

# Spokane River TMDL Collaboration

## Steering Workgroup

August 22, 2005

Jim Bellatty  
Tim Connor (as observer)  
Dick Denny  
Doug Krapas  
Jack Lynch  
Dave Peeler  
Bruce Rawls

Bill Ross  
Ryan Orth  
Mike Sharar  
John Spencer

The Steering Workgroup held a meeting on August 22 to discuss the following agenda:

1. Workgroups—Status Reports on Pending Work Products
  - a. Flows & Loadings
  - b. Re-Use & Conservation
  - c. Technology
  - d. Non-Point Source
  - e. Monitoring Workgroup
2. Roll-Up of Workgroup Information
  - a. Process for roll-up of information from each workgroup into a Full Matrix
  - b. How to frame and tee-up the Full Group discussion on how to begin seeking agreement on a TMDL Implementation Plan
3. August 24 Full Group Meeting— Confirm agenda and supporting materials

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

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

#### *Non-Point Source Workgroup*

The Non-Point Source Workgroup met on August 17 to discuss updates on non-point source control opportunities and has made progress in collecting information around several non-point source areas. The Workgroup has gathered information on the overall amount of phosphorous contributed by the Little Spokane River, although some questions remain as to the specific contributions from various sources. The Workgroup is also considering the question of the contribution of phosphorous from

septic tanks to the Spokane River via the Rathdrum Prairie aquifer. While it is known that some amount of phosphorous is coming through the aquifer to the Little Spokane River, the Non-Point Source Workgroup is attempting to track these septic tank phosphorous contributions to be as clear as possible at this time on what practices will reduce which pounds of phosphorous. Marlena Guhlke and Ari Simms of CH2M Hill have begun to work with Walt Edelen at the Spokane County Conservation District to both identify farming practices that have potential to remove phosphorous sources and gather Natural Resource Conservation Service (NRCS) data to describe these potential phosphorous reductions. The Non-Point Source Workgroup is also investigating Hangman Creek sediment deposits and further coordinating with NRCS to review new data on the sediment that flows from Hangman Creek. In order to determine the potential pathway by which this sediment phosphorus may be introduced to the Spokane River, Ecology is now gathering information on the prospective role of macrophytes in the release of phosphorous from the soil into the water column.

Brewster Boyd presented a spreadsheet at the Non-Point Source Workgroup meeting displaying ranges of reduction for each of the non-point sources. The Non-Point Source Workgroup considered the ranges and made modifications to the spreadsheet before coming to consensus that the spreadsheet was a good format for the purposes of gathering additional information. Brewster Boyd described the next step of the Non-Point Workgroup as the "champions" of the various non-point source areas to continue gathering specific information. The Workgroup is considering two potential dates for a meeting before the September 28 Full Group meeting and believe they will have significant data for the Full Group to review at that point.

The Non-Point Source Workgroup will provide a detailed report at the August 24 Full Group meeting that will require 30-45 minutes.

#### *Flows & Loadings Workgroup*

The Flows & Loadings Workgroup has completed the initial work in answering their assigned Fundamental Questions. The Workgroup has developed a spreadsheet that displays current and planned phosphorous contributions from each of the dischargers, which is now being updated with new data from the Hayden Area Regional Sewer Board (HARSB). HARSB had previously planned to land apply their effluent year-round, but has shortened their water storage time to reduce costs and now anticipates discharge to the Spokane River in April, May, and October. The Steering Workgroup recognized that the TMDL model has not been run to address the question of the seasonal variability of phosphorous in the Spokane River and its potential affect on dissolved oxygen levels, and this needs to be completed.

John Spencer is working with the Flows & Loadings Workgroup to address the accounting of growth within projected flows. This information will be available to the Flows & Loadings Workgroup by the beginning of September. Dave Peeler commented that the Flows & Loadings matrix may have some flow projections that are high. John Spencer replied that the aggregated total flows tend to be on the high side. However, individually, the numbers are a mixture of high and average flows. John Spencer will work to determine whether some projections are high in terms of growth or per-capita estimates.

The Flows & Loadings Workgroup has discussed the role conservation within their projections and how this could affect the pounds of phosphorous going to the Spokane River. A given filtration technology will produce the same concentration of effluent from a more dilute or more concentrated level of phosphorous influent. However, it is also true that through conservation measures flows to treatment plants are reduced and less effluent will ultimately reduce the amount of phosphorous going into the River.

The Flows & Loadings Workgroup will work to identify goals around which they can build flows and loadings scenarios that account for growth and conservation. Dave Peeler commented that a flow chart or some other visual aid could be developed to depict the relationship between conservation, flows, and re-use opportunities for the purposes of cross-walking the findings of the Workgroups at the Full Group meetings. The Steering Workgroup decided that the suggestion of a depiction of the relationship between conservation, flows, and re-use opportunities be carried back to the Flows & Loadings Workgroup by Mike Sharar and John Spencer, with information from the Conservation Workgroup. If the Flows & Loadings Workgroup cannot perform this task due to time constraints, the Full Group will need to provide further direction.

#### *Re-Use & Conservation*

The Re-Use & Conservation Workgroup has developed a fairly complete database of re-use opportunities, organized by location, use, and distance from treatment source. The Re-Use & Conservation Workgroup does not yet have information from the Technology Workgroup to determine the number of pounds of phosphorous that will be removed and whether that might be reused. The Workgroup is currently considering the prioritization of re-use opportunities, generally considering opportunities that are closer as first order opportunities, with those that are further away as longer-term applications. The Workgroup has addressed public education around re-use and aquifer recharge and mentioned a future demonstration project that could help the public become informed about these activities. The Re-Use & Conservation Workgroup has made good progress, but will not have specific pounds to report at the August 24 Full Group meeting.

The Re-Use & Conservation Workgroup will be able speak to conservation opportunities more generally. At the Full Group Meeting, the Workgroup will address the range of achievable reductions using structural conservation techniques, and may discuss the range of reduction possibilities through education-based behavioral change.

The TMDL model may provide important feedback to the Re-Use & Conservation Workgroup concerning the seasonal sensitivity to phosphorous uptake within the Spokane River system. Ecology has an updated version of the model and is waiting to determine which runs need to be made. Bill Ross posed the question of whether the Collaboration should consider waiting to understand all elements of the model that should be run and then decide how many model runs to perform. If the Full Group decides to run models now, they may exhaust the model runs before all inputs are described. On the other hand, waiting to run the model could cause significant delays. The Steering Workgroup agreed that the information a model run could yield on seasonal sensitivity would be helpful for the roll-up of Workgroup information. Bruce Rawls suggested that another model run be designated for the sensitivity of sediment oxygen demand. The Full Group has considered SOD as a package, but has not made a decision as to which model elements are of priority. Jim Bellatty reported that Ecology's Will Kendra has agreed to develop an outline of the process for model runs. Mike Sharar, Dave Peeler, and John Spencer will make suggestions as to when and what the model should be run.

#### *Technology Workgroup*

The Technology Workgroup has collected significant amounts of additional data since their report at the July 22 Full Group meeting. The Technology Workgroup's survey is close to completion and information is organized by type and capacity of each technology application, as well as the expected (average) and peak performances. The Technology Workgroup is also concerned with the seasonal sensitivity of the Spokane River system to phosphorus. Temperature is a potential factor in the River's

phosphorous uptake as well as the performance of certain technologies, especially those that utilize biological nutrient removal. The Technology Workgroup is beginning discussions that will reach conclusions on specific technology type performance and recommendations for seasonal technology performance averages. The City of Spokane has begun its pilot project, but will not have results to report by the September Full Group meeting. Inland Empire Paper will eventually have valuable information to share, but has not finished the compilation of lab data from the exercise. The September Full Group Meeting will be the most appropriate time to share the results of Inland Empire Paper's technology pilot. The Workgroup will require approximately 20 minutes to report, which they request be placed on the agenda prior to lunch, if possible.

### *Monitoring Workgroup*

Candidates for the Monitoring Workgroup are now being invited to participate. Spokane County has approached Stan Miller, a retired County employee versed in water quality, who has agreed to sit on the Workgroup. Ecology has asked Bob Cusimano to participate. The City of Spokane is prepared to offer a candidate on August 23. Bill Ross asked if these three candidates comprised a robust enough group to move forward. Bruce Rawls suggested that an individual from Ecology's Eastern Regional Office participate. Jim Bellatty replied that Jim Ross, who leads monitoring efforts for the Eastern Region, will be available to assist with the Monitoring Workgroup's efforts. Dave Peeler commented that other groups may want to participate, as well.

Mike Sharar described Ecology's thoughts for a general approach for a monitoring scheme in terms of three overlapping elements: protocols to best use the existing four monitoring points maintained by Ecology, use of the model to organize and identify additional data that should be collected, and additional studies, such as the role of sediment oxygen demand. The Monitoring Workgroup should begin to scope the role of a long-term monitoring group by providing a framework for how to monitor the TMDL Implementation Plan goals (i.e. the pounds going to the Spokane River), the Plan's objectives (i.e. Conservation, Re-Use, Non-Point Sources, implementation measures, etc.), and unknown factors (i.e. SOD, etc.). The Monitoring Workgroup will also consider the structure of the longer-term group and resources needed to accomplish their goals.

The Steering Workgroup suggestions for membership and purpose of the Monitoring Workgroup will be discussed at the August 24 Full Group Meeting to gain agreement on a direction and allow the Monitoring Workgroup to begin.

## 2. Roll-Up of Workgroup Information

### *Process for roll-up of information from each workgroup into a Full Matrix*

Bill Ross explained that the purpose of a comprehensive matrix is to describe the products from Workgroups in common terms and provide a picture of phosphorous reductions over next 20 years. Workgroups would distill their information to fit into the Full Matrix. Mike Sharar, John Spencer, and Ross & Associates will assist in beginning to roll this information together. Some of the information produced by the Workgroups will not easily fit in such a matrix. As such, there will need to be a narrative component to a Full Matrix that will allow the Workgroups to provide contextual information and describe assumptions for any cells that are left blank. Mr. Ross would like to set a deadline of September 14 for the Workgroups to provide their data and information. A completed draft of the populated Full Matrix would be available a few days before the September 28 Full Group meeting. The Full Group will then determine how use of the rolled-up information will proceed.

The Non-Point Source and Technology Workgroups have been using a similar format to the draft Full Matrix. The Conservation & Re-Use Workgroup, in particular, will need to translate their information

into this format, which should not present too much difficulty. The Full Group will have the opportunity to see the draft Full Matrix at the August 24 Full Group meeting.

#### *How to frame and tee-up the Full Group discussion on how to begin seeking agreement on a TMDL Implementation Plan*

Bill Ross explained that the use of scenarios may be helpful for Collaboration participants to speak to what they see as the right mix of elements in a TMDL implementation plan. If there is agreement on what these common elements are, they should be discussed in detail at the September Full Group meeting, where there may be further instruction to the Workgroups. The Full Group could then further consider specific scenarios at the October meeting. Mr. Ross anticipates a small number of scenarios would be put forward and that each scenario may not touch on every issue. In general, scenarios should discuss the short- and mid-term activities and long term accomplishments, as well as any further studies needed. The Full Group will discuss the possibility of scenarios, who might propose them, and how they would be proposed at their August 24 meeting and again in September. Cost figures will not necessarily be available by the October meeting and it is anticipated that these details will come after the Full Group is striving for a similar set of activities. If scenarios do not produce some agreement, then Ecology will need to make some decisions on their own after a certain point.

The Steering Workgroup discussed whether Ecology should put forward a scenario. Dave Peeler commented that Ecology could develop a scenario or work from the proposals offered by others. Jack Lynch posed the question that if Ecology does not create a scenario, then how will others know that they are in-step with what the regulators will find acceptable?

Bill Ross commented that the Sierra Club had developed an outline of a draft implementation plan, that the dischargers have their Use Attainability Analysis, and Ecology has its draft TMDL. The joint learning between these groups will continue over the next month. Mr. Ross doesn't believe that an agreement process will withstand a lot of back and forth in a traditional regulatory sense, so if scenarios are to be developed, talking and sharing amongst the parties is encouraged. Scenarios would not be finished products, but would represent some best faith efforts from each party. Dischargers will need to make real commitments and the environmental community will need to embrace the need for flexibility over time.

#### 3. August 24 Full Group Meeting— Confirm agenda and supporting materials

The August 24 Full Group meeting will run from 9am-2pm. The meeting will cover updates from each of the Workgroups in the morning and speak to the roll-up of Workgroup information and discussion of scenarios in the afternoon.

Jim Bellatty commented that the Collaboration effort is garnering increased media awareness. Ecology is developing a brief internal protocol and is prepared to share this with the Full Group. This item will be added to the August 24 Full Group Agenda.

Todd Mielke expects Commissioner Delgado from Stevens County to be in attendance.

#### 4. October Full Group Meeting Date

The date of Friday, October 28<sup>th</sup> has been proposed. Todd Mielke's calendar will be consulted before confirming this date.