

Portneuf River WAG Meeting 16 January 2007 Minutes

Attendees: Candon Tanaka, John Sigler, Kim Gower, Lin Whitworth, Amy Jenkins, Brad Higginson, Andy Ray, Greg Mladenka, Keene Hueftle, Sue Skinner, Elliot Traher, Kevin Koester, Chris Banks, and Pauline Bassett.

The meeting was kicked off at 7:10 PM by the self introduction of participants. As requested during a previous meeting Greg prepared a list of abbreviations, acronyms, and symbols that was provided to each participant.

The minutes from the 19 December 2006 meeting were reviewed and John and Greg both identified a number of omissions and offered some grammatical suggestions that were recommended as modifications to the minutes. In addition, John requested that references be added where mentioned in the minutes. He recommended adding these as a foot note or appending them to the end of the minutes. In addition, John asked that action items and intended completion dates for each item are included in the minutes. Greg and John recommended that the suggested modifications be added to the 19 December 2006 minutes and then circulated for review; final approval of minutes will be determined at the next meeting.

Greg stated that he was still trying to identify someone to represent the livestock interest group. Kevin said that could represent the agriculture and livestock interest groups. He also questioned whether livestock should be split from agriculture. Andy said that he wasn't certain splitting livestock from agriculture was necessary but that both livestock and agriculture were recommended in House Bill 145 as part of WAG membership. Greg said that he would do an inquiry into this issue. Amy recommended Kevin Koester as the agriculture representative to the Portneuf WAG. John seconded the recommendation.

Greg updated the group on the DEQ's progress in retaining a facilitator. Greg said that he had contacted Mark Dietrich (who recently took a position in the state office) and Doug Tanner, the acting regional administrator in the Pocatello Regional Office, about funding for retaining a facilitator. Both Mark and Doug said they were looking into it. Greg said that he wanted to postpone discussion of the administrative elements of the WAG (e.g. mission statement, goals and objectives, and voting procedures) until a facilitator is available which he hoped would be by next meeting. Greg updated the group on the DEQ's progress in retaining a facilitator. He will determine whether a facilitator can be funded by the next meeting.

Andy noticed that some of the attendees were new and said that they wouldn't have received materials sent via email to the other WAG participants. Andy promised to distribute the materials from the American Falls WAG to everyone in attendance. Andy indicated he would expand the WAG email list to incorporate new attendees and forward them WAG materials.

Sue Skinner with the U.S. EPA noted that she will not be a voting member of the WAG. Rather EPA will be attending the meetings as a resource to the WAG for information on ongoing issues within the Portneuf Watershed /Ecosystems and issues under EPA jurisdictional authority.

In response to Sue's statement, Elliot asked who represented the voting group. Greg indicated that the group had not yet defined voting membership, but would have the chance to define this along with other administrative elements of the WAG in the next meeting. Sue said that the experience in American Falls was different than what Portneuf WAG attendees might be envisioning. Specifically, she said not every decision was put to a vote. Instead the American Falls WAG looked for a consensus on issues.

Elliot asked if there was a manual that described the structure of a WAG. Greg said there was no exact prescription for a WAG, but House Bill 145 more succinctly defined the role of WAGs in that it provided guidance on interest groups that should be represented and stated that the DEQ Director will give final approval for WAG membership.

Greg also indicated that he intended to follow-up on the invitations sent out in December to those individuals invited to participate in the Portneuf WAG. Kim asked if all interest groups were now represented. Greg was still waiting to hear from an individual to represent water-based recreation interests and asked the group if they had any ideas for identifying an individual that represented the forest products interest group. Greg read through the recommend list of interest groups to and the group discussed each. Andy mentioned that non-governmental point source dischargers were not represented. John asked whether Idaho State University had been contacted because they now represented a nonmunicipal NPDES permit holder. John recommended Darrel Buffalo, Jeff Madsen, or someone else from the physical plant. Sue also recommended ITD as a non-municipal NPDES permit holder. Sue also recommended that we try not to narrowly define water-based recreation and recommended contacting individuals from the Portneuf Greenway, Audubon, or other active recreational groups. Sue asked Candon, the tribal representative, if tribal water commissioners were interested in attending the WAG.

Keene asked if Greg had any ideas for mining. Kim stated that as a representative for Simplot she could represent the mining interest group. Greg indicated that it may also be possible to get someone to represent peat-mining since this is a form of mining still practiced in Marsh Creek. Sue said that ITD could also represent gravel mining interests. Keene indicated that he would like to see a gravel mining representative participate in the WAG. Ash Grove was mentioned as a mining operation in the watershed and Greg stated that he would contact someone from Ash Grove. Lin stated that Ash Grove had no direct outlet to the river, but was still operating. Sue said that someone from the DEQ air program would have a contact at Ash Grove. Discussion regarding what level of representation was truly necessary for WAG structure ensued with Greg agreeing to notify the cities of McCammon, Inkom, and Lava Hot Springs of the WAG, but otherwise finalizing WAG makeup prior to the next meeting.

Kim asked about the WAG process and asked if the group had a plan to progress toward establishing targets for the river. She also asked whether the group should focus on inviting groups involved in establishing or affected by future targets (and the TMDL) as WAG participants. Sue briefly explained how WAGs function and the general WAG process. WAGs provide guidance on specific watersheds. WAGs provide local public input and guidance to DEQ during the development of the TMDL. Sue stated that WAGs generally do not write the TMDL document, but rather the WAG provides recommendations and reviews information presented by the DEQ. WAG input is given great weight in TMDL development and implementation. The

WAG is also involved in writing and implementing the implementation plan that follows the TMDL. Ultimately, the WAG provides a forum for concerned and involved stakeholders to participate in the TMDL process through from start to finish. WAG membership should represent interests groups affected by the management of that watershed. The WAG also includes representatives of local government and the land management or regulatory agencies interested in the management of water quality in the watershed. The WAG also provides the leadership to implement the TMDL and has the potential to shape the final outcome of a TMDL in ways that go beyond the public comment process. Citizens not involved in the WAG can get involved in the TMDL development process; however, this involvement tends to be limited to formal public comment periods and public hearings.

Greg stated that he would develop a timeline summarizing topics for future meetings. Greg said that he would provide the timeline to participants at the next meeting.

Kevin stated that he could recruit additional representatives from agriculture but that the WAG would have to dedicate to considerable amount of time to training. Kevin said that an alternative to this would be to move forward with the existing group and try to work on establishing loads and targets. Keene hoped that the group would continue to seek additional participants because he believed that the more diverse the WAG was the better it would represent the needs of the watershed. John agreed with Keene's comments on diversity but felt that the existing group currently had strong representation. Still, he felt that it would be beneficial to have better representation from small municipalities in the watershed. Greg agreed to contact the following municipalities (Lava, Inkom, and McCammon) and ask if they would be willing to send a representative to future meetings. Greg stated that while Lava and Inkom discharge to the river, McCammon does not. John felt an appropriate goal might be to get 1 or 2 representatives from small municipalities for future meetings.

Elliot said that with Kevin's participation in the WAG, the group likely had the most knowledgeable and well trained agriculture representative available. He encouraged the group not to overlook that.

Candon asked whether DEQ had published a public notice informing the public that Portneuf WAG was being formed and meeting to develop water quality targets for the Portneuf River. Greg said that the DEQ would put out a public notice before next meeting. Elliot asked whether the Greater Portneuf Water Resources Partnership (GPWRP) could also act as the WAG and assist with the TMDL revision.

John said that while GPWRP was a great resource, he believed that they were a volunteer group and had no state recognized function. Greg said that GPWRP would not likely want to serve as a WAG; he said that the GPWRP had its own mission that didn't include TMDL duties. Greg said that by law the WAG must be formed and certain interest groups had to be represented. Andy said that they would circulate information on HB 145 before next meeting.

Andy provided a brief presentation progress he had made since the last meeting. He started with a response to John's question from last meeting regarding the effects of atmospheric deposition of N and P on water quality. Andy stated that he had looked at three primary sources for

information on atmospheric deposition and encouraged interested attendees to personally read the sources; Andy stated that he was not an atmospheric scientist but tried to distill information from the sources (ESA 2004; <http://bqs.usgs.gov/acidrain/Program.pdf>; Burns 2004). He also noted that the US Geological Survey is the lead agency in the National Atmospheric Deposition Program (NADP), a program that supports a 220 site network of precipitation monitoring sites which measure sulfate, nitrate, ammonium, phosphate, pH, and a suite of other elements and physical measures at some frequency. Two sites closest to the Portneuf River Watershed are located at Logan, UT and the Idaho National Lab. Andy stated that there are two categories of atmospheric deposition: wet deposition (deposition is associated with precipitation events) or dry deposition (often associated with deposition of soil or other particles). Inorganic N deposition for the Intermountain West tends to be lower than in eastern portions of the country (see USGS NADP maps at <http://bqs.usgs.gov/acidrain/Program.pdf>). Phosphorus deposition is measurable “but tends to occur at concentrations less than a few percent of those of nitrogen” (ESA 2004).

Andy showed summaries of regressions using optical turbidity as the predictor variable and total suspended solids (TSS) and total phosphorus (TP) as response variables. The data used to generate these relationships included all 2004 to 2006 from mainstem Portneuf River (except Siphon Road) and Marsh Creek monitoring sites. Andy explained that Siphon Road was excluded because the river at that location is highly influenced by groundwater rich in dissolved nutrients and the river is impounded at this location for several months of each year; combined these conditions create a hydraulically and chemically unique reach. He showed that there was a strong relationship ($R^2=0.95$; $N=217$) between turbidity and total suspended solids and turbidity and total phosphorus ($R^2=0.90$; $N=192$). Andy said that they were pleased with these relationships and when turbidity records were available they would be used to predict TSS and TP. When these readings are not available (25 to 33% of year) other measures such as discharge could be used to predict TSS and/or TP (Ferguson 1986, Dolan et al. 1981). Discharge is often used to develop rating curves and daily discharge data is available from multiple USGS gaging stations (Topaz, Carson St, Tyhee and Marsh Cr at McCammon) located in the Portneuf River watershed. Andy showed an example of a rating curve for Edson Fichter. While the relationship was significant, he said they were looking at published approaches designed to provide a better fit between discharge and TSS. Andy finished his presentation with a graph that predicted TSS loads using turbidity and discharge (when turbidity wasn't available) to provide a complete summary of 2004 TSS load at the Edson Fichter monitoring site.

Keene asked “what do you plan to do with this information”. Andy said that the goal of the presentation was to demonstrate the approach that is being used to develop sediment loads. Andy also stated that there is a very comprehensive dataset for the Portneuf River. He contrasted this with other watersheds that have very limited water quality data.

Kim asked about data quality and specifically about the Batiste Road monitoring location. Kim said that she had heard that the boom at this site “surfs” during high flows and was wondering if we were concerned with data reliability. She pointed out that turbidity was used to predict TSS and TP. Andy stated that the relationships shown were between calibrated sondes and water samples and that the sonde data was an average of multiple readings taken across the stream profile and not from the resident sonde at each site. In reference to the Batiste site, Andy stated that there were at least three things that were being done to address the “surfing” issue. First,

there was an additional monitoring station just upstream (Hwy 30) and that this station was less than one river mile from Batiste Road; Hwy 30 provides sufficient data redundancy to address periods when Batiste might be “surfing”. He also stated that raw data was subjected to a mathematical filter developed to exclude anomalous turbidity values from incorporation into the active data set. Filter specifics will be discussed in the technical advisory committee. Finally, the boom at this location is being redesigned to improve flow through the boom and fitted with ballasts to prevent the boom from “surfing” during high flows.

Keene asked about water quality in Marsh Cr. Andy and Greg said that there was a monitoring station in Marsh Cr and that they would be developing loads for Marsh Cr along with mainstem Portneuf River sites. Lin asked what was causing problems in Marsh Cr, because he wasn't convinced that it was improper land management and he was aware of lots of BMPs that had been implemented.

Kevin was interested in finding out if the DEQ had looked at the load estimates from the original TMDL. He recommended that we look at that document in greater detail and be prepared to discuss it with the group. He also recommended that the load estimates calculated using the approaches described earlier should be compared with those load estimates included in the 2001 TMDL. He stated that that IASCD had done a considerable amount of sampling and asked why so much additional sampling was being carried out.

Greg explained that part of the reason the monitoring network was established was because of an agreement between the City of Pocatello and IDEQ. The City contended that the original TMDL was being written with limited water quality information, but agreed to accept it if additional data was collected before the TMDL was revised. DEQ agreed to collect additional data and revisit the TMDL in 5 years and. Additional data would give both parties more confidence in the estimated loads.

John said the City had filed a law suit against the DEQ because the City believed that the “some of the data” used by the DEQ was two decades old and the temporal resolution was relatively poor. Eventually, the City decided to allow DEQ to proceed with load estimates with the understanding that the TMDL would be revisited and load calculations refined in five years and after additional information was collected.

Elliot asked how the 2004 TSS load estimate for Edson Fichter compared with the 2001 TMDL. Andy said that he had not compared this estimate with that in the TMDL but would look at the 2001 TMDL and get back to the group on that issue.

Kevin commented that as CRP lands go back into cultivation or are sold off sediment loads will likely increase and have negative impacts on the river. Andy said that one of the benefits of this long-term data set will be to provide natural resource managers will be the ability to estimate watershed responses to land use decisions like the conversion of CRP lands.

Andy asked if anyone else wanted to be added to the technical subcommittee. Kim and Elliot asked to be added to the technical subcommittee.

The next meeting was set for 20 February 2007.

Action Items:

Contact Lava, Inkom, and McCammon
Contact Greenway Foundation
 about water-based recreation
Develop TMDL Revision Timeline
Public Notice
Circulate information on HB 145 to
 WAG participants

Proposed date of completion:

Greg – by next meeting
Andy – by next meeting

Greg – by next meeting
Greg/Andy – by next meeting
Andy – by next meeting

References:

Burns, D. A. 2004. The effects of atmospheric nitrogen deposition in the Rocky Mountains of Colorado and southern Wyoming, USA—a critical review. *Environmental Pollution* 127:257-269.

Cohn, T. A. et al. 1989. Estimating constituent loads. *Water Resources Research* 25:937-942.
Dolan, D. M., A. K, Yui, and R. D. Geist. 1981. Evaluation of river load estimation methods for total phosphorus. *Journal of Great Lakes Research* 7:207-214.

Ecological Society of America. 2004. Impacts of atmospheric pollution on aquatic ecosystems. *Issues in Ecology* No. 12, Summer 2004. 26 pp.

Ferguson, R. I. 1986. River loads underestimated by rating curves. *Water Resources Research* 22:74-76.

<http://bqs.usgus.gov/acidrain/Program.pdf>