Portneuf Watershed Advisory Group December 18, 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, December 18, 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), Jon Herrick (alternate, City of Pocatello), Brad Higginson (Caribou-Targhee National Forest), M. Keene Hueftle (Southeast Idaho Environmental Network), Kevin Koester, Jim Mende (Idaho Fish and Game [IDF&G]), John Sigler (City of Pocatello), Hannah Sanger (Portneuf Greenway Foundation), Bud Smalley (alternate, Southeast Idaho Flyfishers), and Candon Tanaka (Shoshone-Bannock Tribes).

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

One visitor attended: Doug Anderson (Hoku Materials).

Members who were absent from the meeting included: Larry Ghan (alternate, Bannock County Commission), Wilder Hatch (Caribou Soil Conservation District), Roger Thompson (Southeast Idaho Flyfishers), and Elliot Traher (Natural Resources Conservation Service), 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. Trina Judkins (DEQ) was introduced. She will be taking notes at meetings to support development of the group memory for each meeting.

Review and Approval of November Group Memory

There were no corrections noted for the November Group Memory. The Group Memory is acceptable and the final Group Memory will be posted to the Portneuf Watershed Advisory Group's website.

Announcements

There was a discussion regarding last meeting's presentation on phosphorus targets. Keene Hueftle stated he did not see a relationship to the Portneuf WAG and felt that equal time should be given to John Carter of Western Watersheds Project to speak about grazing. WAG members expressed their position that Simplot's presentation was more in line with current WAG priorities.

Final Recommendation for Total Phosphorus Target

Wendy Green Lowe asked Keene Hueftle and Candon Tanaka if they had considered how they would like their minority opinion communicated regarding the vote on targets for Total Phosphorus (TP). Both stated they were satisfied with how the decision was portrayed in the November 2007 WAG Group Memory as documentation of their positions.

Impaired Reaches of the Portneuf River Tributaries

Greg Mladenka focused the discussion on causes of impairment. He distributed copies of the 2002 303(d)/305(b) list. The list reflects tributaries or assessment units (AU's) that DEQ considered impaired in 2002 and is available at the following URL:

www.deq.state.id.us/water/data_reports/surface_water/monitoring/2002.cfm

Most waters are listed due to sediment. The Assessment Unit (AU) numbering system was explained at the WAG's request. It was stated that all streams not meeting their beneficial uses are not on this list, but can be found elsewhere. Only those AUs for which Total Maximum Daily Load (TMDL)'s are needed were on the list Greg handed out. Greg said that in some cases, temperature is also a cause of impairment although it is not included on the list. Greg anticipates some changes to the list during this revision. For example, the category of "nutrient" impairment used previously, is likely to list nitrogen (N) and phosphorus (P) explicitly. The difference between a listing for numeric criteria (for example, water temperature > 22 C) and narrative criteria (for example, P) was described. Streams listed for numeric criteria can be de-listed based on measurements indicating that numeric criteria are being met, while streams listed for narrative criteria can be de-listed only when beneficial uses are documented as being met. Greg presented sediment, total nitrogen, total phosphorus, and *E. coli* summaries from a number of tributaries and showed that some of the tributaries are meeting proposed targets, while others still indicate potential impairment based on this data.

Targets for the Portneuf River Tributaries

Greg Mladenka stated that, unlike in the mainstem Portneuf River where TP will be the focus of management efforts, both Total Nitrogen (TN) and TP targets will be proposed for the tributaries. He circulated a handout that showed a number of tributaries have TN concentrations in excess of 1 mg/L. **Brad Higginson** asked whether the same types of Best Management Practices for N apply to P. **Amy Jenkins** said that some practices reduce both, but it depends on the specific practice.

Greg Mladenka further discussed TN, total suspended solids (TSS), and *E. coli* data for various tributaries. He said that when pollutant concentration data is examined, it often bolsters the findings from Beneficial Use Reconnaissance Program (BURP) studies. For example, a previously listed stream, Cherry Creek, is in pretty good shape when both BURP and water quality data are considered. As a result, Cherry Creek will likely be recommended for de-listing. Greg reminded the WAG that the goal of BURP assessments is to determine whether streams are meeting beneficial uses. BURP assessments examine the insect community (and sometimes the fish community) along with measures of stream habitat. The sites are scored based on biological community matrices and habitat measurements. Based on these scores streams are said to "pass" (support beneficial uses) or "fail" (not support beneficial uses). Stream segments that fail are listed and then a TMDL is developed to address the causes of impairment.

A final handout included the BURP assessment sites from the last three cycles. **Brad Higginson** asked where the BURP scoring information resides on the DEQ's website. **Greg Mladenka** said he can make it available.

A discussion ensued regarding whether entire streams or stream segments should be addressed in terms of assessments and TMDLs. There were points made in favor of each approach. Greg stated that DEQ is interested in the WAG's opinion of using more of a segment approach than listing entire streams when one segment is found to be impaired.

Brad Higginson pointed out that listed streams do not require any additional expenditure of resources, but it is a goal of the USFS to identify the cause of impairment for listed streams and change management strategies when warranted. Brad added that many assessment units are so large that it is difficult to figure out which streams or stream segments are impaired.

E. coli standards and sampling requirements were clarified. Other data for the mainstem Portneuf River may be available via Idaho State University.

Greg Mladenka briefly discussed Idaho's temperature standard and explained the process of gathering and analyzing data to determine if the standard (22 C) is being exceeded. Greg noted that a number of streams get listed for temperature. To address temperature exceedances in smaller waterbodies, strategies include increasing woody vegetation, which has the potential of shading streams. **Brad Higginson** asked if temperature is only sampled when a problem has been noted during BURP assessment. **Greg Mladenka** stated that temperature is monitored in both impaired and unimpaired streams.

Andy Ray said that the Technical Advisory Committee (TAC) had met to discuss N. The group concluded that N may be a stressor in some locations of the watershed and that it should be included in the TMDL. The TAC proposes a number of revisions. The first revision involves establishment of a target for N expressed as total N rather than total inorganic N. The second revision establishes a new numerical target of 1.0 mg/L TN. Finally, the revised TN target is proposed for all tributaries, but not the mainstem Portneuf River.

Andy Ray said the mainstem Portneuf River is strongly influenced by groundwater; groundwater $NO_2 + NO_3$ concentrations throughout the subbasin often exceed 2.0 mg/L. DEQ does not believe the TMDL process is the best mechanism to address N levels in groundwater. In contrast to mainstem reaches, tributaries to the Portneuf River generally are less influenced by N-enriched groundwater and therefore are more directly tied to land use activities. Many tributaries have TN concentrations well above those measured in the Portneuf River. Kevin Koester asked about the rationale for dealing with N on the tributaries when they are part of the larger river system. Andy Ray noted that N loading from tributaries is common and may result in a significant load to the Portneuf River. Efforts to reduce N loading from tributaries identified in the TMDL would be expected to have measurable and direct impacts to individual streams and the mainstem Portneuf River.

John Sigler said that the WAG is approaching a time when it will have to discuss waste load allocations for the targets discussed today. John said this would require a presentation of the assimilative capacity of the river and its tributaries and he didn't believe that the WAG could really discuss targets unless members fully understood the river's assimilative capacity. The WAG discussed whether it would be necessary and/or feasible to fully investigate assimilative capacity.

Documents Relevant to the December 18, 2007 Meeting

Three documents were provided to participants during the meeting.

- A figure depicting the TSS loads for all tributaries in the Portneuf Watershed
- A summary of findings from the U.S. Fish and Wildife Service/National Contaminant Biomonitoring Program
- A spreadsheet presenting data on constituents found in various tributaries (including Topaz, Pocatello, Tyhee, Marsh, and Pebble Creek)

All can be found on the project website located at:

http://www.deq.state.id.us/about/regions/portneuf_river_tribs_wag/index.cfm

Upcoming WAG Meetings

Wendy Green Lowe mentioned that the group was behind its original schedule. She will work with DEQ to define objectives for future meetings and propose a revised schedule for completing the TMDL. There was much discussion regarding how temperature exceedances due to natural conditions could be addressed, whether an assimilative capacity study was appropriate, and the need to discuss TN targets for the tributaries in more depth. The City of Pocatello was especially interested in having waste load allocations presented prior to furthering the TMDL revision process.

It was stated that the City and DEQ could meet to discuss the City's waste load allocation and then report back to the larger WAG in January.

It was decided that the next meeting should cover two major questions: 1. What targets should be included in the revised TMDL. 2. Is it acceptable to apply main stem targets to tributaries?

Next Meeting

The next meeting of the Portneuf Watershed Advisory Group will be at 7:00 p.m. on January 15, 2008 in the Snake River Conference Room at the Regional Offices located at 444 Hospital Way, Suite 300 in Pocatello, Idaho. The meeting will be designed to accomplish the following objectives:

- Discuss proposed targets for N developed by TAC
- Agree on a recommendation regarding N targets

Next Steps

The following next steps will be completed:

- Trina Judkins and 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. Andy Ray will post handouts from the December meeting on the Internet.

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