MEETING SUMMARY

Spokane River TMDL Collaboration

Full Group Meeting
December 16, 2005, 9:00 a.m.-2:00 p.m.
City of Spokane Fire Training Center, N. 1618 Rebecca Street

Full Group Attendees

Tom Agnew, Liberty Lake Sewer & Water District
Chris Butler, Spokane Tribe of Indians
Tony Delgado, Stevens County
Dick Denenny, City of Spokane Valley
Tom Eaton, US EPA-Region 10
Rick Eichsteadt, Sierra Club
Wayne Frost, Inland Empire Paper
Sid Fredrickson, City of Coeur d'Alene
Jim Hollingsworth, The Lands Council (for Mike Petersen)
Bruce Howard, Avista
Todd Mielke, Spokane County Commissioner
Dave Peeler, WA Dept. of Ecology-Olympia
Robert Steed, ID Dept. of Environmental Quality (for Gwen Fransen)
Albert Tripp, City of Airway Heights

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

Collaboration Update and Meeting Agenda Review

Bill Ross opened the Full Group session shortly after 9:00 a.m. and reviewed the day's agenda. The Department of Ecology will present its response to the scenarios submitted by the group of dischargers and the Sierra Club at the November 22 Full Group meeting. Following this presentation, the Full Group will discuss the status of the various Workgroups. Tom Eaton, of EPA Region 10, will then address the Full Group with an update on EPA activities related to the Collaboration. After lunch, the Full Group will discuss the role of public education and information activities, before reviewing the Collaboration's next steps and future schedule.

Co-Chair Todd Mielke remarked that the Collaboration is now close to the conclusion of its process and encouraged continued participation in these final stages. Co-Chair Dave Peeler also recognized the Collaboration is near its conclusion and announced that Ecology is now working on the details of an outline for a draft TMDL Implementation Plan.

Ecology's Response to the Scenarios

Dave Peeler presented the Ecology response to the scenarios submitted by the group of dischargers and the Sierra Club at the November 22 meeting. Ecology's primary goal is to improve the health of the Spokane River system. Low dissolved oxygen (DO) levels in the River are attributable to phosphorous loadings from point discharges, primarily, but also to non-point sources of phosphorous.

To improve DO levels in the Spokane River, the draft TMDL established a goal to remove 191 lbs. of point source phosphorous, consistent with the best available science and Washington State water quality standards. This goal was later challenged by a group of petitioners as being unattainable. As it is clear that DO levels can be significantly improved, Ecology will reconsider its position regarding phosphorous reduction when (a) the best available science supports such a change or (b) direct experience over approximately ten years of reduction efforts demonstrates that this position is unattainable. Even as the goal may be revised over time to align with new information about the response of the Spokane River system to phosphorous reduction actions, these changes do not necessarily include ending efforts to improve DO.

Ecology believes that a Managed Implementation Plan (MIP), following a multi-year, multi-faceted collaborative approach is the correct strategy to strive to meet the phosphorous reduction goals in the draft TMDL. A successful MIP will require continued effort on the part of the responsible parties; open evaluation, discussion, and decision-making; and good scientific inputs. In accordance with the proposed actions in the Sierra Club and discharger scenarios, the MIP will include phosphorous reduction activities in the following areas:

- Improving wastewater treatment technology
- Water conservation to cut volumes
- Effluent reuse
- Aggressive non-point source control

Mr. Peeler emphasized that it is the sum of all actions taken together which provides reasonable assurance that the River will meet its DO goal and that every pound of phosphorous removed advances this effort. Ecology expects that all phosphorous reduction actions will begin in 2006 and that the current pattern of monthly meetings may continue for the purpose of coordinating these activities. All participants will meet at least annually to report on progress and schedules, review monitoring data, coordinate with other factors (FERC/Avista), and consider possibilities for useful studies and investigations. In addition, at least every five years, Ecology would conduct significant evaluations to consider MIP status and any minor revisions. After ten years, the MIP will undergo a major evaluation. Several questions to be addressed at this time include:

- How is the River responding, especially with regard to DO?
- What is in place, what's left to do, and what works and what doesn't work?
- What have we learned, how does the best science guide us, what new efforts show promise of improving DO?
- Should we revise the MIP and/or the goal?

Technology improvements at permitted discharges will produce the largest improvements in DO, making these upgrades the highest-priority actions within the MIP. The establishment of a rigorous selection process is a critical first step in implementing technology upgrades and while this process may benefit from common standards and methods, technology decisions will be made on an individual basis for each NPDES permit-holder. Ecology believes that one-year interim permits are appropriate to allow facilities to gain experience and stabilize their operations. Ecology understands that the timing of permit issuance is critical for providing certainty for permit holders and anticipates a thorough and swift decision-making process. Ecology also wants to collaboratively explore ways to set permit levels that are routinely achievable, as well as provide incentives to push treatment operation to optimum levels. Wayne Frost commented that Inland Empire Paper Company demonstrated through its pilots how quickly a treatment technology can be selected, however, it may take more than a year of operation to determine final limits. Dave Peeler replied that Ecology can address these situations as they arise.

Ecology considers conservation an important element in a successful MIP and will look to develop unifying characteristics amongst all conservation programs, with each program tailored to its host jurisdiction. Ecology agrees that the LOTT program, which spends wastewater revenue on conservation to avoid the costs of new treatment capacity, is a good model to follow. Ecology supports indoor and outdoor conservation and will use its authority to help efforts that discourage waste.

Ecology views reuse as a vital component of the MIP. Reuse is in highest demand during the months of greatest concern for the Spokane River and its effectiveness is more certain than non-point source controls. Ecology encourages treatment facilities to create Class A reclaimed water, which is suitable for all reuse opportunities, year-round. In addition to reuse, dischargers should also consider aquifer recharge as a reuse strategy. Ecology will support funding for reuse planning and expects that reuse and Class A reclaimed water production will be included in the technology selection process, in facilities plans, and general sewer plans and receive aggressive funding from the dischargers.

Septic tanks contribute a significant loading of phosphorous to the Rathdrum Prairie aquifer. Septic wastewater should be treated to a higher level, but should also be recognized for its current aquifer recharge role, albeit with a lower quality water. Ecology would like to further examine the use of strategic recharge to offset reduced flow to the aquifer as septic tank elimination is implemented. Todd Mielke explained that Spokane County is moving forward with the conversion of approximately 10,000 septic tanks over the Aquifer Sensitive Area and continues to install infrastructure for this purpose. It is anticipated that the main line of this sewer system will be completed by 2010, with a two to three year timeframe to complete these sewer hook-ups once the main pipeline is in-place. Mr. Mielke raised the matter of trailer home parks and the fact these systems are legally exempt from septic tank elimination if they are not failing. If they do connect, trailer home parks are not required to pay a general facilities charge, however, Spokane County could use some assistance from Ecology in how to address this situation. Mr. Peeler responded that due to most trailer home parks' status as low-income housing, Ecology may be able to address the exemption with some innovative financial solutions. Albert Tripp asked whether land applied water would be attributable to individual dischargers. Mr. Peeler responded that Ecology is encouraging Class A water production so that as reclaimed water is applied to land, it is of such high quality that it will not be seen as a significant pollution contribution to the River system. Tom Agnew asked whether funds dedicated to septic tank elimination would also include septic tank programs in Kootenai County. Stan Miller responded that this funding applies to Spokane County only. Sid Fredrickson commented that Kootenai County is 95% sewered, but many unregulated septic systems exist on the south side of the Coeur d'Alene River to the state line. Lars Hendron added that data was gathered for septic tanks around Lake Spokane. Dave Peeler acknowledged that some areas have not been inventoried for distribution of septic systems and grants are now being requested to fund these initiatives.

With respect to non-point source contributions of phosphorous, Ecology accepts that there may be controllable non-point sources and would like a non-point source plan available immediately for review. As soon as suitable elements of the non-point source plan are ready, efforts should begin. Ecology will seek legislative authorization for $333,000, one third of the plan cost. The Spokane Conservation District should play a key role with planning and implementation of all NPS efforts. If controls are shown to be ineffective, funding for a non-point source program will be reduced; if proven to be very effective, funding may increase. Sid Fredrickson noted that Coeur d'Alene remains optimistic that they can contribute to at least one major non-point source activity, especially since Idaho's current regulations do not allow land application of reclaimed water over the Aquifer Sensitive

Area. Mr. Fredrickson also spoke to a 1990-91 study by the US Geological Survey that showed a net reduction of phosphorous and nitrogen going into Lake Coeur d'Alene. There is no agreement yet on a Lake Coeur d'Alene Management Plan, however one is expected and should direct future implementation of reduction controls in Lake Coeur d'Alene and its outflow. The trading concept may offer more opportunities for Coeur d'Alene to participate in a non-point source program. Rick Eichsteadt asked for more information on Ecology's view of dishwasher detergent and fertilizer. Mr. Peeler responded that the removal of this source of phosphorous could provide a significant contribution to the mix of reduction strategies. Ecology supports the immediate adoption of regional bans of phosphorous in dishwasher detergent and fertilizer, but is yet uncertain about their support for a state-wide ban.

Ecology supports the recommendations of the Collaboration's Monitoring Workgroup and proposes to pay half the cost of a monitoring program. An effective monitoring program would include the following elements:

- Enhanced river trend monitoring
- Effectiveness monitoring especially for non-point source efforts
- Efforts to assure usable, good quality data
- Proposing and managing studies to better understand the River and enhance the model
- Clearing house assuring models produce good information

Ecology supports quality, coordinated public education and information. Each Collaboration participant will have important individual messages to deliver to the public, but the Collaboration will also require consistent messages and coordinated information. Once the MIP is drafted, it will require some explanation to the public and, in turn, an informed and engaged public will contribute to the success of the Collaboration.

With regards to a new Spokane County treatment facility, the Sierra Club identified several issues in their scenario related to the permit of a new discharge. Ecology's response to these concerns is that they will abide by state and federal law and believe that every action taken by a new Spokane County plant should improve the Spokane River. Possible keys to permitting a new plant for the County include that the plant demonstrably improves the River and/or the new plant promptly enables a new action front (such as reuse).

Mr. Peeler spoke to Ecology's view of regional growth, as it relates to the goals of the Collaboration and an MIP. Ecology is primarily concerned with the volume of pollutants discharged (phosphorous and chemical biological oxygen demand), not the volume of water discharged. Growth of the region's wastewater systems is not perceived as an issue of concern if meeting the goal for DO in the Spokane River is "reasonably assured" through managed use of treatment technology, water conservation, effluent reuse, and non-point source control. Mr. Peeler reiterated that it is the sum of actions amongst the Collaboration, as the MIP is envisioned and started and over its 20 year lifespan, which must reasonably assure the achievement of water quality standards.

Mr. Peeler displayed a chart representing how various sources of phosphorous loading to the Spokane River could change over time. The point source area of the chart depicts rapid reductions of phosphorous over a six-year period, representing the dischargers' adoption of advanced treatment technologies. Further decreases in point source phosphorous loading shown in the 10-20 year "second" period of the MIP do not necessarily represent the application of new treatment technologies, but could come from further enhanced reuse or conservation efforts. Mr. Peeler noted that phosphorous loadings attributable to natural background conditions could also decrease over time.

Non-point source control activities are expected to contribute steady reductions over the course of the MIP, and should commence immediately. The non-point source area of the chart includes reductions of phosphorous loading from the two tributaries, the Little Spokane River and Hangman Creek, that account for 50% of non-point source reductions over the MIP's 20-year timeframe. Throughout the MIP process, Ecology will act on all reasonable fronts, understanding that the precise outcomes of various reduction activities are unknown. Ecology will monitor for improved DO levels and pounds of phosphorous reduction and work with parties within the MIP to focus on proven and promising reduction activities. After ten years of the MIP, Ecology and the dischargers will collaboratively examine their collective strategies to meet reasonable assurance of water quality standards and, based on these findings, continue along the same path, change their approaches, or modify expectations behind the TMDL.

Bill Ross asked the Full Group members whether Ecology's presentation appeared to provide the Collaboration a reasonable path forward. Full Group members expressed agreement that Ecology's outline of an MIP is a good framework to an agreement and draft TMDL Implementation Plan. Wayne Frost asked for Ecology's stance on aeration in Lake Spokane or the Avista dam's tailrace. Mr. Peeler responded that Ecology is not opposed to oxygenation and that Avista's proposal may be a good action to improve DO levels in Lake Spokane. However, more information is needed and initial phosphorous controls should be in place before a determination is made on the role of aeration/oxygenation. Tom Agnew commented that Liberty Lake will soon operate its new plant up to 1 MGD in capacity and is interested in working with Ecology to determine how it can gain approval for an additional 1 MGD of capacity. Dick Denneny expressed an interest in learning more about Ecology's views on reuse and gathering enough detail on the contents of an MIP to begin allocating funds to specific programs. Rick Eichsteadt commented that the Sierra Club is interested in further discussion of the conditions for a new Spokane County plant. Chris Butler commented that the Spokane Tribe of Indians would be prepared to discuss some government-to-government matters with Ecology after the New Year. With these comments collected, the section on Ecology's response to the scenarios concluded.

Discussion of the Workgroups' Status

The Full Group discussed the current status of the Workgroups and whether they should now be considered in "standby" mode. Todd Mielke and Dave Peeler commented that the Workgroups' purpose was to gather and examine data under specific areas, guided by the Fundamental Questions. This work is now complete with no specific Workgroup assignments at the moment. The Full Group may decide to reactivate the Workgroups for specific matters in the future. Dave Peeler added that the Full Group will need to consider who is most appropriate to participate in these future Workgroups for the purposes of the agreement.

Full Group members discussed more recent activity surrounding treatment technology and agreed that it is not productive at this time for the Collaboration engage in a discussion of technology data and statistics. The Collaboration is in general agreement on the approach to treatment technology using pilots and interim limits. Todd Mielke commented that the dischargers developed an independent review of exemplary treatment facilities and, at the direction of the Steering Workgroup, shared this information with the Technology Workgroup. Dave Peeler stated that consistent with the dischargers' report findings, different plants around the country do seem to perform to meet their permit limits. Mr. Peeler has solicited feedback from several state regulator colleagues from around the country to corroborate this notion. Tom Eaton commented that EPA is also developing their own report on treatment technologies for phosphorous reduction, as this is an issue of importance for several watersheds in the region. EPA anticipates its report will be completed in the next two to three months

and encouraged the Collaboration to move forward, independent of its release. Rick Eichsteadt noted the importance of developing protocols for piloting technology and the Full Group concurred, agreeing that a workgroup will be assembled to guide the process for selecting technology after an agreement is made.

The Full Group thanked all Workgroup participants for their important contributions to the Collaboration.

Update on EPA's Activities Related to the Collaboration

Tom Eaton presented an update on EPA activities related to the Collaboration. Mr. Eaton explained that EPA has three basic responsibilities in relation to this TMDL for the Spokane River: to review the TMDL, to review NPDES permits issued by Ecology in Washington, and to issue NPDES permits in Idaho. With respect to the responsibility for issuing permits for Idaho dischargers, EPA will take a "do no harm" approach, based on a 0.2 mg/L variance from the background DO conditions in Lake Spokane, applied at the state line. This translates to treatment levels of 40 to 80 μg/L for the Coeur d'Alene and Post Falls treatment facilities. Hayden will not discharge to the River during the summer months and will treat its effluent to approximately 500 μg/L during the "shoulder" season. EPA will conduct further model analysis for Idaho dischargers using this natural background assumption and is also working with Ecology to recalibrate the Washington TMDL model to the state line, rather than at Lake Coeur d'Alene. Larry Esvelt commented that in addition to separating at the state line, the model should also be adjusted for flows. Dave Peeler agreed with this assessment and suggested that a model certification group work on this task, perhaps in conjunction with a future Monitoring Workgroup. Tom Agnew asked how natural conditions are defined on a River so modified by human activity. Mr. Peeler responded that the model needs to simulate natural conditions to the greatest extent possible and will require clearer definitions. Dave Peeler thanked Tom Eaton and EPA for working with Washington and Idaho for a common solution.

Discussion of Public Education and Information Activities

Todd Mielke spoke to several current and future public education efforts related to the Collaboration's activities:

- Two town hall meetings and a press release on the ban of phosphate dishwashing detergent. The town hall was video-taped and was re-broadcast six times.
- Ecology, Avista, Spokane County, Inland Empire Paper, and the Lands Council are drafting an insert about the Collaboration to be distributed in utility bills.
- Mike Peterson is participating in drafting an op-ed piece for the newspapers.

The Full Group discussed direction for the Collaboration's public education and outreach efforts. Mr. Mielke commented that money is a limiting factor for future public education and quoted costs for two proposed public education activities: an improved educational video for local distribution is estimated at $8,000; a website aimed at educating the lay-person that would consolidate existing information to be handed-off to the Collaboration's governing entity is estimated at $2500. Dave Peeler commented that the Collaboration has not yet discussed the administrative arrangement for the next ten years, including education and outreach. Ecology is ready to participate in this conversation. Todd Mielke also suggested that multi-jurisdictional meetings be convened to educate elected officials across the region. Town hall meetings may also be a good strategy to get the public involved in the problems and solutions surrounding the Collaboration. Jani Gilbert introduced Brook Beeler, an environmental educator at Ecology, who may be able to assist in education efforts around conservation and non-point source control. Rick Eichsteadt commented that the Sierra Club is also ready to participate in public education efforts, pending the outcome of an agreement.

Next Steps and Future Schedule

The Full Group discussed the Collaboration's next steps and path forward. The Steering Workgroup suggests two meetings in January: one on January 12, from 8:00 a.m.-1:00 p.m. and another on January 25, from 9:00 a.m.-2:00 p.m. Ecology will prepare a more detailed outline of its proposed MIP for the Full Group meeting on January 12 and provide a copy of its product to the Full Group in advance. Dave Peeler suggested the Full Group consider specific pieces of the MIP at each of its January meetings. Full Group members may provide any suggestions for topical discussions for the January 12 meeting to Ross & Associates. Larry Esvelt asked if the environmental and public reviews of these documents could be coordinated. Mr. Peeler commented that Ecology would prefer that the revised draft TMDL and the permits agreement come together at the same time as the draft Idaho permits. Ecology has many standard public review requirements that differ from EPA's process. Ecology is hopeful these reviews can be brought into closer alignment through the TMDL process.

The meeting concluded at 2:05 p.m.