

## Portneuf Watershed Advisory Group January 15, 2008

### *Group Memory*

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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, January 15, 2008 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), Jim Mende (Idaho Fish and Game [IDF&G]), Hannah Sanger (Portneuf Greenway Foundation), 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: 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), M. Keene Hueftle (Southeast Idaho Environmental Network), Kevin Koester, John Sigler (City of Pocatello), 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 December Group Memory*

A number of corrections were agreed to for the December Group Memory. The Group Memory (as revised) was approved and will be posted to the Portneuf Watershed Advisory Group’s website.

### *Target for Nitrogen*

WAG members had received a document prior to the meeting outlining DEQ’s proposed target for Nitrogen (N). **Jim Mende** requested an explanation of the rationale behind the recommendation.

**Andy Ray** explained that DEQ is proposing a target for Total Nitrogen (TN) rather than a target for total inorganic nitrogen (which was used in the 2001 Total Maximum Daily Load [TMDL]) because it is widely recognized that all forms of nitrogen entering aquatic systems will eventually become biologically available.

In addition, Andy explained how the proposed target of 1.0 mg/L TN was developed using the widely accepted Redfield ratio (1958); a 16:1 ratio of nitrogen to phosphorus (N:P) that results in balanced growth of aquatic plants. Using the WAG’s recommendation of a 0.07 mg/L TP target yields a TN value of 1.1 mg/L ( $16 \times 0.07 = 1.1$ ). Allowing for a 10% margin of safety, DEQ proposes a TN target of 1.0 mg/L.

The rationale behind DEQ’s proposal that no target be established for TN on the mainstem was questioned. It was explained that there are several areas along the mainstem Portneuf River that are known to gain flow from

groundwater. In certain areas (including the lower Portneuf River downstream of Batiste Road) nitrogen in the inflowing groundwater exceeds the proposed target of 1 mg/L. In other words, the concentrations in the mainstem do not necessarily reflect sources that can be addressed through the TMDL process. As a result, DEQ is proposing that the TMDL not include a TN target for the mainstem Portneuf River. By contrast, TN impacts to tributary streams occur primarily via surface runoff.

There was much discussion regarding whether it was appropriate or equitable to place a target for TN on tributaries but not on the mainstem Portneuf. Beneficial uses are constant across tributaries and mainstem reaches. The point was also made that TMDL targets are applied to (National Pollutant Discharge Elimination Systems [NPDES]) permits (such as permits for the Pocatello, Inkom, and Lava Hot Springs waste water treatment plants). One probable consequence of including a TN target in the TMDL could be the inclusion of TN in the future NPDES permits. At this time, N targets and requirements for treatment by waste water treatment plants are rare in this region. And, the City of Pocatello has vocalized their concerns about N targets and concluded addressing N in the treatment plant would be extremely expensive and since the amount of N contributed by the City is negligible (compared to that contributed by groundwater), the resulting change in the mainstem would be of little benefit. Managers and scientists with the EPA and DEQ believe that a 10 to 20-year strategy which focuses on watershed-wide phosphorus reductions may produce considerable improvements in water quality in the Portneuf River. However, if this strategy is deemed ineffective, N targets could be considered in future TMDLs.

The WAG discussed the fact that groundwater aquifers within this region rank among the state's 25 Nitrate Priority Areas (see [http://www.deq.idaho.gov/water/prog\\_issues/ground\\_water/nitrate.cfm](http://www.deq.idaho.gov/water/prog_issues/ground_water/nitrate.cfm) for a discussion of nitrate in groundwater and to learn more about Idaho's Nitrate Priority Areas) and also that the DEQ is unable to regulate groundwater N through the TMDL process. However, in recognition of concerns about N in groundwater, **Elliot Traher** described how the implementation of some agricultural BMPs may reduce N inputs to both surface and groundwater. The DEQ's groundwater program is developing region-specific tools to define and quantify nitrate impacts, facilitate technology transfer to local decision-makers (mapping overlays and ground water modeling tools and capability), and recommend the development and implementation of local ordinances to improve ground water protection efforts. A description of DEQ's role in groundwater protection is described on the DEQ website and can be viewed at:

[http://www.deq.idaho.gov/water/prog\\_issues/ground\\_water/overview.cfm](http://www.deq.idaho.gov/water/prog_issues/ground_water/overview.cfm)

### ***Final Recommendation for Total Nitrogen Target***

An attempt was made to reach consensus in support of the recommendation for a target for TN for the tributaries. 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 supported a recommendation of 1.0 mg/L TN in the tributaries and no TN target for the mainstem Portneuf River. The following individuals voted in favor of the recommendation: Kim Gower (JR Simplot Company), Jon Herrick (alternate, City of Pocatello), Brad Higginson (Caribou-Targhee National Forest), Jim Mende (Idaho Fish and Game [IDF&G]), Hannah Sanger (Portneuf Greenway Foundation), Roger Thompson (Southeast Idaho Flyfishers), and Elliot Traher (Natural Resources Conservation Service). **Candon Tanaka** (Shoshone-Bannock Tribes) voted against the recommendation; he stated that he believed that the TN target should be applied across the watershed and include the mainstem Portneuf River. Candon added that he felt that natural background TN concentrations in spring-fed reaches of the lower Portneuf River would be below 1.0 mg/L TN.

### ***Application of Targets Established for the Mainstem to the Tributaries***

The group discussed the merits of applying targets that had already been recommended by the WAG for the mainstem Portneuf River (for Total Suspended Solids [TSS], Total Phosphorus [TP], and *E. coli*) to the tributaries.

**Brad Higginson** reiterated a concern he had expressed in the past about creating the potential for allowing additional pollution in tributaries that are already well below the targets. **Greg Mladenka** clarified that measured

concentrations at any site would continue to serve as de-facto targets where measured values are already less than approved target concentrations. In other words, new point sources would not be permitted if they would add pollutants to the system even if current concentrations are below the targets.

The WAG agreed to recommend the targets for the tributaries should be the same as those that had already been recommended for the mainstem Portneuf.

### ***Targets for the Portneuf River Mainstem and Tributaries***

WAG members agreed that the following chart summarizes the targets that have been recommended to DEQ to this point in time.

<b>Constituent</b>	<b>Mainstem Target</b>	<b>Tributary Target</b>
Total Suspended Solids (TSS)	35 mg/L during low flow conditions (see footnote 1 below) 80 mg/L during high flow conditions (footnote 2)	35 mg/L during low flow conditions (footnote 5) 80 mg/L during high flow conditions (footnote 2)
Total Phosphorus (TP)	0.07 mg/L during low flow conditions (footnote 3) 0.125 mg/L during high flow conditions (footnote 3)	0.07 mg/L during low flow conditions (footnote 5) 0.125 mg/L during high flow conditions (footnote 5)
<i>E coli</i>	126 cfu/100 mL (footnote 2)	126 cfu/100 mL (footnote 5)
Oil and Grease	5 mg/L (footnote 2)	5 mg/L (footnote 5)
Total Nitrogen (TN)	No target (footnote 4)	1.0 mg/L (footnote 5)
1 - Approved by consensus at the 9/18/07 meeting. 2 –This target represents no change from the 2001 TMDL and the WAG approved making no changes at the 9/18/07 meeting. 3 – Approved via majority vote on 11/20/07. Kim Gower, Brad Higginson, Kevin Koester, Jim Mende, John Sigler, & Roger Thompson voted in favor; Keene Hueftle and Candon Tanaka opposed. 4 – Approved via majority vote on 1/15/08. Kim Gower, Jon Herrick, Brad Higginson, Jim Mende, Hannah Sanger, Roger Thompson, & Elliot Traher voted in favor; Candon Tanaka opposed. 5 – Approved by consensus at the 1/15/08 meeting.		

The WAG agreed that the Revised TMDL should not include targets for pollutants that are not on the 303(d) list, but understood that DEQ intends to discuss other pollutants or stressors (e.g. dissolved oxygen and temperature) in the narrative of the TMDL. This discussion should serve to describe locations in the subbasin where exceedances in water quality criteria have been documented.

### ***Upcoming WAG Meetings***

**Wendy Green Lowe** reminded the group that the group was behind the schedule that had been approved for the Working Charter. She had met earlier that day with Andy and Greg and proposed a new schedule for completing the WAG’s work, as follows:

February 19, 2008 Meeting Objectives:

- Discuss the target for oil and grease
- Discuss TSS waste load allocations (WLA) for point sources and load allocations (LA) for non-point sources

March 18, 2008 Meeting Objective:

- Discuss WLA/LA for TP

April 15, 2008 Meeting Objectives:

- Discuss WLA/LA for TN, E-coli, and Oil and Grease

May 2008 – No WAG meeting scheduled

May 27, 2008 – WAG to receive Preliminary Draft TMDL from DEQ

June 17, 2008 Meeting Objectives:

- Explore the potential for a WAG recommendation on the Preliminary Draft TMDL

June 24, 2008 – Deadline for comments by individual WAG members on the Preliminary Draft TMDL

July 8, 2008 – WAG to receive Draft TMDL (incorporating comments from the WAG members)

July 15, 2008 Meeting Objectives:

- Discuss and approve the Draft TMDL for release to the public for a public comment period

It was noted that DEQ may not be able to distribute the Draft TMDL on July 8 if comments from the WAG are extensive. The July 15 meeting will be delayed if that milestone is missed.

In addition, there may be a need for a WAG meeting after the public comment period.

It was agreed that Wendy Lowe should revise the schedule in the WAG's Working Charter to reflect these schedule changes.

## ***Announcements***

**Sue Skinner** announced that the Bannock County Comprehensive Plan is out for review. WAG members might want to review and comment on that document.

**Sue Skinner** also announced that the draft 2008 303(d)/305(b) Integrated Report for Idaho has been posted and is open for public comment. See the URL below for a link to the draft report.

[http://www.deq.state.id.us/water/data\\_reports/surface\\_water/monitoring/integrated\\_report.cfm](http://www.deq.state.id.us/water/data_reports/surface_water/monitoring/integrated_report.cfm)

A question was raised about the timing of submission of agency/industry implementation plans. Some agencies may want to follow the same schedule; others may not.

## ***Documents Relevant to the January 15, 2008 Meeting***

One document was provided to participants ahead of the meeting.

- Nitrogen Proposed Target, January 6, 2008 revision

It can be found on the project website located at:

[http://www.deq.state.id.us/about/regions/portneuf\\_river\\_tribs\\_wag/index.cfm](http://www.deq.state.id.us/about/regions/portneuf_river_tribs_wag/index.cfm)

### ***Next Meeting***

The next meeting of the Portneuf Watershed Advisory Group will be at 7:00 p.m. on February 19, 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 the target for oil and grease
- Discuss waste load allocations (WLA) and load allocations (LA) for TSS

### ***Next Steps***

The following next steps will be completed:

1. Andy Ray, Greg Mladenka, 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](mailto:wendy@p2-solution.com)

### ***References:***

Redfield, A.C.1958. The biological control of chemical factors in the environment. American Scientist 46:205-21.