

February 4, 2004

Mr. Randy Smith, Director  
Office of Water  
U.S. EPA Region 10  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Oregon Responses to EPA Questions re the State's water quality temperature standards

Dear Mr. Smith:

This letter is a follow up to our similar correspondence of December 19, 2003, which described Oregon's newly adopted antidegradation and temperature rules. There are three purposes for this letter. First, we are offering similar clarifications regarding the State's intended methodology for identifying natural conditions for parameters other than temperature. Second, we are commenting on several proposed conservation measures EPA is developing pursuant to consultation under the Endangered Species Act. Finally, we are providing your Agency with information on the application of the dissolved oxygen criteria to resident fish spawning.

#### Natural Conditions

As we indicated in our earlier letter, our revised rules make it clear that where DEQ identifies a natural condition which is less stringent than the numeric criteria set out in the State's water quality standards, the natural condition supercedes the numeric criteria. Very similar language appeared in our previous rules, which were previously approved by EPA.

By definition, "natural conditions" are those pollutants that are present in the State's waters that are not attributable to anthropogenic activities. Rather, these conditions are caused by local geophysical, hydrological and meteorological processes and wildlife. DEQ anticipates that site-specific natural conditions might be identified for the following parameters:

- Bacteria (attributed to wildlife)
- Metals (attributed to naturally eroding ore deposits)
- Nutrients (attributed to background soil, vegetation and/or wildlife conditions)
- Sediments and Turbidity (attributed to soil erosion and/or organic matter not accelerated by human activities)

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- Other parameters attributed to similar natural processes.

Prior to a natural condition superceding otherwise applicable numeric criteria, DEQ will make a finding as to the level at which the pollutant is present with no influence from anthropogenic activities. Similarly, DEQ will document the natural process contributing to the presence of the pollutant. The specific methodology used to support a natural condition finding may vary in each local situation. However, in general the methodologies used will be similar to that described in our December 19, 2003 letter:

- Reference streams,
- Pollutant transport models,
- DNA testing,
- Historical data (where available) and/or
- Other sampling methods and studies.

The public will have specific notice of these natural conditions whenever they are relevant to one of the Clean Water Act regulatory programs. The public notices and documentation accompanying the biannual 303(d) listing process, draft TMDLs, draft NPDES permits and 401 water quality certifications will indicate that the otherwise applicable numeric criteria have been superceded by a natural conditions finding. Moreover, since 303(d) listings and TMDLs are transmitted to EPA for approval, the Agency will have an opportunity to review DEQ's natural conditions conclusions. DEQ is committed to work with EPA as natural condition methodologies are refined in the TMDL, NPDES and 303(d) listing contexts.

DEQ expects that natural conditions will most commonly be identified through the TMDL process. In that circumstance, EPA will have an opportunity to review and evaluate any natural condition determination as part of its TMDL approval action. DEQ will list the water bodies where "natural conditions" findings have been made on our standards web page to ensure that the public is aware and notified of natural conditions,

It should be noted that it is possible, at some locations in the State, that the natural condition will not support, and never has supported a designated beneficial use. In such circumstances, DEQ will modify the designated use to properly adjust the beneficial use to better reflect the existing use of the water segment.

#### Proposed Conservation Measures

DEQ is aware that EPA is considering several conservation measures associated with its approval of the State water quality standards revisions. EPA has inquired whether DEQ would participate in these conservation measures if they are pursued. To begin with, DEQ notes that most of these conservation measures pursue information on the future *implementation* of the State's standards. They are best categorized as efforts intended to identify additional information supporting the use of our standards once they are in place.

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Since Oregon has a strong interest in these federal initiatives, DEQ will, resources allowing, participate in the proposed conservation measures as described in EPA's Biological Evaluation: Temperature Monitoring and Use Designations (2.5.1) and the Two Year Review (2.5.2).

#### Dissolved Oxygen and Spawning

The revised Oregon rules clarified spawning locations and timing for anadromous fish and Lahontan Cutthroat Trout. Due to a lack of site specific data for species other than these, and since temperature criteria for spawning were not established for other species, no similar clarification was made for resident trout (i.e., rainbow, redband, Westslope cutthroat and coastal cutthroat) or char (bull trout) spawning. However, the dissolved oxygen criteria contain provisions that continue to apply to resident trout and char spawning areas. DEQ will use the following dates to apply the dissolved oxygen spawning criteria (throughout the range where the Oregon maps indicate trout rearing, redband trout and core cold water habitat uses are identified).

#### Resident Trout Spawning (Redband, Rainbow, Westslope and Coastal Cutthroat)

- *For waters designated as trout rearing, or redband trout use, spawning is deemed to occur from January 1 – May 15 each year;*
- *For waters designated as core cold water habitat, or bull trout spawning and rearing use, resident trout spawning is deemed to occur from January 1 – June 15 each year; and*
- *For trout rearing waters upstream from core cold water habitat, spawning is also deemed to occur from January 1 – June 15 each year.*

#### Char (Bull Trout) Spawning

The following dates apply to all reaches designated as having "bull trout spawning and rearing use" within the specified basin or subbasin:

| <u>Basin</u>     | <u>Subbasin</u> | <u>Spawning Period</u> | <u>Source of Information</u> |
|------------------|-----------------|------------------------|------------------------------|
| South Willamette |                 | Aug 15 – May 30        | ODFW                         |
| John Day         |                 | Sept 1 – April 30      | ODFW                         |
| Umatilla         |                 | Sept 1 – April 30      | ODFW                         |

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|             |             |                   |       |
|-------------|-------------|-------------------|-------|
| Walla Walla |             | Sept 1 – April 30 | ODFW  |
| Grand Ronde | Upper G. R. | Sept 1 – April 15 | ODFW  |
|             | Wallowa     | Sept 1 – May 15   | ODFW  |
|             | Wenaha      | Aug 15 – March 31 | ODFW  |
| Imnaha      |             | Aug 15 – May 31   | ODFW  |
| Hood        |             | Aug 15 – May 15   | USFWS |
| Deschutes   |             | Aug 15 – May 15   | USFWS |
| Powder      |             | Aug 15 – May 15   | USFWS |
| Malheur     |             | Aug 15 – May 30   | USFWS |
| Klamath     |             | Aug 15 - May 30   | USFWS |

This timing information will be circulated to DEQ field staff responsible for implementing the dissolved oxygen criteria. DEQ will continue to refine all of these designations as more information is developed on resident trout and char spawning activities.

Oregon looks forward to EPA's review and approval of our water quality standards. If you require any additional information or clarification of these rules, please contact me or have your staff call Mark Charles, water quality standards manager at (503) 229-5589.

Sincerely,

Michael T. Llewelyn, Administrator  
Water Quality Program

Cc: Stephanie Hallock - DEQ  
Mark Charles - DEQ  
Paula van Haagen - EPA  
Mary Lou Soscia - EPA