology will err on the side of the investor, not the process and not the water quality. This is another reason why agencies and the public should be involved early in the process.

The guidance discusses the design of a field sampling program starting with an "assessment of existing information." *Id.* at 64. We disagree. It should start with an assessment of existing uses as well as natural (including pre-1975) conditions. Once again, Ecology demonstrates its disinclination to address the requirements of the federal regulations.

In this section, as well as the previous one on data gaps, Ecology does not explain how the existing data and data gaps will not be allowed to drive the hypotheses.

Sampling Design Considerations

This section does not include a discussion of downstream effects. *Id.* at 64. To the extent that it discusses reference sites, as providing the "most straightforward evaluation of ecological

benefits,” it fails to discuss the problems inherent in using reference sites, as discussed above. We agree that data collected prior to the discharge may be useful. *Id.* However, we hope that Ecology is not implying that the NEB UAA can be used for future dischargers. This is contrary to federal regulations.

Data Quality Objectives

The guidance touches on the what, where, when of data collection but all through the lense of data quality, not sampling plans. This needs to be remedied. For example, Ecology needs to assure that the species that are sampled are appropriate, whether they represent species in the food chain, fish actually consumed by people, etc. Likewise, the method of analysis needs to represent the appropriate ends as well, e.g., if people prepare fish whole, analysis should not be of fillets only. These kinds of errors are frequently made both intentionally, to skew results, and unintentionally, because of lack of knowledge of the food chain or human uses.

Statistical Design Considerations

This section introduces jargon not likely to be understood by the average reader. *Id.* at 65. We suggest that it be as readable as other sections of the guidance. It also appears that the focus on evaluating gaps in existing data has the potential to undermine the a priori links Ecology’s guidance encourages.

Composite Sampling

The guidance discusses the pros and cons of composite sampling but fails to omit a highly relevant aspect of the particular kind of streams at issue, those with very distinct episodic, seasonal, flood-based characteristics. In addition, it does not discuss the need to tie contaminant concentrations with uses which themselves may be seasonal. Thus, the guidance fails to touch on the numerous problems with composite sampling while gently encouraging it as a way to save money. This is likely to skew results.

Selected Analytical Methods

Again, the guidance omits the planning of sampling as a key ingredient to success, focusing instead on data collection and analysis. *Id.* at 66. The guidance is not clear as to whether it is the proponent or the State that does the analysis of the data.

Biological Resources: Infauna, Fish, and Birds

Ecology omits mammals and other forms of animal life in this discussion. *Id.* at 66. The

Cheryl Niemi, Washington Department of Ecology

August 13, 2004

Page 50

guidance should explain why it includes birds but not mammals, fish but not amphibians, and other strange omissions. Or, better, it should be written to be inclusive of all species. Species must also be evaluated in relation to populations outside the direct area being considered for the NEB UAA for a number of reasons including breeding, abundance, population health, etc.

The guidance states that “measures of biological communities alone may be suitable indicators of ecological benefit or they may need to be evaluated relative to certain aspects of the physical environment.” *Id.* The guidance should explain what this means. It is difficult to understand why the physical environment would not be incorporated into any analysis. The guidance should also discuss why the idea of indicator species is relevant to NEB UAAs rather than just describing what an indicator species is. *Id.*

The guidance suggests that the assessment of community structure can be evaluated against a reference site. *Id.* It does not explain how this will be used in the NEB UAA which remains a highly subjective exercise even once the data are gathered and evaluated. This also does not account for changes projected in the reference site or the NEB site over time. The future is just as relevant as current conditions, if not more. Moreover, while discussing the need to address the “gradient of decreasing effect of the discharge” to “evaluate the spatial extent of its influence,” the guidance does not explain how this should be undertaken nor does it explain that this must be done for both the projected benefits and projected harms.

The guidance takes a strong turn for the worse when, after pages of discussion about science, Ecology states: “Avian communities are strongly influenced by the condition and extent of riparian habitats. Because this group also has a high public value, the provision of habitat suitable for certain bird communities will often be viewed as an ecological benefit.” *Id.* at 67. This statement is highly objectionable at a number of different levels. First, this comes from an agency which has made no attempt whatsoever to adopt numeric criteria for the protection of birds that are affected by water pollution, despite known areas in Washington waters where toxic effects have been measured. Second, Ecology’s own UAA guidance states explicitly that it does not intend to address the issue of wildlife uses in UAAs, blatantly disregarding federal regulations. However, where it suits Ecology to justify excess and unsafe pollution to please the public, it’s perfectly willing to show an interest in birds. This hypocrisy should be remedied. In addition, the federal regulations do not call for Ecology to make a determination on whether the public would prefer green habitat to that which is natural so this type of so-called analysis has no place in the NEB UAA guidance. With this type of approach, it becomes clear that Ecology has no intention of following the letter of the law or to base its NEB UAAs on potential environmental harms that can be avoided but instead to justify unsafe levels of pollution that will, over time, reap detrimental results in the name of protecting the bottom line of vested interests and making arid lands look “pretty.” Instead, it should focus on what arid lands are supposed to look like.

This section, once again, addresses sampling protocols without addressing the all-important sampling plan. *Id.*

Rapid Bioassessment Protocols

The guidance does not make clear when rapid bioassessment is an acceptable analytical tool for NEB UAAs but merely poses some questions. *Id.* Every absence of guidance in the guidance is the equivalent of Ecology leaving decisions to proponents of removing protection for water quality uses.

Data use

Since the NEB UAA applies only to arid areas, it should simply state that annual averages of any data are not suitable. Instead, it says their use is “seldom good practice.” *Id.*

Analytical techniques

Once again, Ecology pulls the public view into the discussion as a potential override to scientific analysis and sound policy. The guidance states that there is “public concern over declining habitat acreage.” *Id.* at 68. There is also public concern over declining water quality. There is also public concern over lack of species protection including from toxic contaminants. However, Ecology ignores these at-least equal public concerns demonstrating its bias towards granting NEB UAAs. Again, this raises policy considerations that are completely lacking in the entire guidance. The answer to declining habitat acreage is decidedly not to suspend the Clean Water Act at every opportunity and to poison the habitat while keeping it watered! Moreover, in its examples, Ecology uses non-aquatic-dependent species, such as woodpeckers and hummingbirds. Yet, the guidance never discusses the tension between aquatic- and non-aquatic-dependent species.

Data use

Since the guidance admits that use of a “habitat approach” “may not include all of the environmental or behavioral variables that may limit populations below the predicted habitat potential,” the guidance should specifically state that these limitations must be overcome if such an approach is used. *Id.* at 68. We agree, as mentioned above, that there are other future limitations, such as the “socio-economic or political constraints” mentioned in the guidance, that can and will affect the species considered to be the basis of relaxing safe limits on pollution. The guidance must make clear that all of these – and they should be enumerated more clearly – must be exposed in the NEB UAA process.

This section ends with a reference to the need to establish “criteria for new or sub-divided designated uses.” Nowhere in the guidance, however, does Ecology establish how it intends to establish these new or sub-divided uses nor how it intends to establish criteria to protect the most sensitive beneficial uses, as required by federal regulations, when it has decided to disregard the protection needs of some uses through the NEB UAA process. Nor has Ecology discussed the relative costs associated with conducting the NEB UAA including the criteria development or the need for ESA consultation where T&E species are present.

8. *Summary evaluation of NEB and recommended actions*

This section of the NEB UAA guidance is extremely troubling as it demonstrates, despite all the talk about science, how simplistically Ecology perceives this task. Here, Ecology concludes that “if analyses indicate that 1) the discharge is a significant, or the sole, contributor of water to the waterbody; 2) the water provided by the discharge is healthy aquatic and riparian habitat [this phrase does not make any sense]; and 3) these habitats are limited in the watershed and needed to support endangered species, it [sic] relatively easy to demonstrate the discharge provides a significant NEB.” *Id.* at 69. Perhaps this discussion is impenetrable because it uses the “healthy aquatic and riparian habitat” that is overused in the previous pages, without explanation, but the argument still appears to be simplistic. In short, even unsafe levels of pollution can be deemed acceptable if the effluent is creating habitat. Since this is likely to be the case in nearly every arid area where there is an effluent-dominated stream, Ecology has just projected the likely outcome of each and every NEB UAA process. Its only caveat is the question of toxics which may biomagnify, a subject the guidance has completely skirted by referring only to the need to avoid “quantities” of toxic substances. Ecology never explains how it intends to analyze the long-term build-up of toxic constituents and how it intends to balance their potential harm against its other perceived benefits. It does not, for example, instruct the proponents of NEB UAAs or the public that it intends to use all the latest science, including for example the endocrine disrupting effects of many toxic pollutants, when evaluating the likely effects of these unknown allowable “quantities” of toxics. It should.

The guidance discusses the need to obtain peer review but it doesn’t point out that, generally speaking, paid consultants will support the positions of those who pay them. *Id.* It also mentions the importance of clarity because of public participation and review but this is a hollow reference as the guidance completely omits a role for the public at the point at which input would be meaningful. When all the data are collected, public input will be too late.

Ecology discusses the subsequent actions, including removing designated uses, developing criteria, etc. *Id.* However, there is no reference to the requirement to protect existing uses and no discussion of the costs and process involved in developing new criteria. In addition, if designated uses are removed that will require them to be revisited each triennial review, the NEB

UAA should require that the proponent develop and implement a monitoring plan to support such triennial review.

Ecology is correct in cautioning proponents of NEB UAAs that additional pollution controls may still be needed even if the process is "successful" in downgrading the use designations and criteria. *Id.* at 69. However, it is unclear why Ecology says that "Ecology or the proponent must determine...the most protective pollution reduction technique." *Id.* This is the job of the State.

The guidance discusses other options if the NEB is not demonstrated including the development of site-specific criteria. *Id.* Since site-specific criteria would be needed if the NEB were demonstrated, Ecology should explain the differing approaches and why one or the other would be warranted and justified under federal regulations. In addition, Ecology does not explain why obtaining an NEB "through further mitigative enhancements to the waterbody" is consistent with federal regulations or different from the discussion throughout this appendix. The federal regulations do not say that dischargers can discharge pollution at levels that exceed those found safe for aquatic and human life if instead of providing treatment to their wastes they improve habitat. The regulations do say that, in this context, a UAA can be granted if the uses are unattainable due to human influences and the conditions cannot be remedied or the remedy would cause a greater environmental harm. 40 C.F.R. § 131.10(g)(3). (The guidance also does not discuss the relationship between attainability and the NEB concept, as required by the federal regulations.) Amazingly, none of the options includes adding increased instream flows to the waterbody.

Economic costs and benefits must be determined

In this tiny section, Ecology admits that state law requires the agency to weigh the financial costs and benefits of making changes to the standards. *Id.* at 70. This demonstrates the importance of comments made above concerning the costs associated with developing new criteria. Given Ecology's inability to even establish criteria to protect its currently designated uses, it is difficult to understand how it could justify the expense for changing criteria for a single waterbody.

9. *Monitoring program to verify the NEB*

We agree that a monitoring program to verify the NEB should take place. *Id.* at 70. We do not understand why Ecology can say that such a program is required in the NEB UAA context while arguing that it neither cannot nor will not require the same post-UAA program for other UAAs. If Ecology wants to take such an inconsistent position, it should at least explain why it believes that, from both a policy and a legal perspective, these are so different that they have two dissimilar outcomes. In addition, the guidance should specifically instruct that the monitoring

program look for unexpected consequences. Once again, the guidance focuses on protocols, not sampling plans.

Monitoring Program Design Tasks

The last of the individual tasks included in the monitoring program design is “[v]erify Net Ecological Benefit and determine subsequent actions.” *Id.* The process of “verifying” the NEB is not one merely of collecting data but is also one of policy analysis. Nowhere does Ecology recognize that granting and continuing an NEB UAA is a matter of policy, not science, except where it discusses the public’s perception of habitat needs. Public perception cannot be equated to a policy analysis. There is no mention of existing uses throughout this section. There is no mention of re-evaluating attainability, re-evaluating the policy decision to forgo safe levels of pollution, re-evaluating designated uses that do not meet CWA § 101(a)(2) uses, in this section or below.

Monitoring Program Objectives and Performance Criteria

Ecology argues that data must be collected to assess compliance with effluent permit requirements and ambient water quality criteria. *Id.* at 71. We agree. It is unclear why Ecology includes the former in this guidance as it would be expected to be a part of any NPDES permit. In addition, to ensure that compliance of the downgraded waterbody meets criteria, including the effects of other human pollution sources, this too should be included in the NPDES permit of the NEB UAA proponent. While Ecology does not include such monitoring requirements in NPDES permits, it has the legal authority to do so which it should exercise in this case. Therefore, this section should be focused on 1) ensuring that these data requirements were placed in the NPDES permit and 2) the analysis of these data.

That said, this section raises many red flags. Ecology states that because “contaminant loading and bioaccumulation in valued waterbody resources is often a potential concern (detriment) due to the presence of the discharge, monitoring of contaminant sources and concentrations in aquatic habitats is frequently conducted.” *Id.* at 71. It is not clear what Ecology means by “valued waterbody resources.” The guidance, if it is going to distinguish between valued and unvalued resources, should explain what it means and why the agency believes it can make this distinction. Second, the guidance should explain why contaminant loading is only a potential concern instead of always a concern. Even if the pollution source itself contains zero toxic pollutants, there are other human activities that frequently affect waterbodies, sources of pollution that must be included in the NEB UAA evaluation. The statement itself is misleading. Less frequently rather than more are contaminants monitored for in the environment, due to the high costs and the reluctance of government agencies to actually gather this information. Whether they have or have not been monitored for is beside the question; Ecology needs to

ensure that such monitoring takes place. We also suggest that in rewriting this section, Ecology change the tone and the tense. That monitoring “can often” provide information is just a useless statement of fact. It says nothing about whether Ecology will ensure that monitoring takes place.

Evaluate expected monitoring program performance and select appropriate sampling design.

This is one of very few, fleeting, references by Ecology to the fundamentally important sampling design issue. *Id.* The guidance says almost nothing about this important topic. Moreover, sampling design – unlike protocols and procedures – is very understandable to the public and public input should be incorporated as a requirement of this process.

Verify Net Ecological Benefit and determine subsequent actions

Ecology’s guidance is very unspecific and includes phrases such as “regularly reported.” *Id.* Regular reporting could be twice a year or once every ten years. It also doesn’t say to whom the reporting is taking place. To all agencies? To the public? This kind of nebulous statement does not provide the public with any assurance that the NEB UAA is something it can believe in nor does it provide the proponents with any clear idea of what Ecology will require. What it does do is set up a system ripe for abuse. This section of the guidance goes on to mention the role of Ecology, the polluter, the other agencies and the tribes but, once again, omits the public. Ecology should not be setting up processes to undermine the Clean Water Act that take place behind closed doors and only offer the public an opportunity for input after all of the decisions have long been made.

The guidance mentions that one aspect of the review will be compliance with “the ambient water quality criteria decided upon following the UAA analysis or development of site-specific criteria.” *Id.* Ecology should explain how it can choose criteria that are not site-specific criteria. This is particularly true when the driving focus behind an NEB UAA is that the effluent cannot meet water quality standards. Therefore, by definition, it cannot meet applicable criteria. We strongly concur with Ecology’s statement that compliance includes compliance with narrative criteria. *Id.* We do not understand, however, why this is the only mention in the entire guidance of narrative criteria. There is no explanation given of how the NEB UAA intersects with narrative criteria any more than there is any explanation in the NEB UAA appendix on how it will ensure the protection of existing uses. And, this is the only reference in the NEB UAA to amphibians which have otherwise been ignored. We agree that amphibians, reptiles, and waterfowl must be protected but how does this square with Ecology’s legally-unsupportable decision to “reserve” wildlife uses in the UAA process? Such aquatic-dependent species are both existing and designated and cannot be set aside before, during, or after a UAA evaluation. Finally, Ecology has a bizarre attitude towards assuring the protection of these aquatic-

Cheryl Niemi, Washington Department of Ecology
August 13, 2004
Page 56

dependent species. The guidance states that “[p]articular care should be taken to confirm ... they are flourishing.” *Id.* The question is not just whether they are flourishing but whether they will in the future. Ecology’s perspective is, evidently, to wait until these aquatic dependant species demonstrate population declines, individual health problems, or unsafe contaminant levels before acting. At that point, it is too late. Ecology needs to rewrite the guidance to ensure that it looks out into the future, as many of our comments have pointed out.

Ecology states that “[i]f maintenance of a Net Ecological Benefit or attainment of designated use is not demonstrated, management or enforcement actions may be taken.” *Id.* at 72. It does not discuss how it will ensure that this takes place. For example, there is no discussion of the time frame of the monitoring and maintenance of the NEB. There is no reference as to what Ecology will do if an NPDES permit holder terminates its permit. It is not at all clear what kinds of enforcement actions, under what authorities, Ecology has in mind nor what it means by “management” actions. These require specificity in the guidance.

Thank you for the opportunity to comment on your first draft of the UAA guidance. We urge you to set this project aside in favor of attending to the statutorily-required duties associated with water quality standards which Ecology has been unable to meet including, but not limited to, the following: 1) development and implementation of antidegradation policies to ensure the protection of existing uses in all regulatory activities; 2) development of numeric criteria to protect aquatic-dependent species; and 3) development of numeric criteria to protect threatened and endangered species. Given Ecology’s continuing inability to maintain water quality standards that meet federal requirements, using state resources instead to assist individual polluters in downgrading environmental protections is a poor choice.

Sincerely,

Nina Bell, Executive Director
Northwest Environmental Advocates

Brett Swift
American Rivers

Mike Petersen, Executive Director
The Lands Council

Sue Joerger, Puget Soundkeeper
Puget Soundkeeper Alliance

Cheryl Niemi, Washington Department of Ecology
August 13, 2004
Page 57

Nancy McKelvey
Spokane Chapter of Trout Unlimited

John Osborn, MD, Conservation Chair
Upper Columbia River Group of Sierra Club

Bruce Wishart, Policy Director
People for Puget Sound

Galen Buterbaugh
Lake Spokane Protection Association

Bonnie Beavers, Staff Attorney
Center for Justice

cc: Mark Hicks, Ecology
Melissa Gildersleeve, Ecology
David Ragsdale, EPA
Marylou Soscia, EPA
Jeff Lockwood, NMFS