Portneuf Watershed Advisory Group
October 16, 2007

Group Memory

Snake River Conference Room, Pocatello Regional Office
Idaho Department of Environmental Quality

The Idaho Department of Environmental Quality Pocatello Regional Office hosted a Portneuf Watershed Advisory Group meeting on Tuesday, October 16, 2007 in the Snake River Conference Room at the Regional Office located at 444 Hospital Way, Suite 300 in Pocatello, Idaho.

Meeting participants included the following voting members of the Portneuf Watershed Advisory Group: Kim Gower (JR Simplot Company), Brad Higginson (Caribou-Targhee National Forest), M. Keene Hueftle (Southeast Idaho Environmental Network), Jim Mende (Idaho Fish and Game [IDF&G]), John Sigler (City of Pocatello), Candon Tanaka (Shoshone-Bannock Tribes), Roger Thompson (Southeast Idaho Flyfishers), and Elliot Traher (Natural Resources Conservation Service).

The following non-voting members were also in attendance: Greg Mladenka (Idaho Department of Environmental Quality [DEQ]), Andrew Ray (DEQ), and Sue Skinner (US Environmental Protection Agency [EPA]).

Members who were absent from the meeting included: Larry Ghan (alternate, Bannock County Commission), Wilder Hatch (Caribou Soil Conservation District), Jon Herrick (alternate, City of Pocatello), Kevin Koester, Hannah Sanger (Portneuf Greenway Foundation), Bud Smalley (alternate, Southeast Idaho Flyfishers), Louis Wasniewski (alternate, Caribou-Targhee National Forest), and Lin Whitworth (Bannock County Commission).

Wendy Green Lowe of P2 Solutions facilitated the discussion. This "group memory" documents discussion and decisions that occurred.

Review and Approval of September Group Memory

Corrections were noted to the September Group Memory. Changes will be made in accordance with those corrections noted and the final Group Memory will be posted to the Portneuf Watershed Advisory Group's website.

It was also noted that the website refers to the group memory documents as "minutes." These documents are not verbatim transcriptions and do not present as much detail as would be expected in minutes. DEQ was asked to change the website to reflect more accurately the intent of the group memory documents.

Total Phosphorus Targets for the Mainstem Portneuf

Andy Ray reported that the Technical Subcommittee met on the 24th of September to discuss phosphorus. The goal of the Subcommittee meeting was to establish a recommendation for a total phosphorus target. The subcommittee noted that the largest fraction of total phosphorus in the Portneuf River above the Batiste Road bridge crossing is associated with sediment. Because of the strong relationship between sediment and phosphorus, the Watershed Advisory Group discussed having two targets for total phosphorus to maintain consistency with the dual targets for total suspended sediment approved during the during the 18 September 2007 WAG meeting. High flow targets generally apply from February through May and low flow targets apply the rest of the year (see Table 51, pg 107, of 2001 TMDL for dates that apply to different segments of the watershed).

DEQ analyzed data spanning three different flow years (calendar years 2004-2006) and plotted total phosphorus as a function of total suspended sediment and determined that there was a significant linear relationship using samples collected at mainstem Portneuf River (except the Siphon Road monitoring location) and Marsh Creek monitoring sites. DEQ developed a predictive model based on this empirical relationship and the model predicted a total phosphorus concentration of 0.0725 mg/L using the low flow

total suspended sediment target of 35 mg/L and a TP concentration of 0.1255 mg/L under high flow conditions (associated with a TSS target of 80 mg/L). As a result, the Technical Advisory Subcommittee recommended targets for TP of 0.07 mg/L during low flow conditions and a TP target of 0.125 mg/L during high flow conditions.

Keene Hueftle asked if the point isn't to look at the total load of phosphorus during two flow periods (high and low) but over all flow conditions that occur throughout the year. **Andy Ray** affirmed that comment, but explained that DEQ must set daily targets under the Clean Water Act (Total Maximum Daily Loads [TMDL]). **Keene Hueftle** asked why DEQ is set on establishing high flow and low flow targets. **Andy Ray** stated that the DEQ recognizes that more sediment and sediment bound phosphorus is delivered during periods of high flow and this occurs in natural and impaired watersheds. A dual target formally acknowledges that sediment and other pollutant loads are a function of flow and therefore this approach is commonly used for setting annual TSS targets. **Andy Ray** added that the DEQ has developed daily estimates of TSS and TP concentrations, flows (or discharge), and TSS and TP loads

Candon Tanaka objected to the recommendation of 0.07 mg/L under low flow as he believes that target would not be protective enough to support beneficial uses and especially for support of salmonids and other cold water biota. There is no viable opportunity for addressing groundwater nitrogen through the TMDL process. Candon went on to explain that he would prefer a TP target of 0.05 mg/L. He would prefer to be cautious in order to be protective of the resource.

Elliott Traher asked what conditions would be like on the lower river if the target of 0.07 mg/L were achieved in the upper portions of the watershed.

Greg Mladenka explained that the river below Batiste Rd is very different than above that location. Groundwater entering below Batiste Road is contributing approximately 1,500 pounds of phosphorus per day.

John Sigler observed that 0.07 mg/L is a realistic target, even if it might not be as protective as might be preferred. The City of Pocatello is a point source of pollution and is treated differently under the law than non-point sources are, despite the fact that the City contributes far less phosphorus to the Portneuf Watershed than the non-point sources do. In his opinion, it would not be fair to ask the City of Pocatello to attempt to achieve a lower target. Furthermore, it would not be realistic to expect the City of Pocatello to comply. The only way to accomplish the lower target would be to install additional, very expensive technology at the waste water treatment plant. He estimated that it would cost the City of Pocatello $10 to $30 million to accomplish the lower target – which would be a lot of money for the City to come up with. He went on to explain that once the TMDL is established, the City of Pocatello will be issued a National Pollutant Discharge Elimination System (NPDES) permit. He does not believe the City of Pocatello would have taxpayer support for allocating that level of funding to accomplish the lower target. As a result, he does not feel that adoption of the lower target (0.05 mg/L) could be achieved.

The group discussed the concept of establishing different targets for different sections of the watershed. **Andy Ray** explained that the DEQ will certainly consider this idea but was unsure exactly how to reconcile it in the TMDL. He explained how rivers are continuous ecosystems that link upstream and downstream reaches. Furthermore, splitting the river at jurisdictional boundaries or bridge crossings makes little ecological sense, since the goal of establishing a target is such that the target should support beneficial uses throughout the river.

Greg Mladenka observed that even a target of 0.07 mg/L will be very difficult to achieve. He expects that it could take ten years or much longer to be able to achieve that target.

Keene Hueftle commented that he wants to see the watershed cleaned up. He is not particularly concerned about how hard it would be to accomplish the targets.

Sue Skinner observed that the EPA would understand the situation faced by the City of Pocatello; the federal agency understands that it is unfair to require point sources achieve strict targets if it is not possible to also reduce non-point sources.

Candon Tanaka reiterated that he supports a target of 0.05 mg/L because he does not believe a target of 0.07 mg/L would support beneficial use. When asked if he can demonstrate this belief within the Portneuf River; he said no, he was basing his opinion from observations of tributaries on the Fort Hall Reservation.

Elliott Traher asked if the lower target of 0.05 mg/L could be accomplished. If not, he suggested that it may be more appropriate to establish a target that feels realistic. Private landowners may be more willing to try to accomplish reductions if they feel the targets can be achieved. This social aspect of the targets should be considered.

Candon Tanaka observed that there is more than one social context of relevance to the TMDL process within the Portneuf Watershed.

Elliott Traher asked if the targets could be adaptive in the TMDL.

Greg Mladenka observed that 0.07 mg/L would be a huge improvement over the current situation. Even that target may not be "reasonably attainable."

Andy Ray asked for clarification about the NPDES permit process. **John Sigler** responded that he expects the requirements in the NPDES permit for the Pocatello wastewater treatment plant to require whatever target is specified in the TMDL.

Candon Tanaka observed that the EPA has the obligation to implement the Clean Water Act. The Clean Water Act was written to ensure protection of beneficial use. The higher target will not ensure protection of beneficial use. He went on to observe that DEQ has the discretion to establish different load allocations for different sources – but such a strategy would make the agency vulnerable to litigation (in his opinion).

The Watershed Advisory Group attempted to reach consensus on a recommendation to establish 0.07 mg/L as the target under low flow conditions and 0.125 mg/L under high flow conditions. **Candon Tanaka** could not agree to that recommendation; consensus was not achieved. Candon explained his position: he believes that healthy fisheries require phosphorus levels below 0.05 mg/L.

The Working Charter for the Watershed Advisory Group provides for a vote when consensus in not possible. An initial vote was taken. The results were discussed and another vote was taken after clarification of concepts. It was not possible to find a majority in support of any outcome.

It was observed that a few people appeared to have changed their positions between the two votes.

Brad Higginson explained that he could not support the recommended target as it could allow further degradation in those portions of the watershed that are currently meeting the target.

Roger Thompson was not comfortable supporting any outcome based on his current understanding of the situation.

Greg Mladenka explained that State Water Quality Standards include an anti-degradation clause. However, this only applies to point sources.

Discussion reached a standstill. **Wendy Lowe** explained options the group might want to explore, including 1) not providing advice regarding phosphorus, 2) discussing the issue further at a future meeting (after people have had time to reflect on what they had learned), and 3) searching for new solutions that would address divergent opinions.

The Watershed Advisory Group agreed to discuss this topic again at the next meeting after seeking additional information from Lynn Van Every and the EPA.

John Sigler offered final comments that he believes the City of Pocatello is committed to doing what it can to accomplish overall goals. However, they would like to see requirements under the new NPDES permit that can be accomplished economically for taxpayers.

Brad Higginson commented that he supports the suggested target for the lower reaches of the Portneuf Watershed; he does not support that target (0.07 mg/L) for the upper reaches.

Candon Tanaka observed that other water quality standards are being violated – which makes it complicated. Many reaches are not meeting water quality standards for dissolved oxygen or for temperature. Some things can be improved; other cannot. Phosphorus levels may exacerbate other problems.

All agreed that they would like additional information about actual loads for different segments of the watershed. **Elliott Traher** requested information about the actual loads or concentrations in segments that are believed to be achieving beneficial uses.

Next Meeting

The next meeting of the Portneuf Watershed Advisory Group will be at 7:00 p.m. on November 20, 2007 in the Snake River Conference Room at the Regional Offices located at 444 Hospital Way, Suite 300 in Pocatello, Idaho. The objectives for the October meeting were not accomplished, however the group agreed that discussion of total phosphorus targets is of paramount importance. As a result, the agenda for the November meeting will be used to continue that discussion.

Next Steps

The following next steps will be completed:

1) Wendy Lowe will prepare the draft Group Memory for review and approval at the next meeting.
2) Andy Ray will post the draft Group Memory on the project website. He will send a hard copy to Kevin Koester.
3) DEQ will attempt to arrange to have Lynn Van Every attend the next meeting with additional information to support the Watershed Advisory Group's ongoing consideration of possible targets for phosphorus.
4) Greg Mladenka will review water quality information collected by Union Pacific Railroad, U.S. Geologic Survey, and the U.S. Environmental Protection Agency and report back to the WAG at some future date.

Wendy Lowe's contact information: (208) 523-6668 and wendy@p2-solution.com