

Portneuf River WAG Meeting 19 December 2006 Minutes

Attendees: Candon Tanaka, Jason Pappani, John Sigler, Kim Gower, Lin Whitworth, Larry Ghan, Amy Jenkins, Brad Higginson, Louis Wasniewski, Andy Ray, Greg Mladenka, Keene Hueftle, Mark Dietrich, and Jim Mende.

Premeeting conversations and food for the dessert potluck were served at 6:00 PM. At 6:30 PM, *The Changing River*, a historic film about the Portneuf River and produced by Dr. G. Wayne Minshall was shown. Keene led a brief discussion following the film and asked whether attendees believed the river had changed further since the film was originally released. Several attendees shared personal experiences and observations relating to changes in the basin.

The formal meeting was kicked off at 7:00 PM by the self introduction of participants. Greg recommended that the minutes from the 21 November 2006 be approved. John seconded with the stipulation that if upon a more thorough review additional comments could be made to amend the minutes from the 21 November 2006 meeting and the attendees agreed.

Greg stated that in the next or a subsequent meeting that he would distribute information developed during the American Falls WAG process to the Portneuf River WAG participants. Specifically, Greg recommended the goals/guidelines and mission statement from the American Falls WAG as a model when developing these policy statements through the Portneuf River WAG process. Greg promised to distribute these materials via email prior to the next meeting. 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. 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.

Larry suggested Greg contact Trout Unlimited to look for someone to represent water-based recreation. Larry also asked whether the agricultural community would be represented. Amy indicated others representing the Idaho Association of Soil Conservation Districts and NRCS had been contacted and would be attending future meetings.

Amy asked whether Kathy Gneiting, who acted as the facilitator in American Falls, had agreed to facilitate. Mark said that she seemed interested, but he was waiting get a work plan and budget from Kathy and that he was looking into sources of funding to cover Kathy's expenses.

Larry asked whether small municipalities in Bannock County would be represented in the WAG process. Greg and Mark stated that they want small municipalities to participate but indicated that historically it has been hard to get individuals to attend consistently. They agreed to try and contact individuals from all of the municipalities in the watershed. Keene recommended that farmers and cattle ranchers should also be included. Keene said that representation by the railroad should also be considered and Jim asked whether the agricultural water users and LDS Church near Chesterfield had been invited to attend. In response to all comments, Mark said that he believed that a more diverse group of participants would help to strengthen the revision and he welcomed the participation of all stakeholders in the basin. He followed by stating that this

would also help to strengthen the implementation plan that will follow the revision. Jim offered to send invitations to individuals and organizations in the upper part of the watershed.

Lin and Jim both said that some land owners and/or organizations might be leery of the IDEQ and the TMDL process. They said that invitations from other WAG participants might be a better way to engage some groups not represented in the basin. Lin added that we are all part of the problem and said that even those participating in the WAG and in monitoring/implementation activities should be more accountable. Jim asked whether the meeting location should change to other venues throughout the watershed to encourage attendance by rural stakeholders. Mark welcomed the ideas, but said that the reality is participation will generally be limited to agency representatives, Bannock County, the City of Pocatello (because of their stormwater and NPDES permits), and Simplot; historically these organizations and agencies represented the lion's share of regular attendees. However, given sufficient participation by out of town members, he stated that meetings could occasionally be held at other locations, especially if a meeting focused on outreach. John clarified that the Stormwater Plan was not restricted to the City of Pocatello, but also included the City of Chubbuck, Bannock County, and the Idaho Transportation Department.

Lin asked the group how the Conservation Reserve Program (CRP) had influenced water quality in the Portneuf River. Greg indicated that while not intensively studied in the Portneuf Basin there was overwhelming evidence from other regions that inclusion of lands in CRP has helped to improve water quality in watersheds that support large acreages of cultivated land (Feather et al. 1999; Whiles et al. 2004 shows benefits from riparian buffers; see also <http://www.id.nrcs.usda.gov/technical/nri/table10.html> for USDA Idaho Erosion Rate Summaries). John stated that non-CRP lands contribute approximately 10 tons of sediment/acre/year. In contrast, CRP lands contribute 1 ton of sediment/acre/year. He stated that these statistics were initially provided by Elliot Traher with the NRCS. *During the 16 January 2007, Elliot clarified John's statements and said that 10 tons/acre is the maximum allowable erosion rate for non-CRP lands to meet federal compliance requirements. One ton/acre estimates for CRP land was generated from the output of a model that Elliot has used to estimate erosion rates in Bannock County and is based on perennial plant cover at a density of one plant/sq. ft.*

Andy provided a presentation on the Portneuf River monitoring efforts, including the collection of water quality and quantity data, using conventional sampling techniques and continuous monitoring devices (data sondes). He showed the group how load estimates are generally calculated using discharge and constituent concentration data and provided an example of a daily nitrate load estimate for the Edson Fichter monitoring location. Andy also showed annual load estimates from this same location using preliminary data. He pointed out that load estimates vary annually and that this has a great deal to do with annual variations in stream flow. A graph was used to illustrate how the annual hydrograph at the USGS Pocatello Carson St gage varied between 2004 and 2006. Andy also indicated that constituent loads could be estimated using continuous surrogate concentrations or readings and cited works by the USGS (e.g. Urhich and Bragg 2003; Christensen et al. 2000). He showed the group how constituent loads could be predicted by developing empirical equations between continuously measured parameters (e.g. turbidity) and analytes (e.g. total suspended solids (TSS) and total phosphorus). He presented preliminary regression equations and scatter plots showing TSS regressed on turbidity. He

indicated that the relationships between these two parameters were strong at all of the long-term monitoring stations on the Portneuf River. Jason asked whether the data had been lumped to include all of the sites or whether they had only been examined individually. Andy agreed to see whether a single equation could be used to predict all of the sites in the Portneuf River watershed but said that some relationships were site specific and used the Siphon Road turbidity and total phosphorus relationship as an example. Jason also questioned whether there were sufficient points at the higher end of the relationships to have confidence in the predictive models. Andy agreed that additional points would be needed to increase his confidence in the models at both high turbidity and TSS concentrations, but stated that the fitted lines were arguably good for the limited number of high turbidity and high TSS readings. Andy then showed how the empirical equations were used to predict a near continuous record of TSS and TP for the Portneuf River at Topaz monitoring site. He also said that he and Greg were actively working on ways to predict these constituents when turbidity data was not available. Jason recommended that they examine whether discharge could be used as a good predictor in the absence of turbidity. Andy said that they would look into that and report back to the group.

John asked whether Andy had considered the effects of atmospheric deposition of N and P in the watershed. Andy replied that he knew of a measurement station in Logan, Utah that would provide an estimate for N deposition rates in Pocatello region. He also stated that Richard Inouye has been involved in long-term experiments at ISU that attempt to mimic N deposition rates and predict effects of increased deposition rates on sage-steppe ecosystems. Andy said he would talk to Richard about this and review the literature for estimates of N and P deposition in the region.

Keene was concerned that the calculations seemed more esoteric in nature and questioned whether citizens would be better served by more implementation activities. Mark and Greg stated that the first step in the TMDL revision process was to fully characterize conditions in the watershed and that implementation activities would follow. Keene reemphasized that while he was concerned about the application of basic science that is going into the TMDL revision; he wanted to know what was being done to fix the problems. Mark assured Keene that implementation was being done by a number of agencies and organizations in the watershed already and that this would continue throughout the TMDL revision process. Mark followed by saying we may need to do a better job of conveying to the public that this work is being done regardless of the TMDL process. Keene said that he would like to see a coordinated report highlighting the work that has been accomplished by all of the agencies and encouraged the group to make this available to the public. Moreover, he wanted all of the agency representatives present to have information at hand to convince him and the public that they are doing things with tax payer dollars to improve the Portneuf River. Keene's comments were discussed in greater detail but overall the attendees agreed that a more directed outreach campaign was necessary.

Keene wanted someone to report back during the next meeting about preliminary plans to have a symposium on the Portneuf River this spring. Keene had met with faculty from ISU's Department of Biological Sciences and his impression was that ISU was going to organize this symposium. Andy said that he would follow up on this and report back at the next meeting.

The next meeting was set for 16 January 2007. Larry asked if the group had considered other venues for future WAG meetings. Andy said he would be sending an email to attendees in order to find out who might want to serve on a Technical subcommittee of the WAG.

References:

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