

# Spokane River TMDL Collaboration

## Steering Workgroup

August 4, 2005

Dale Arnold  
Tim Connor (as an Observer)  
Sid Fredrickson  
Dick Denenny  
Wayne Frost  
Todd Mielke  
Dave Peeler  
Bruce Rawls

Bill Ross  
Mike Sharar  
Ryan Orth

The Steering Workgroup held a meeting on August 4 to discuss the following agenda:

1. Workgroups—Status Reports on Pending Work Products
  1. Flows & Loadings
  2. Re-Use & Conservation
    - i. Conservation Workshop Proposal
  3. Technology
  4. Non-Point Source
2. Monitoring Workgroup
  1. Develop Fundamental Questions/Charter for the Monitoring Workgroup
  2. Nominate Workgroup membership
3. Framework for Roll-Up of Workgroup Information

### *1. Workgroups—Status Reports on Pending Work Products*

Mike Sharar provided updates on the status of each of the Workgroups. The following topics were discussed in detail:

#### *Flows & Loadings Workgroup*

The Flows & Loadings Workgroup continues to make good progress and will have a substantial report for the Full Group at the August 24 meeting. The Workgroup is also currently populating their oxygenation/aeration matrix and analyzing the impacts of the phosphorous detergent and fertilizer bans. For each, the Workgroup will address both technical ramifications and the appropriate paths forward.

The Workgroup is focusing efforts on describing the removal of phosphorous from the Spokane River system through a ban on certain dish soaps. Spokane County has agreed to lead the question of a soap ban's contribution from the septic tanks for the Non-Point Source Workgroup. Bill Ross commented that the Flows & Loadings Workgroup should coordinate with the Non-Point Source Workgroup to ensure that phosphorous loadings from septic tanks and/or detergent and fertilizer sources are not accounted for more than once.

Todd Mielke commented that some of the assumptions about growth-related flows made within the table presented by the Flows & Loadings Workgroup at the July 22 Full Group meeting were unclear. Bruce Rawls replied that the County and City flows were correct. The assumed per capita flows in the table do include some conservation measures for some dischargers. The Steering Workgroup suggested that the Flows & Loadings Workgroup communicate their assumptions on conservation to the Re-Use & Conservation Workgroup and clarify this point at the August 24 Full Group meeting.

#### *Re-Use & Conservation*

The Re-Use & Conservation Workgroup continues to gather information and is determining how to present their findings in a useful way. In particular, the Workgroup has found it challenging to assign cost figures/implementation strategies around the opportunities they have identified to develop effective re-use and conservation programs. The Steering Workgroup asked that the Workgroup present regional re-use and conservation opportunities in terms of their potential to remove pounds of phosphorous from the Spokane River, with the expectation that the Full Group will determine the relative merits of various strategies, including cost considerations. The Workgroup has requested facilitation on a limited basis and Bill Ross has agreed to attend by phone at least part of the Friday, August 5 Workgroup meeting to assist with this work. Todd Mielke commented that the Re-Use & Conservation Workgroup should focus on a succinct synopsis including to what standard effluent will need to be treated to what types of re-use activities. Also it would be helpful to prioritize where, in relationship to the aquifers, re-use opportunities appear technically feasible and to identify those opportunities that may be ruled-out due to regulatory or technical issues. Challenges and opinions encountered by the Workgroup on the overall goal for re-use may be presented as a sidebar to this primary evaluation for the Full Group to consider. Wayne Frost commented that the Workgroup should communicate a sense of timing for potential aquifer recharge opportunities to help the Full Group consider how these could fit into an implementation plan. Mike Sharar and Dave Peeler announced that they will attend the Friday, August 5 Re-Use & Conservation Workgroup meeting.

#### *Conservation Workshop Proposal*

The Steering Workgroup agreed that water conservation is important element for the Full Group to consider, but recognized that time constraints dictate what type of Conservation Workshop would be most useful within the immediate Collaboration effort. The outcomes of a Workshop should provide information specific to the relationship of conservation to the objectives of the TMDL, specifically the removal of phosphorous from the Spokane River. Similarly, any challenges encountered should be connected to the Spokane River TMDL. Todd Mielke proposed and the Steering Workgroup agreed that the Re-Use & Conservation Workgroup clarify the intent of the Conservation Workshop as one that will be specific to the TMDL's issues and not one that explores a more broad-based water conservation effort. If a more general workshop is desirable, the Steering Workgroup suggested such a Workshop be included in the implementation plan for a later date. If, after determining that the Conservation Workshop would focus on generating specific information for the Collaboration effort, the Workgroup should provide a budget to the Steering Workgroup for review and approval. Mike Sharar will carry this to the Re-Use & Conservation Workgroup.

The Steering Workgroup briefly discussed the relationship of conservation to phosphorous loadings. John Spencer explained that decreased influent may make removal of phosphorous through treatment more difficult, in some cases, and may make it more efficient in others. Wayne Frost commented that the conservation of irrigation water combined with a ban on phosphate fertilizer could remove phosphorous from the Spokane River.

#### *Technology*

The Technology Workgroup continues to gather data on various treatment plant technologies and will have a preliminary report at the August 24 Full Group meeting. The Workgroup is currently two-thirds to three-quarters finished with this task. Wayne Frost reported that Inland Empire Paper (IEP) is now documenting the results of its pilot demonstrations, which produced average results in the 60-70  $\mu\text{g/L}$  range, but were unable to get to 10  $\mu\text{g/L}$ . However, there are expanded costs related to sludge management resulting from the heavy chemical treatment required to reach higher treatment goals.

The Steering Workgroup considered whether the Technology Workgroup should begin to think about the different ranges and situations associated with various technologies, based on data from Discharge Monitoring Reports from all sizes of plants across the country (which are mostly municipal and not industrial in nature). The Steering Workgroup decided that the Technology Workgroup should assign ranges around these technologies. Bruce Rawls raised the point that the Technology Workgroup has not been asked to consider the sensitivity of the Spokane River at different times of the year. Mike Sharar responded that each of the Workgroups' products will be translated, as necessary, into the reliability and seasonality discount concepts provided by Rob Greenwood from the EPA water quality trading perspective.

#### *Non-Point Source*

The Non-Point Source Workgroup is moving forward in describing what is known about various non-point source opportunities and will provide a descriptive report at the August 24 Full Group meeting, but will not have a substantive report until mid-September.

Bill Ross attended the August 4 Non-Point Source Workgroup meeting and reported that members spoke to their ability to use the new non-point source matrix as a guide to talk about programs and the possibility of their success. The Workgroup will drill down into specific sources to provide the Full Group with what is known and unknown about each. Members of the Workgroup agreed in general that to more accurately describe the pounds of phosphorous that might be removed from the Spokane River from non-point sources, a larger study will be needed.

Mike Sharar noted that it is important for the Full Group to understand that non-point sources will become more significant as pounds removed from other sources decrease the "delta" in any pounds removal scenario. The Steering Workgroup discussed the idea that the pounds that this Workgroup is considering be spoken to in terms of what is controllable versus non-controllable, not what is non-point source and background. Bill Ross commented that the Full Group's search for pounds within the delta will come out of a pool of pounds that is broader than just non-point sources and that the Workgroup will come prepared with information in its matrix that contributes to this conversation.

#### *Monitoring Workgroup*

At the July 22 Full Group meeting, the Full Group asked the Steering Workgroup to discuss a science/monitoring component to the overall Collaboration effort. Bill Ross posed the question of

whether a Monitoring Workgroup should function for the purposes of the negotiation, or beyond this period. Todd Mielke suggested two different groups: one group for the purposes of the negotiations, a second group outlined in an implementation plan as the monitoring component of an agreement. The Full Group will need to discuss resources to fund long-term monitoring activity.

Sid Fredrickson suggested that a Monitoring Workgroup begin a dialogue with the developers of the TMDL model at Portland State University (PSU) to determine where data could improve the inputs to the model. Some inputs to the model are assumed and some are based on test data. PSU should be asked to perform a sensitivity analysis on the model, if they have not already done so. A Monitoring Workgroup could then ask PSU for advice on what elements need to be monitored to produce data for sensitive areas of the model. Dave Peeler added that the Flows & Loadings Workgroup has already proposed an approach to learning more about sediment oxygen demand, which will give a Monitoring Workgroup a good start on this important piece of information.

The Collaboration will need a small group to begin to think about the structure for longer-term monitoring activities compatible with the TMDL's implementation plan. This "first-step" Monitoring Workgroup would consider the composition of a longer-term group and the kinds of questions that they could address. A monitoring effort should, in part, be focused on dissolved oxygen as the biological target of the TMDL and use biological monitoring to understand unknown elements of the Spokane River system, such as SOD. Overall, monitoring activities should provide also feedback on what pounds of phosphorous are going into the Spokane River, what pounds of phosphorous are coming out of the River, and how the River is responding to these activities.

The Steering Workgroup discussed who would make-up a Monitoring Workgroup for the purposes of developing a charter and then scoping the nature of ongoing monitoring activities. Dave Peeler offered to assign a couple of Ecology staff to the Workgroup. Sid Fredrickson will make inquiries of a nominee from Idaho, specifically a modeler at the Idaho Department of Environmental Quality. Bruce Rawls mentioned a retired Spokane County employee with a broad understanding of water quality as a potential candidate for the dischargers. Mark Butell and Barry Moore of Washington State University were mentioned as candidates, but would likely better act as resources for this Monitoring Workgroup, at first. John Spencer will work with the dischargers to nominate individuals to the Monitoring Workgroup. Specifically, Mr. Spencer will approach Dale Arnold at the City of Spokane (who had to leave the meeting early) to consider his staff resources.

Once nominations are made, the Monitoring Workgroup will be convened on a conference call, hopefully before the August 22 Steering Workgroup meeting.

#### *Framework for Roll-Up of Workgroup Information*

The Workgroups will have various levels of completed information and display available at the August 24 Full Group meeting. At the moment, it is important for the Workgroups to continue full speed on their information-gathering efforts. At the August meeting, the Full Group will be able to focus on the Workgroup reports and begin to consider areas that need to be filled-in and useful ways to think of the information overall.

It was discussed how, and if, to roll-up the data across the Workgroups in September for consideration at the September Full Group meeting. It may be difficult to create scenarios without some sort of tool that would allow the Full Group to cross-reference different ideas. A master matrix that captures all relevant information from each of the Workgroups in one place may help the Full

Group to see different scenarios that the information represents. Some information will lend itself to fitting within a matrix, while other information may not.

The Full Group should discuss at the August 24 meeting possible approaches to the development of scenarios and what each of the Workgroups should do to prepare their data for examination at the September and October Full Group meetings. It may be difficult for the Full Group to assemble an agreement as one group. On the other hand, too many proposed scenarios will present their own difficulties for the Full Group. The Full Group could assemble a core framework of agreed-upon elements that people could use to express their perspectives, which would highlight ones that are in need of resolution/negotiation. It may not be until October that the Full Group is ready to discuss scenarios or proposals based on the data gathered by the Workgroups. Todd Mielke suggested that the Full Group might need to convene two times in October to maintain its momentum during this period.

The Steering Workgroup will continue this conversation at its August 22 meeting.

The Steering Workgroup Meeting convened at approximately 5:45 PM.