#### Portneuf Watershed Advisory Group November 20, 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, November 20, 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), Candon Tanaka (Shoshone-Bannock Tribes), and Roger Thompson (Southeast Idaho Flyfishers).

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

Three visitors attended: Doug Anderson (Hoku Materials), Sherrill Nelligan Doran (CH2MHill), Henry Hamanishi (J.R. Simplot).

Members who were absent from the meeting included: Larry Ghan (alternate, Bannock County Commission), Wilder Hatch (Caribou Soil Conservation District), Hannah Sanger (Portneuf Greenway Foundation), Bud Smalley (alternate, Southeast Idaho Flyfishers), 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. Kasey Guthrie (DEQ) was introduced. She will be taking notes at meetings to support development of the group memory for each meeting.

#### **Review and Approval of October Group Memory**

Corrections were noted to the October 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.

#### Announcements

Keene Hueftle reported that he had made an inquiry of a friend named John Carter regarding phosphorus targets. He received a response and read the response aloud to the WAG. The response read:

Phosphate as opposed to total phosphorous is a complex and rapidly cycling compound. There has been literally tons of research on phosphorous and phosphates in lakes and streams and it is one of the bad actors (nutrients) leading to eutrophication (gross production of algae, aquatic veg) which, in turn, leads to oxygen depletion at night (respiration) or during decomposition (under ice in winter).

Utah uses the 0.05mg/I for phosphorous for ag, domestic water, and aquatic life, so your 0.05 vote is consistent with a neighboring state. The Utah DEQ website is run by a friend of mine and is quite detailed. You might find some interesting info there. The link is <u>http://www.waterguality.utah.gov/documents/DOC\_RULE.htm</u>.

Also, just googling the terms phosphorous and aquatic life or drinking water might get you somewhere."

### Total Phosphorus Targets for the Mainstem Portneuf

Andy Ray recapped the discussion from October's meeting regarding phosphorus targets for the mainstem Portneuf. Some members felt that they did not have enough information to vote on a potential recommendation for phosphorus targets. Therefore, this meeting was designed to provide more information about phosphorus. Several members of the WAG will present their thoughts to the WAG. It is hoped that by the end of the meeting all WAG members will feel better informed and able to participate in a decision regarding the WAG's recommendation for phosphorus targets.

Wendy Lowe confirmed that the WAG members would like to take action on this recommendation at this meeting and move on to other topics at the next meeting. Andy asked that questions be addressed during presentations.

#### *Review of the Technical Basis for the Total Phosphorus Levels in the Portneuf River*

Sherrill Doran (CH2M Hill) presented information about J.R. Simplot's perspectives on Total Phosphorus (TP) levels in the Portneuf River. She presented data from various locations along the Snake River in Idaho and made the case for using a 0.070 mg/L target in American Falls Reservoir. She illustrated work that has been accomplished in other DEQ regions to address excessive plant or algal growth due to nutrients, focusing solely on phosphorus.

A copy of the presentation is available at:

<u>http://www.deq.idaho.gov/about/regions/portneuf\_river\_tribs\_wag/phosphorus\_levels\_presentation\_112007</u> .pdf

Keene Hueftle asked whether standards for lakes apply to reservoirs and if protecting salmonids would protect entire aquatic ecosystems. Sherrill Doran explained that EPA does not distinguish between lakes and reservoirs. She went on to explain that standards are based on protecting both fish and aquatic communities. There was also a discussion regarding protection of both warm and cold water fisheries in systems such as Brownley Reservoir. Sherrill pointed out that TMDLs generally focus on the most sensitive species/communities in the system(s) they address.

#### **Proposed Total Phosphorus Targets**

**Candon Tanaka** of the Bannock-Shoshone Tribes' Water Quality Department gave a presentation on their characterization of nutrients and dissolved oxygen concentrations at several sites located in the lower Portneuf River and other Fort Hall Bottoms streams. He stated that when phosphorus concentrations are much lower than at Siphon Road, dissolved oxygen concentrations more often attain a minimum of 6 mg/L, but they have observed some dips in dissolved oxygen below 6 mg/L even when TP levels are <0.05 mg/L. Keene Hueftle asked in fish populations at Fort Hall are stocked or self-sustaining. Candon responded that these streams are very productive, and that although limited stocking out of the Jackson hatchery (cutthroat trout) sometimes occurs, the populations are self-sustaining.

# *City of Pocatello's Proposal for Total Phosphorus Load Allocation for the Mainstem of the Portneuf*

John Sigler explained that the City of Pocatello was not prepared to present potential load allocations in regard to their waste water treatment plant. He reiterated the City has essentially eight million dollars

on the table they think would contribute to water quality improvement. This includes the 5 million dollars funded by the bond issue to purchase water rights in the Portneuf for potential future use as a municipal water supply. There was discussion about whether or not that will actually do anything in regard to phosphorus, but it will re- water about 20 miles of river that is significantly de-watered during the irrigation season. In addition, another three million dollars could be used to modify the Waste Water Treatment Plant operations in order to bring phosphorus effluent concentrations down to a consistent level (approximately 1 mg/L).

Keene Hueftle questioned the source of funding for these projects. John Sigler explained that it is presently all funded by City rate payers. He went on to explain that the cost estimates developed by the City's consultants indicate if "we tweak the plant, that's 3 million dollars. If we have to achieve a target of 0.07 mg/L, we are looking at a cost of 30 million dollars. If we have to achieve 0.05 mg/L, the cost would go up to 40 or 45 million dollars." He went on to observe that even if the City removed all phosphorus, the levels in the Portneuf River would not change that much because groundwater is discharging 1500 pounds a day. As a result, the City doesn't see any rationale in spending somewhere between 30-45 million dollars unless there would be true benefit in the river. The City is willing to discuss that option but he predicted that there would be a tremendous amount of resistance from City Council and rate payers - who would not support spending 30 million dollars with no benefit to the biology of the river."

#### **Total Phosphorus Concentrations in Surface Waters**

Andy Ray provided a presentation on Total Phosphorus levels along the Portneuf River. This presentation has been posted on the Internet at:

http://www.deq.idaho.gov/about/regions/portneuf\_river\_tribs\_wag/tp\_summary\_presentation\_112007.pdf

#### Summary of Recommendations

Wendy Lowe reminded the WAG that its Charter called for attempts at consensus for recommendations. Consensus is defined as everyone understands and will support the recommendation.

Wendy Lowe reminded the WAG that the Technical Subcommittee recommended that the recommendation the target for TP be reduced to 0.07 mg/L during low flow conditions and 0.125 mg/L during high flow conditions.

An attempt was made to reach consensus in support of the recommendation of the Technical Subcommittee. Consensus was not achieved.

In accordance with the WAG's Charter, a vote was called. A majority of the members of the Portneuf Watershed Advisory Group support a recommendation that DEQ decrease the target for TP to 0.07 mg/L during low flow conditions and 0.125 mg/L during high flow conditions. The following individuals voted in favor of the recommendation: Kim Gower (JR Simplot Company), Brad Higginson (Caribou-Targhee National Forest), Kevin Koester, Jim Mende (Idaho Fish and Game [IDF&G]), John Sigler (City of Pocatello), and Roger Thompson (Southeast Idaho Flyfishers). M. Keene Hueftle (Southeast Idaho Environmental Network) and Candon Tanaka (Shoshone-Bannock Tribes) voted against the recommendation. Keene Hueftle asked that the meeting record reflect his concern that the recommendation is not protective enough; he would prefer a target of 0.05 mg/L for low flow.

The recommendation will not be transmitted to the Idaho Department of Environmental Quality until the next meeting of the Watershed Advisory Group. Mr. Hueftle and Mr. Tanaka have until that time to draft statements for incorporation into the recommendation, in accordance with the WAG's Charter provision that reads: "If a vote is taken, the minority perspective will be respectfully communicated in addition to the majority decision."

#### Next Meeting

The next meeting of the Portneuf Watershed Advisory Group will be at 7:00 p.m. on December 18, 2007 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:

- · Review impaired reaches of the Portneuf River tributaries
- Review causes of impairment of the Portneuf River tributaries

#### Next Steps

The following next steps will be completed:

- 1) Kasey Guthrie 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) Greg Mladenka will post information about water quality collected by Union Pacific Railroad, U.S. Geologic Survey, and the U.S. Environmental Protection Agency on the project website.

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