

## Spokane River TMDL Collaboration

Full Group Meeting

May 11, 2005

### Full Group Attendees:

Todd Mielke, Spokane Co. Commissioner  
Bruce Howard, Avista  
Dale Arnold, City of Spokane  
Kent Helmer, Hayden Area Regional Sewer Board  
Dave Peeler, Department of Ecology  
Tom Agnew, Liberty Lake Sewer and Water District  
Rene-Marc Mangin, Department of Ecology  
Sid Fredrickson, City of Cour d'Alene  
Dick Denenny, City of Spokane Valley  
Tom Eaton, US EPA

Chris Butler, Spokane Tribe of Indians  
Wayne Frost, Inland Empire Paper Co.  
Mike Petersen, Lands Council  
John Hyatt, City of Airway Heights

Bill Ross, Ross & Associates, Facilitator  
Mike Sharar, Mike Sharar Consulting  
John Spencer, CH2M Hill

### Welcome

Commissioner Mielke welcomed attendees and called the meeting to order at approximately 9:12 a.m. All in attendance introduced themselves.

### Introduction of Bill Ross

Commissioner Mielke introduced Bill Ross of Ross and Associates. Mr. Ross is the new facilitator for discussions. He provided a brief resume of his extensive experience in helping resolve environmental issues and described his background as an environmental official for the State of Alaska.

Mr. Ross clarified his role and embraced, with some cautionary notes, the ambitious schedule aiming to bring the Spokane River TMDL Collaboration to a close in October.

### Statement of Meeting Purpose

Mr. Ross and Commissioner Mielke explained that this meeting is meant to "kick-off" Workgroup activity. There was discussion about the importance of Workgroups keeping a clear focus and coordinating through the Steering Workgroup.

### Ground Rules

Mr. Ross presented some ground rules emphasizing roles and responsibilities of the Collaborative. Mr. Ross emphasized three basic ground rules:

- > The primary substantive discussions about a TMDL implementation plan will occur in the Full Group. Workgroups are to work on assigned questions and report their answers to the Full Group.
- > Full Group discussions will continue to have participation of non-members during the flow of the conversation on the topic at hand.

- > Press inquiries about the Collaborative should be referred to Ross & Associates. Members can speak about the substance of the discussions, but are asked to refrain from attempting to characterize the views, intentions, or motivations of other members.

### **Public Process**

Mike Sharar, Ecology's consultant, presented a review of the latest Public Process statement. The statement reflected adjustments made at the Steering Workgroup meeting of the evening of May 10<sup>th</sup>. It is attached as Attachment One. There were questions and clarifying discussion.

### **Workgroup Assignments**

John Spencer, CH2M Hill, presented questions worked on by the Steering Workgroup at its meeting the evening before. These "Fundamental Questions" are to be the main focus of each Workgroup. The questions are assigned to target the Workgroup's initial efforts on identifying what specific strategies, techniques, activities, etc. would make sense to consider in order to reduce phosphorus loadings to the river. This was described as focusing on "getting pounds of phosphorus" out of the river. By first doing so, this specificity of phosphorus reduction will make subsequent policy and legal questions much easier to focus upon and will enable discrete scenarios to be analyzed as components of a TMDL implementation plan. Developing answers to the Fundamental Questions (either by consensus or a range of opinions) is the primary task of each Workgroup. Each Workgroup is to keep in mind the Brainstorm Questions prepared at the last Full Group meeting as they answer the Fundamental Questions.

Mr. Spencer went through the questions Workgroup by Workgroup. There was considerable discussion. The questions, as discussed, are attached as Attachment Two. The questions as modified by the Full Group are attached as Attachment Three. Whether or not to have the Flows & Loadings Workgroup analyze the potential role of aeration at this time will be discussed and decided by the Steering & Policy Workgroup at its next meeting. The relationships Workgroups to each other were discussed. How the appropriate scenarios for removing phosphorus from the River was also discussed, with an understanding emerging that the Technology Workgroup is likely to play a key role in this later in the summer.

### **Update on Pollutant Trading**

Tom Eaton of EPA presented the status of the effort to contract with an expert consultant to review the potentials for "pollutant trading" as an element of the Spokane River TMDL Collaboration. He said that he expected an advertisement and selection within about two weeks.

It is likely Mr. Rob Greenwood, also of Ross & Associates, will be a strong contender for this EPA-funded consulting contract. Mr. Greenwood wrote EPA's pollutant trading guidelines.

### **Wrap-Up and Schedule**

The next Full Group meeting will be at the Fire Training Center beginning at 9:00 a.m. June 23<sup>rd</sup>.

Future meetings will be held on July 22 and August 24. Times and locations are yet to be determined, and will be posted on the Collaboration website as soon as they are available.

## Attachment One

*(working title)*

### **Spokane River Collaboration Public Process Description**

In late February, 2005, the City of Spokane, Spokane County and several other public and private entities with Spokane River discharge permits (the Petitioners) reached agreement with the Washington State Department of Ecology to tentatively withdraw their Petition for Rule Making concerning Draft TMDL limits. Ecology agreed to suspend issuance of TMDL limits. Together, using information assembled for the Draft TMDL and a Use Attainability Analysis (UAA) prepared by the Petitioners, the Petitioners and Ecology are working on a TMDL Implementation Plan for the Spokane River. This collaboration allows productive discussion about the Draft TMDL and the UAA in the context of planned future actions and the expected resulting improvements in river quality. The discussion is called the Spokane River Collaboration (SRC) *(working title)*.

Issuance of TMDL limits has specific public involvement requirements which both the Petitioners and Ecology intend to meet. That process is now temporarily “on hold” as the Petitioners and Ecology work on a proposed Implementation Plan. Several issues will come into question as this is done, understandings about data may change, and the Draft TMDL may need to be revised. If TMDL changes are recommended, those will be subject to the same public scrutiny and opportunities for input that have been used in developing the Draft TMDL. In particular, the TMDL Advisory Committee will need to review any modifications proposed for the Draft TMDL and the TMDL process will need to be completed. No part of the TMDL process is being or will be skipped.

Similarly, there are established processes for developing a Use Attainability Analysis and submitting a Petition for Rule Making to adjust water quality standards for a specific water body. Those processes were followed by the Petitioners and they withdrew their petition as the deadline for an Ecology response approached. The petition was withdrawn without prejudice concerning its being filed again. All processes associated with issuance of a TMDL and a Petition for Rule Making are simply “on hold” while a proposed Implementation Plan is under discussion.

Both Ecology and the Petitioners are very committed to open discussions during the “on hold” period as a proposed Implementation Plan is being considered. The discussions will be occurring in two types of venues. The first, known as the Full Group, involves representatives of all Petitioners, the United States Environmental Protection Agency, the Idaho Department of Environmental Quality, the Washington Department of Ecology and others. This venue will also serve as the focal point for “government to government” level discussions with tribes. All Full Group meetings are publicized and open to public attendance. Every meeting will include opportunities for public comment. The Full Group is where collective determinations are reached.

A second venue for conversation about the proposed Implementation Plan and related issues is in Workgroups. Several Workgroups will be functioning simultaneously to delve into the

meaning and significance of data, develop improved understandings, answer specific questions, and prepare answers and recommendations for the Full Group.

Meetings of the **Wastewater Flows and Loadings, Technology, Reuse and Conservation, and Non-Point Source Workgroups** will be publicized in advance. The public will have opportunity to observe as a Workgroup deals with topics. In the interest of efficiency, there will not be any public comment at these Workgroup meetings. Meeting notes will be kept and made available to the public at the web site described below. If members of the public have concerns or suggestions about the Workgroups, those should be e-mailed to the attention of the Steering Workgroup (address available on the web site) where they will be considered at the earliest opportunity and responses prepared.

The Steering Workgroup is responsible for keeping the discussion process moving effectively and efficiently. The Steering Workgroup, led by facilitator Bill Ross of Ross and Associates, will convene frequently, often by conference call. Notes will be kept of all Steering Workgroup meetings and made available on the web site. The Steering Workgroup is responsible for making sure discussions move forward. Substantive Petitioner/Ecology determinations may only be made in the Full Group in open session.

The address for the Spokane River Collaboration web site is...

<http://client-ross.com/spokane-river/>

**Everyone, including the public, Petitioners and Ecology, should consider this web site the primary source for information about Spokane River Collaboration discussions.** One part of this site is devoted to Full Group and Workgroup meeting schedules and locations. Another holds meeting notes, and other timely information. There is also a Library with links to relevant documents available for download. The Spokane River Collaboration site is intended to provide source-controlled information officially offered by the Petitioners, Ecology or both. It provides contacts for anyone wishing to offer comment about the process or substantive issues under consideration. The site is not set up as a "blog" or "chat room" for general use. All material on the site must be approved by the facilitator. Posting can only occur through Bill Ross and Ryan Orth of Ross and Associates ([ryan.orth@ross-assoc.com](mailto:ryan.orth@ross-assoc.com)).

In summary:

- Should changes in the Draft TMDL result from the current effort, those changes will be subject to the same level of public review and comment used in developing the Draft. The TMDL Advisory Committee will review any changes and the public process will be completed.
- Determinations concerning the Petitioner/Ecology discussions will only be made by the Full Group
- All meetings of the Full Group will be publicized, open for public observation, and include opportunity(s) for public input
- Workgroup meetings, while publicized and open for public observation, will not include opportunities for public comment
- Workgroup sessions will be documented with meeting notes that will be timely posted on the web site

- The public may provide comment about Workgroups via the Steering Workgroup e-mail address available at the web site
- The Spokane River Collaboration web site is <http://client-ross.com/spokane-river/>. All material posted is sent to the facilitator and approved and posted by him. The web site is the primary information source for the public, Petitioners and the Department of Ecology

**Attachment Two  
Spokane River TMDL Collaboration  
Fundamental Questions**

May 11, 2005

*Wastewater Flows and Loadings*

1. What are the current and future (20 year) wastewater flows and loadings that will be generated for each of the wastewater treatment plants and the proposed Spokane County wastewater treatment plant. Define the monthly average wastewater treatment flows April through October?
2. What are the forecast loadings for BOD, Phosphorus for the above flows?
3. What are the measures to be used for determining the phosphorus loading limits to the river; daily, weekly, monthly, seasonally?

*Technology*

1. What are the criteria to be used to define treatment technologies that are ready for implementation for publicly owned wastewater treatment plants, using current industry knowledge?
2. What is the lowest, average and median final effluent concentration of phosphorus that can be achieved by treatment plant technologies that are ready for implementation for publicly owned wastewater treatment plants?
3. What is the total number of pounds of phosphorus to be released to the Spokane River from point sources including the proposed Spokane County Treatment Plant during the period April 15 to Sept. 30? To answer this question, use the median from #2. Assume the plants will achieve the median concentration. What is this poundage at the end of each 5 year increment over the next 20 years, starting at 2008?
4. Taking into account (1) the flows and loadings and total number of pounds released developed by the Flows and Loadings Workgroup and (2) conservation and re-use recommendations of the Conservation and Re-use Workgroup and (3) the source control recommendations of the Non-point Source Workgroup, what is the point source loading of phosphorus to the river over the next 20 years?

### *Non-Point Source*

1. What is the potential for the reduction of phosphorus from non-point sources using various source reduction methods and/or Best Management Practices (BMPs)? What is the seasonal (April through October) nature of the potential reduction?
2. What phosphorus reduction to the Spokane River can be attributed to source control measures such as a ban on phosphorus based dishwashing detergents and or a ban on phosphorus containing fertilizers for lawn and garden use.

### *Reuse and Conservation*

1. Define concentric rings from each existing and proposed treatment plant to establish a range of distances for re-use of treated municipal wastewater? Answer the question, "What is the total quantity of re-use opportunities within those concentric rings for re-use in commercial, industrial, landscape and golf-course applications, during the period April 15 to Sept. 30?"
2. Estimate the phosphorus reduction that can be attributed to re-use of municipal wastewater assuming reasonable opportunities are captured over the next 20 year period.
3. What is the experience of other communities with climates similar to Spokane's in implementing water re-use measures?
4. What is a reasonable expectation for reduction in water use from water conservation measures in the Spokane region?
5. Is the cost estimate for land application of municipal wastewater accurate to within an engineering standard of order of magnitude.

## Attachment Three

Spokane River TMDL Collaboration

### Fundamental Questions

May 12<sup>th</sup>, 1005

#### *Flows and Loadings*

1. What are the current and future (20 year) wastewater flows and loadings that will be generated for each of the wastewater treatment plants and the proposed Spokane County wastewater treatment plant. Define the monthly average wastewater treatment flows April through October?
2. What are the forecast loadings for BOD, Phosphorus for the above flows?
3. What are the measures to be used for determining the phosphorus loading limits to the river; daily, weekly, monthly, seasonally?

*(Based on discussion at the Full Group May 11<sup>th</sup>, the Steering Workgroup may shift this question to the Technology Workgroup. The Steering Workgroup meets May 18<sup>th</sup>)*

#### *Technology*

1. What are the criteria to be used to qualify treatment technologies as ready for implementation for industrial and publicly owned wastewater treatment plants, using current industry knowledge?
2. What is the lowest, average and median final effluent concentration of phosphorus that can be achieved by municipal and industrial treatment plant technologies that are ready for implementation for industrial and publicly owned wastewater treatment plants? What final effluent concentration for phosphorus is achieved at the 95<sup>th</sup> percentile among qualified technologies?
3. What is the total number of pounds of phosphorus to be released to the Spokane River from municipal and industrial point sources including the proposed Spokane County Treatment Plant during the period April to October 30? To answer this question, use the results of #2. What is this poundage at the end of each 5 year increment over the next 20 years, from 2008 to 2028?
4. Taking into account; (1) the flows and loadings developed by the Flows and Loadings Workgroup and (2) conservation and re-use recommendations of the Conservation and Re-use Workgroup and (3) the effluent loading reductions resulting from source control, what is the range of point source loading of phosphorus to the river over the next 20 years, 2008 to 2028?

5. What are the measures to be used for determining the phosphorus loading limits to the river; daily, weekly, monthly, seasonally?

*(Based on discussion at the Full Group May 11<sup>th</sup>, the Steering Workgroup may shift this question to the Technology Workgroup from the Wastewater Flows and Loadings Workgroup.)*

### **Reuse and Technology**

1. Define concentric rings from each existing and proposed treatment plant to establish a range of distances for re-use of treated municipal wastewater? Answer the question, "What is the total quantity of re-use opportunities within those concentric rings for re-use in agricultural, commercial, industrial, landscaping, aquifer recharge and golf-course applications, during the period April 15 to Sept. 30?"

2. Estimate the phosphorus reduction that can be attributed to re-use of municipal wastewater assuming reasonable opportunities are captured over the next 20 year period.

3. What lessons from experience of other communities in arid climates are there in regard to timing and scale of implementing water re-use measures?

4. What is a reasonable expectation for reduction in municipal wastewater influent flows from water conservation measures in the Spokane region?

5. Is the cost estimate, prepared by the City of Spokane and Spokane County for land application of municipal wastewater accurate to within an engineering order of magnitude standard.

6. What is the order of magnitude cost for aquifer recharge alternatives given the analysis done in #1 above?

*(New question to be considered by the Steering Workgroup at its May 18<sup>th</sup> meeting.)*

### **Non-Point**

1. What is the potential for the reduction of phosphorus from non-point sources using various source reduction methods and/or Best Management Practices (BMPs)? What is the seasonal (April through October) nature of the potential reduction?

2. What phosphorus reduction to the Spokane River can be attributed to source control measures such as a ban on phosphorus based dishwashing detergents, septic tank elimination and or a ban on phosphorus containing fertilizers for lawn and garden use.