

**Pend Oreille River TMDL Watershed Advisory Group
Meeting Summary
Thursday, October 26, 2006
Federal Building, Sandpoint, Idaho**

Attendees

Gary Wescott, Southside Water and Sewer District; Todd Johnson; Russ Fletcher, Pend Oreille Conservation District; Mike Mihelich, Kootenai Environmental Alliance; Randy Curliss, City of Dover; Marty Robinson, Pend Oreille PUD; Patty Perry, Kootenai Tribe of Idaho; Ted Runberg, Priest River Development Council; Charlie Holderman, Kootenai Tribe of Idaho; Marcie Mangold, Washington Dept. of Ecology; Jon Jones, Washington Dept of Ecology; Karen Kinsella, JBR Environmental for Pend Oreille Mine; Tyson Clyne, Idaho Dept of Environmental Quality; Channing Swan, Stimson Lumber; Jenna Borovansky, Idaho Dept of Environmental Quality; Kate Wilson, Lakes Commission; Jamie Davis, Bonner/Boundary Soil & Water Conservation Districts and Idaho Soil Conservation Commission; Liz Sedler, Panhandle BAG; Lori Burchett, Bonner County Planning; John Gross, Kalispel Tribe; Helen Rueda, EPA; Paul Pickett, Washington Dept. of Ecology; Robert Steed, Idaho Dept of Environmental Quality; Michele Wingert, Kalispel Tribe; Ruth Watkins, Tri-State Water Quality Council.

Welcome and Introductions

Ruth gave a brief overview of today's meeting agenda and participants introduced themselves.

TMDL Updates

Idaho: Jenna Borovansky reported that IDEQ has received the draft temperature TMDL model calibration report from the contractors at Portland State University, and by January the contractors should be finished running all the scenarios through the model. The results of the scenario runs will be discussed at our next committee meeting. Jenna noted that the total dissolved gas TMDL is still in the works.

Jenna also gave a report on the meeting held this morning on TMDLs for tributaries in the Pend Oreille River/Lake Pend Oreille watershed in Idaho. She passed around the list of the tributaries that require TMDLs by the end of 2007. She explained that the tributary group, at least for now, would not become its own separate WAG, but would operate as a sub-group of our Pend Oreille River WAG. River WAG members will be informed of dates and agendas for subsequent tributary TMDL meetings in case they would be interested in attending. Several people attended both meetings today.

Washington: Jon Jones reported that Ecology's temperature TMDL modeling work is well underway and Paul re-iterated that the three models being used for the Pend Oreille River temperature TMDL (Portland State University for IDEQ and Ecology and Seattle City Light for the most downstream portion of the river) are all using the same model platform so the modeling results will dovetail. Jon said that Washington's total dissolved gas TMDL draft report is currently out for internal review. Once the report is ready for public review and comment, Jon will let Ruth know and she will notify the WAG that the report is on the state's website.

Jon explained that Ecology will not be starting work on TMDLs for the river's tributaries until a future date due to limited agency resources. Paul added that the exception to this is that he is addressing

temperature 303d listings in the tributaries as part of the mainstem TMDL and that his agency is working with the tribes, Pend Oreille PUD and others to gather available data. The Forest Service (Colville National Forest) has already completed temperature TMDLs for tributaries on national forest land and Jon has a copy of the water quality implementation plan for those TMDLs if anyone is interested.

Temperature Model Basics: “Modeling 101”

Paul Pickett gave a PowerPoint overview about how computer modeling for water temperature in a waterbody works and what we hope to learn from the models being developed for the Pend Oreille River temperature TMDL. Some of the main points from his presentation included:

- A model is a mathematical tool that uses statistics and/or fundamental scientific principals to replicate observed data from the field and make projections about trends into the future.
- A model can identify causes of pollution problems and can fill in between gaps in observed data.
- After a model is calibrated (the observed data and projected trends match up closely) then “what if” scenarios can be applied to the model. This allows us to figure out which restoration measures will make the most difference in reducing the pollution problems.
- Models can range from very simple spreadsheet models to very complex multi-dimensional models. The highly complex CE-QUAL-W2 model is the one being used for the Pend Oreille River temperature TMDL.
- The first step in doing a temperature model is to gather and enter data that characterizes the current conditions of the waterbody. Data includes: water temperature (using in-stream temperature loggers, or infrared imaging); channel structure and flows (using stream channel surveys of width, depth, floodplain, tree heights); shade (using hemispherical photography and shade estimates from photos); and weather information (using nearby weather stations).
- The next steps in the modeling effort include: modeling the current conditions of the waterbody (i.e, calibrating the model to see if the conditions it predicts are close to the data collected ((or observed)) in the field); modeling potential conditions (including potential human influences on changes to temperature); modeling “worst case” scenarios; and setting heat load targets to meet temperature standards.
- When management scenarios are run through the model, alternative restoration activities can be evaluated. These alternatives might include such measures as restoring riparian vegetation and shade, reducing erosion and restoring channel structure, making operational or structural changes at dams, and/or changing minimum/maximum flows.

Randy Curliss asked if the model will be able to help the groups in Idaho who are working on regionalization of wastewater treatment, adding it would be great if the model could be used to support/promote a regional facility. Bob Steed replied that the model first needs to be used for the temperature TMDL because the river is listed by the state as impaired for temperature; however, in the future IDEQ will add nutrient data to the model once management actions for temperature are determined. (Management actions for temperature may influence nutrient conditions.) Paul re-iterated that once the model is set up, other parameters, such as nutrients or milfoil can be added. Randy asked about adding oxygen to the water as a possible management measure; Bob replied that while sometimes aerators can be used in lakes they aren’t used in rivers because their influence travels downstream.

Water Quality Standards and Beneficial Uses: Idaho, Washington and Kalispel Tribe

Paul distributed a handout outlining the numeric temperature criteria for Idaho, Washington and the Kalispel Tribe. The differences in the sets of criteria, and what these differences might mean for the TMDL, were discussed.

Idaho: Bob explained the process for Idaho's Water Quality Standards, which are based on both beneficial uses and criteria. Aquatic, recreation and water supply beneficial uses have numeric and narrative criteria to protect those uses. Referring to the Pend Oreille handout, Bob noted that temperature criteria are shown for cold water, salmonid spawning and bull trout. Idaho's criteria for cold-water uses in the river are 22°C (maximum of daily max) and 19°C (maximum daily average). He explained that the river's surface water exceeds temperature criteria "most of the time" and that the Idaho model will be used to simulate natural condition since this is currently an unknown.

Washington: Jon and Paul explained that the process in Washington is the same as Idaho's in that the Clean Water Act is the federal law that requires states to develop water quality standards, which are put into rules using numbers based on studies and best evidence. Washington's criterion for cold-water uses in the river is 20°C (maximum of daily max). The important thing for the WAG to understand is that the three sets of standards (Idaho, Washington and tribe) are sometimes different, but they are established in rules so that's what we have to work with. Paul noted that the Washington information in the handout is based on the state's 2003 standards, which have not yet been fully approved by EPA.

Kalispel Tribe: John Gross outlined the tribe's process to develop criteria to protect beneficial uses. He noted that while the state's standards are stream class-based, the tribe's are based on uses taking place and criteria that are protective of those uses. It was determined that adult salmonid migration is the highest use and that temperatures of 20.5°C (maximum of daily max) and 18°C (7-day average of daily max) were protective of that use; warmer temperatures were not protective of rainbows and definitely not of bull trout.

The one standard that is the same in Idaho, Washington and the Tribe is for natural conditions: 0.3°C is the maximum increase allowed at any time when natural conditions are above the established criteria.

The group discussed that upstream states have to meet downstream standards, and that in this TMDL all will have to meet the 0.3°C above natural condition. EPA's job will be to make the call if the three jurisdictions don't come up with a solution that meets standards. Bob said that Idaho DEQ knows they must meet downstream standards in Washington, but it is unclear about meeting the tribe's standards farther downstream; this will have to be figured out.

Bob Steed asked John whether he thought that the tribe's 20.5°/18° temperature criteria or the natural condition would be apply for the TMDL and John indicated the tribe is waiting to see what the model shows. Paul noted that he thinks the natural condition will likely apply most of the time, but maybe not for all seasons of the year.

Patty Perry asked whether the Endangered Species Act or a TMDL prevails in management decisions, and how resource needs for endangered fish get balanced with water quality (TMDL) concerns. Bob said we will have to establish what we know and make the best call but that this issue likely won't get resolved before the TMDL is completed in December 2007.

Todd Johnson asked about Montana standards and upstream temperature data. EPA has been in contact with Montana agencies about their data, and Ruth will follow up and gather some info for a future meeting.

WAG Operating Procedures

Bob Steed distributed a draft of operating procedures for the group to consider regarding WAG decision-making. Bob noted it would be good for the group to have a decision-making process in place should it become necessary in the future. The procedures describe the consensus process, and if consensus cannot be reached then the issue in question would go to a 2/3-majority vote. The procedures also spell out absentee voting (only for items on the agenda), quorum (50% of voting members present or proxy), advance notice of meetings and agendas, voting according to affiliation, abiding by open meeting laws, and TMDL-related information to be posted on the Idaho DEQ website.

The group agreed that the draft operational procedures looked fine and Bob said these would be posted on the website.

Idaho and Washington Water Quality Grant Programs

Idaho: Tyson Clyne described the Idaho Non-Point Source (“319”) Program grants and said that pre-applications are due November 7th (pre-applications are voluntary, but recommended), and final proposals are due February 8th. He handed out application packets and briefly reviewed the projects that were funded last year. The program funds projects that are geared toward on-the-ground non-point source work and need to be tied to a TMDL. Russ asked if a Washington group could apply for an Idaho grant if they are working on a tributary that flows into Idaho. Jenna said she was not sure and that such projects would likely be reviewed on a case-by-case basis. Jon said he could look into opportunities for funding a Washington/Idaho project from the Washington side.

Washington: Jon explained that the current applications for 319 grants and Centennial Clean Water Fund grants in Washington are quite involved and that changes are underway; next year’s grant packet will look different and likely will be simpler. There is not a pre-application process in Washington; potential applicants are urged to discuss their project ideas with Ecology staff. (He thought the Idaho pre-application was a great idea.) He noted that the 319 program has about \$1.9 million available; the Centennial Fund has about \$17.8 million available and funds projects up to \$250,000. The deadline for grant applications is next Thursday (November 2).

Wrap up and Next Meeting:

Potential agenda items for the next meeting include:

- Temperature model calibration report and initial scenario results
- Presentation by Seattle City Light on development of their total dissolved gas options
- Pend Oreille Watershed (Washington) Detailed Implementation Plan and implementation grants, Pend Oreille Conservation District

It was agreed for Ruth to contact Christine at Seattle City Light to see which meeting date would work best for her: January 24th, 30th, 31st of February 1. Ruth will distribute meeting notes and let everyone know the next meeting date.

Meeting adjourned at 4:00 pm.