

Spokane River TMDL Collaboration

Full Group Meeting

January 25, 2006, 9:00 a.m.-12:00 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

Tom Eaton, US EPA-Region 10

Rick Eichsteadt, Sierra Club

Sid Fredrickson, City of Coeur d'Alene

Mike Petersen, The Lands Council

Bruce Howard, Avista

Doug Krapas, Inland Empire Paper (for Wayne Frost)

Todd Mielke, Spokane County Commissioner

Dave Peeler, WA Dept. of Ecology-Olympia

Robert Steed, ID Dept. of Environmental Quality (for Gwen Fransen)

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 at 9:10 a.m. and reviewed the day's agenda. The Department of Ecology will present its Water Quality Managed Implementation Plan Proposal to the Full Group to be followed by a discussion of this document. Tom Eaton, of EPA Region 10, will then address the Full Group with an update on EPA activities related to the Collaboration. Lastly, the Full Group will review the Collaboration's next steps and future schedule.

Bill Ross described Ecology's draft Water Quality Managed Implementation Plan (MIP) Proposal as a work in progress towards a draft TMDL Implementation Plan. Collaboration participants are currently engaged in a joint learning process designed to create a path forward towards an agreement and TMDL Implementation Plan that will provide reasonable assurance of achieving water quality standards. As the Collaboration aspires to address 20 years of effluent management, at times with approaches that are more non-traditional, it is anticipated that some of the concepts within Ecology's MIP Proposal will be clear to some Full Group members, while requiring further clarification for others. This need for additional clarification is a normal part of the joint learning process attempting to devise a comprehensive solution for the regional community and the Spokane River.

Co-Chair Todd Mielke remarked that the Full Group anticipated it would need to summarize its work at a certain point; the goal for today's meeting is to begin focusing on a document that will serve as a basis for an agreement. While differing views may present themselves, the conversation about various concepts within Ecology's MIP Proposal will continue. Co-Chair Dave Peeler commented that Ecology

attempted to assemble their proposal in a logical manner. The outline contains a lot of detail and many sequential steps. Given the constraints of time, Ecology has found it challenging to capture these concepts in a written form, and some further refinement of this draft will be needed. The version of the draft MIP distributed on January 24 was found to have some typos and grammatical errors; non-substantive changes were made and this revised version will be re-distributed in hard-copy at today's meeting and posted to the Collaboration website. In addition, Mr. Peeler noted that over 100 pages of appendices are not included with this hard-copy, but may be accessed electronically on the Collaboration website or from a compact disc that Ecology will provide upon request.

Presentation and Discussion of Ecology's Proposal Outline

Dave Peeler distributed copies of the draft MIP Proposal to the Full Group and briefly described their approach to this document. Mr. Peeler disclaimed that this MIP Proposal does not represent a "line in the sand" as to where the Collaboration process moves from this point forward, but is a draft that represents Ecology's "best shot" at responding to the scenarios presented at the November Full Group meeting and describes a framework that could provide reasonable assurance to meet water quality standards for the Spokane River.

The MIP Proposal speaks to a goal for water quality standards based on the draft TMDL and a series of actions designed to achieve this goal as soon as possible and for up to 20 years. The actions described in the MIP Proposal build on upon several foundational elements in a logical fashion. The first of these elements, "Point Source Tools", describes a process for technology selection and installation. The MIP Proposal assumes that a majority of point source phosphorous reductions will be implemented within the first six years of an MIP to achieve the lowest effluent phosphorous discharge possible. The group of dischargers will make significant financial commitments to establish advanced treatment technology upgrades and Ecology will not ask dischargers to commit to significant new technology within the useful for life of these upgrades, which are determined to be 20 years. However, it is not certain what new technologies or add-ons there may be in the future. If dischargers are not meeting their goals and there is a reasonable and effective technology available, this position on new technology could change.

Appropriate interim and final discharge limits will be established after facilities have completed pilot operations. With these permits issued, the dischargers will then rely on a "toolbox" of actions to strive towards the TMDL reduction goal, including reclamation and reuse, water conservation, enhanced pretreatment programs, infiltration and inflow reduction, and non-point source phosphorous reduction. In addition to an effluent limit, final permits for each discharger will describe their individual and collective commitments to action under these various toolbox elements. Due to the uncertain nature of reductions resulting from these toolbox actions, dischargers will be held accountable to specific actions rather than the actual phosphorous reduction results from these actions. Reasonable assurance will be met through a combination of technology performance and commitments to actions within the toolbox.

A regional entity, in cooperation with Ecology, will administer the funding and evaluation of the MIP's progress and the Spokane County Conservation District will manage the implementation of any planned NPS commitments throughout the watershed. Annual check-ins and bi-annual public workshops/symposiums will provide an opportunity to review the progress of discharger commitments and any new scientific data to distinguish the effectiveness of the various MIP elements. A major review of the MIP approach will be instituted after 10 years to determine whether the TMDL goal can continue to be achieved by the current actions, or if additional actions need to be taken, or if the phosphorous reduction goal and/or DO level in the water quality standards should be revised.

Full Group members offered the following questions and comments on Ecology's proposal:

- Todd Mielke commented on what he saw as an inconsistency in the way the phosphorous removal target is described. In one place, the MIP Proposal says that once the River system's phosphorous concentration reaches 10ug/L, permitted phosphorous discharge limits will move from a pound measurement to a concentration measurement. In another instance, the MIP Proposal speaks to reaching the target through use of the toolbox to remove pounds of phosphorous. Dave Peeler acknowledged that this language is confusing and explained that Ecology was attempting to account for the possibility that individual dischargers could meet a 10 µg/L phosphorous effluent concentration through the application of advanced treatment technology alone. It is more likely that dischargers will apply treatment technology and then use other tools to manage a "delta" between their discharge and the overall target, perhaps at times as a group. The ultimate goal of the MIP remains to reduce the total phosphorous load to the River.
- Mr. Mielke commented on a description in the MIP Proposal of Spokane County's facility as a "new source". The County is in the process of converting septic tanks to a sewer system, a program the County began 20 years ago. Mr. Mielke asked whether this situation constitutes a new source for new growth, or rather is a converted source attempting to achieve better water quality in the Spokane River. Mr. Peeler replied that Ecology is supportive of the septic conversion program, as this will reduce phosphorous loads to the River. While some of this converted flow would otherwise be accounted for as a non-point source, some is seen as new loading to a County plant. This potential determination of the County's plant as a new source does not preclude them from using other elements of the toolbox, such as reuse, pre-treatment, conservation, etc.
- Rick Eichsteadt and Todd Mielke both asked for clarification of the MIP Proposal's discussion of a 10-year MIP review. Mr. Peeler referenced section five of the Proposal that discusses a 10-year MIP review considering the results of individual and collective actions around technology performance and commitments to toolbox actions, as well as monitoring data, results from special studies, and the potential role of oxygenation. New information from monitoring activities and studies will enhance the TMDL model and the use of this model for periodic check-ins and within a rigorous scientific and technical review after 10 years will help clarify future steps to address water quality for the next 10 years of the MIP.
- Mike Petersen asked whether Ecology will use the current piloting efforts of Inland Empire Paper and the City of Spokane to set effluent limits. Dave Peeler replied that no determination has been made on whether these pilot programs could contribute to future permitting decisions. Ecology has not yet reviewed the engineering reports from the various pilots and would need to see these from each discharger within the context of a wastewater management plan before making such a decision. Upon review of the methods and data from a pilot, Ecology can provide feedback on whether more information is needed. Wastewater management plans developed by dischargers and submitted to Ecology will be made available for public review and must be approved, disapproved, or appropriately conditioned by Ecology. Ecology has not yet described this process for the purposes of the MIP and will need to do so. Jack Lynch commented that the City of Spokane will provide the results of their pilot program to Ecology.
- Tony Delgado asked how the MIP Proposal addressed increases in phosphorous loadings due to population growth. Mr. Peeler responded that population growth was factored into the flows submitted by the group of dischargers in their scenario. The chart on page 4 of the MIP Proposal displays estimated sources of phosphorous loading to the Spokane River. This chart

anticipates that during the first five years of implementation, before advanced treatment technologies are at optimal performance and final permit limits are set, there could be some variability in overall phosphorous loading, including potential load increases as septic tanks are converted to sewer systems. However, Ecology expects total loads to decrease during this period through immediate use of toolbox elements. The MIP Proposal also suggests that Ecology work closely with communities that are currently unsewered, which may further mitigate phosphorous loading from potential growth in these areas.

- Jim Kimball asked about the MIP Proposal's suggestion of the goal of 0.2 pounds of phosphorous assigned to Idaho dischargers. Dave Peeler commented that this goal comes directly from the current draft TMDL. The MIP Proposal discusses the potential need to revise the TMDL once EPA issues permits to the Idaho dischargers. EPA and Ecology have an understanding that at some point it may be appropriate for Idaho NPDES permits to be adjusted, should these discharges contribute to a failure to reach the TMDL goal.
- Dave Peeler commented that he has had two conversations with the Spokane Tribe about their water quality standards and resources. There is a sink for nutrients and low DO, as well as temperature violations, in Lake Spokane below the Long Lake Dam. The MIP is concerned with managing and monitoring for both Washington State and downstream tribal water quality standards.
- Rick Eichstaedt asked for clarification on how Ecology intends to capture and incorporate combined sewer overflow (CSO) implementation and phase 2 stormwater permit data into a 10 year MIP review. Mr. Peeler responded that the CSO reduction target date for the City of Spokane is 2017 and would fall just after year 10 of an MIP. This timing does not imply that the City of Spokane would not take action to address stormwater until 2017; just as is the case with other toolbox elements, Ecology expects commitment to action on CSO reductions. Stormwater monitoring is currently difficult, often impractical, and supported by insufficient science. Stormwater permits are now out for public comment and will not require monitoring in their first cycle, but will consider monitoring at a later date. Ecology proposes that the traditional NPDES permit monitor the quality of the discharge, and that a state-municipality partnership determine how to best monitor stormwater discharges before implementing a program.
- John Spencer commented that he assumes Ecology supports permitting rapid infiltration as an element of reuse. Dischargers will need to partner with Ecology to help to define a reuse plant and aquifer infiltration strategy and to market these ideas to the regional community. Dave Peeler responded that Ecology will encourage Class A water production for reuse activities, but does not currently say how this water should be used. The granting of a permit based on significant reuse is difficult for Ecology to judge until a specific proposal is made. In the past, Ecology has partnered with several communities around the state to assist with the implementation of reclaimed water activities. Due to the pressure on pollution reduction in this region, as well as a limited water supply, there is good potential to do something similar with this community. Mr. Peeler also announced that legislation was introduced in Washington that would attempt to simplify state reclaimed water regulations and create a partnership with the state Department of Health to ensure reclaimed water is used safely.
- Mike Petersen commented that it would be helpful to have a flow chart to visually describe the MIP Proposal's dense timelines and ensure there is some flexibility in the toolbox and adaptive management approach. Mr. Peeler responded that the MIP Proposal's appendixes include a Gantt chart displaying the various phases for each of the dischargers. The outline and chart were Ecology's first attempts at identifying each of the steps in the MIP process and could be modified to reflect a greater level of detail and minor shifts in timing. Timeframes present a

management challenge as Ecology's must balance MIP progress with practicality for the municipalities.

The Full Group Co-Chairs suggested Collaboration participants provide written comments to Ecology regarding specific language in the MIP Proposal that could benefit from greater clarity, as well as sections that may contain too much detail, or not enough detail. The goal of the comment exercise is for Full Group members to converge on the foundational concepts of a MIP within a single document. By soliciting comments, Ecology is not expecting redlined versions of the document but written comments should reference page numbers/outline sections and the related pieces of language within the MIP Proposal. Written comments should be submitted directly to Dave Peeler via email (dpee461@ecy.wa.gov) with the subject "Spokane MIP," no later than close of business, Wednesday, February 8. Ecology will compile a summary of all comments, as well as create a new version of the MIP Proposal; both will be distributed prior to the next Full Group meeting and posted to the Collaboration website. Over the next several weeks, Ecology will also conduct consultations with each of the dischargers and others to gather direct feedback on the contents of the MIP Proposal. Todd Mielke described his position as a member of a coalition of municipalities that will need to share the substance of an MIP with his elected colleagues before reaching an agreement. The MIP document will need to have enough detail to describe the implementation processes to those who have not been involved in the Collaboration discussions up to this point. Mr. Mielke suggested that the more specific Full Group members could be in making references to the draft MIP Proposal document in their comments, the closer the Collaboration will be to building the consensus necessary to move forward with sharing these foundational concepts with regional elected officials.

Update on EPA's Activities Related to the Collaboration

Tom Eaton provided an update on EPA's most recent activities related to the Collaboration. Mr. Eaton explained EPA's role as the permitting agency for the Idaho dischargers in Coeur d'Alene, Post Falls, and Hayden, and its role in reviewing water quality standards for Washington State and the Spokane Tribe of Indians. EPA has used the TMDL model for the purpose of developing permit limits for Idaho dischargers. In their run of the model, EPA considered the natural conditions for the Spokane River. Washington point source discharges and non-point sources were removed to ascertain the phosphorous limits that Idaho dischargers would need to achieve as to not contribute to degradation of the natural DO condition of the Spokane River by more than of 0.2 mg/L (considered a measurable decrease in DO). After modeling several scenarios and applying an equitable distribution of discharge levels across the Idaho permittees, the results suggested the following scheme for permit limits: Post Falls and Coeur d'Alene will be limited to an effluent phosphorous concentration of 50 µg/L; Hayden will discharge 95% of their effluent in the "shoulder" season at 400 µg/L and be completely out of the River in the critical summer months. The model shows that using these numbers in the months of concern, Idaho dischargers would contribute less than 0.2 mg/L degradation of DO, measured at the state line.

Permits for Idaho dischargers have been expired for over a year. EPA will aim to draft these permits by August, at the latest, for issuance in the 2006 calendar year. EPA Region 10 continues to work with the EPA General Consul to ensure the permits they issue are consistent with EPA's interpretation of water quality regulations. If the aforementioned permit levels for Idaho dischargers contribute to future water quality impacts in the Spokane River, EPA will re-evaluate these permits and work with the Collaboration process as it does so. Under Clean Water Act §401, certification for these permits is provided by the State of Idaho, who are responsible for establishing a schedule and interim limits for Idaho dischargers. EPA encourages that this certification process occur at the same time for each discharger so it is clear that these permits are coordinated in relationship to a regional effort.

John Spencer asked whether water quality standards were achieved in Lake Spokane when EPA ran the model. Tom Eaton replied that he was not aware that EPA asked the model this particular question. The model run demonstrates that the aforementioned scenario does not degrade the Washington water quality standards at the state line. Mike Petersen commented that it appears EPA has applied all potential DO change in the Spokane River in Idaho discharges, and are therefore not allowing any of this change to take place in Washington. Dave Peeler commented that when Ecology performed its modeling to establish the TMDL goal, all Washington and Idaho point sources, as well as Washington non-point sources, were removed to establish natural background conditions. Washington non-point sources alone were found to contribute to a 0.2 mg/L DO degradation, driving the 10 µg/L goal in the draft TMDL. Ecology will now need to run the TMDL model again, including these new Idaho discharge limits, to determine if there is any affect upon the approach to Washington sources. Mr. Peeler's opinion is that these contributions are unlikely to make much of a difference in Lake Spokane's water quality. Mr. Spencer followed with the question of whether the EPA model run revealed the number of pounds of phosphorous present at the state line. Mr. Eaton replied that this number can be derived from the estimated concentrations at the state line and that EPA and Ecology will coordinate to produce this specific data from future model runs.

Todd Mielke commented that Ecology's proposal includes efforts to better understand the relationship between non-point sources and the aquifer and asked whether EPA had made any consideration of monitoring for Idaho non-point sources that may reach the Spokane River after the state line via the aquifer. Mr. Eaton was not aware of any such efforts and confirmed that non-point sources for Idaho were not included in their model runs. If controllable non-point sources are both identified and controlled, and these controls reduce Idaho's overall loadings, dischargers in Idaho could potentially receive credit for these actions in future model runs. Then, as the model is potentially re-baselined and the TMDL adjusted accordingly, dischargers in Washington would only be responsible for non-point sources in their state. Dave Peeler clarified that the Ecology proposal does mention groundwater monitoring, but was focused on the Spokane Valley; he assumed that monitoring at the state line is also possible.

Rick Eichsteadt asked how Idaho discharges could affect downstream tribal water quality standards. Tom Eaton replied that EPA has not extended their model to the pool beyond the Long Lake Dam that the Spokane Tribe and Ecology discussed. The seven percent phosphorous contribution from Idaho dischargers will be reduced and should not cause a 0.2 mg/L DO degradation.

Jim Kimball shared his concern over the potential for complications with the anti-backsliding provisions of the Clean Water Act. Tom Eaton replied that he was not prepared to address anti-backsliding at this time. Bob Steed indicated that Idaho DEQ has not yet come to any conclusions on permit limits.

Collaboration Next Steps and Future Schedule

The Full Group discussed next steps and a future schedule based on the day's proceedings. As discussed above, Ecology will solicit comment on its draft MIP Proposal in attempts to clarify specific elements of the written proposal. Instructions for comment will be distributed to Collaboration participants and the draft MIP Proposal posted to the Collaboration website. A date for the next Full Group meeting will be announced once calendars are surveyed and a date is determined. The next Full Group meeting will address the revised draft MIP Proposal and the convergence or differences on foundational concepts from the comments submitted to Ecology. Ecology will consult with each interested party as to their path forward and coordinate with EPA to gather data from model runs for Idaho dischargers. As the foundational concepts of an implementation plan and agreement achieve consensus, there will be a need to conduct outreach with regional elected officials. Co-Chair Dave Peeler added that if Ecology can run the TMDL model with EPA's outputs, they will make this available to Collaboration participants as soon as possible. Co-Chair Todd Mielke agreed on these defined next steps.

Rick Eichsteadt announced that the House Natural Resources Committee would be hearing public comment on House Bill 2322, concerning state-wide limits on phosphorous in dishwashing detergent, on Friday, January 27 at 1:30 p.m.

Bill Ross thanked the Full Group members for their participation and adjourned the meeting at 11:55 a.m.