

Spokane River DO TMDL Implementation Advisory Committee Meeting Minutes: November 3rd, 2010

Committee Members and Alternates: Dale Arnold, Galen Buterbaugh, Mike Chappel, Rick Eichstaedt, Speed Fitzhugh, Brenda Grassel, Terry Harris, Doug Krapas, Bud Leber, Laurie Mann, Lee Mellish, Todd Mielke, David Moss, Dan Redline, Terry Werner, Ken Windram, Kris Holm (phone), Laurie Mann, Mike Neher, , Tom Agnew.

Observers: Claire Schary, Paul Klatt (Phone), Sarah Hubbard-Gray (phone), Pat Hallinan, Marcie Mangold, Elaine Snouwaert, Steve Llewellyn, Ben Brattebo, Tom Herron, Terry Cromwell, Grant Pfeiffer, Sandra Jarrad, Jim Ross, Rebecca Stevens, Lars Hendron, Rob Lindsay, Keith Johnson, Jim Bellatty, Mark Esvelt, Ginny Darrell, Neil Kersten, Meghan Lunney.

Ecology TMDL Staff: Dave Moore, Kelly Susewind, Helen Bresler, Melissa Gildersleeve, Tony Whiley.

Spokane River Forum Staff: Andy Dunau, Tonilee Hanson.

Welcome and Introductions: Andy Dunau welcomed participants to the meeting, each of whom introduced themselves.

All meeting materials, including those referenced in these minutes, can be found on-line at <http://www.spokaneriver.net/?p=3648>. For anyone having difficulty printing out the schedule of activities, Andy will e-mail file in Excel.

Updates:

WA Permits: Draft NPDES permits for Spokane's Riverside Park Water Reclamation Facility, Inland Empire Paper, Kaiser Aluminum, and Liberty Lake Sewer and Water District were released. A public workshop and hearing is scheduled for November 10th, and the comment period is open until November 17th.

Definitions Added: Definitions were added for the draft Washington State Trading Framework guidelines.

Updated Schedule: The TMDL implementation schedule passed out at previous meeting was updated. Dave clarified that this is a high level overview and does not take the place of specific updates re permit timelines and other items.

Meetings between IDEQ/Ecology/EPA. These agencies are continuing to meet to address issues related to quantifying and qualifying transboundary trades.

ID/EPA Settlement Conference on 10/29. Settlement discussions re Idaho's lawsuit occurred on 10/29 in Seattle. Agreement was not reached and parties are considering their positions. Direction of discussions, or whether another settlement meeting will be held, is not known. The content of discussions is subject to confidentiality. Laurie Mann will try to provide list of meeting participants.

What Will Be Considered a Trade?

Helen Bresler led a discussion to further consider what will be considered a trade. Key Points:

- We're thinking there will be three kinds of trades for the Spokane watershed: 1) between two point sources with the currency being phosphorus; 2) within a single entity at a single plant at the same discharge point with the currency being phosphorus, ammonia, or CBOD if equivalency can be shown; and 3) between a point source and a nonpoint source with the currency being phosphorus,
- In Idaho, because the Idaho dischargers were not given wasteload allocations, changing the amounts of phosphorus, ammonia, and CBOD discharged will not be considered trading as EPA issues the permits. After permits are issued, any adjustments would be trading.
- Because the TMDL only addressed total phosphorus, assigning a new wasteload allocation based on bioavailable phosphorus will require a TMDL amendment.
- Trading may be used after technology efforts are maximized. Final permits define what is expected to be achieved with technology.
- The committee will help develop the framework, but it's Ecology's responsibility to implement.
- Ecology is committing people and resources to enable trading to work within the context of permitting needs. The current time line is to complete trading framework in one year to address the permit schedule.
- EPA, not Washington, will establish permit and allocation for Idaho. Idaho optional entry into trading will be based on that outcome.
- Although adjustments to ammonia, total phosphorus, and CBOD at a single plant are considered a trade, it is a simple trade that can be accomplished through establishing equivalency and capturing this in the NPDES permit.
- Point source to point source trading assumes one entity can over control for phosphorus at their discharge point and, therefore, can sell a credit to a point source that can not meet their allocation.
- Ecology is willing to consider creating a bubble that would allow dischargers to aggregate limits on ammonia, total P, and CBOD to meet permit requirements. Clarified that such an arrangement would:
 - Only be considered for point source to point source trading
 - Need to segregate (define) liability if one entity fails to meet their limit.Use of bubble for single or group of Idaho dischargers is an EPA permit issue.
- Point Source to Nonpoint Source:
 - Nonpoint source generates credits through the implementation of BMPs.
 - The credit is quantified through ratios (later discussion) that define impact in the effected reservoir.
 - Although a credit can be given for a specified time period, monitoring and measuring effectiveness may change value of the credit when time period ends.
 - Liability for ensuring that the BMP is achieving required pollutant reduction is with the point source.
- Within a single entity:
 - If a single entity intends to use a point (e.g.—storm water drain) or non-point source (e.g.—septic tank elimination) to meet discharge point allocation/permit requirement, this is considered a trade (or offset) and should go through the trading framework for quantification, qualification, monitoring, enforcement, etc.
 - Similarly, the trading framework would be used if one municipality needing a credit contributes to another municipality's infrastructure project, e.g.—if Suncrest built a sewer project that removed/reduced septic tanks.
 - One way to think about this is that once an entity goes beyond the pipe to meet permit requirements, it should be accounted for in the trading framework.

- It's a permit issue if something like water conservation is being used to limit end of pipe discharge.
 - Trading vs. offset terminology is largely semantic. Trading requirements will not contradict current regulations for offset.
- In general, monitoring and enforcement can be difficult without a clear point source. Similar concern for non-point sources. For a bubble, for instance, how do you decide who is responsible for doing more or if the bubble is still a valid phosphorus control mechanism?
- If a bubble is used and standards are not being met in ten years, parties to the bubble would be liable and the agreement between themselves (as described in the permit) should identify their share of the responsibility.
- Ecology will establish monitoring and enforcement measures based on the trade, e.g.—capital project to limit storm water runoff vs. BMP to reduce agricultural runoff.
- Multiple entities can combine and share credits for a single project.

Establishing Phosphorus Reduction Needs Beyond Technology

Dave Moore led discussion. The objective is to gain a better sense of total phosphorus reduction needed and, therefore, where energies can be most cost effectively centered.

Dale Arnold provided City of Spokane feedback. Their current estimates is that technology will assure they meet a seasonal average in the mid - 50s [ppb total phosphorus]. Therefore, permit requirement will necessitate about a four pound phosphorus reduction at the discharge point. The city estimates this can be achieved through a water reuse program that would send 13 million gallons of water to golf courses, parks and other venues.

- Utilizing this option is within an entity and does not require a trade because water reuse can be accounted for within the permit.
- If the city provides water reuse above what is needed to meet permit requirements, this can qualify as a credit and become part of a trade with an entity needing a credit.
- As part of engineering plan, city would assure reused water would not come back as phosphorus through storm water or ground water migration.

Amount needed by Idaho dischargers is still variable because of differences in assumptions and waiting on EPA draft permits. One set of assumptions indicates 1.8 pounds. Assumptions using growth projects articulated in dispute resolution process indicates 3 pounds.

Bruce Rawls from Spokane County indicated their needs are variable. There permits will require compliance from day one, which is an estimated need of 1.6 lbs. The County believes that up to a 20 lb qualification (not yet determined by Ecology) for septic tank reduction can be used as credit. Over time, tweaking of plant operations is also expected to allow for equivalence (offsets between ammonia, total PH and CBDO parameters) to meet 1.6 lbs reduction need.

Doug Krapas from Inland Empire Paper indicated need, depending on variables, of approximately 1 lb.

Bud Leber from Kaiser indicated that pilot technology shows they may be 1 lb under allocation.

Liberty Lake was not available for comment. Dave will follow up with Liberty Lake after the meeting to develop table with numbers for all facilities.

Key Points:

- Without final permits, a number of assumptions are being used.
- It's necessary to establish the general scenario if a trading framework is to be developed in time to be useful for permits. It also means assumptions may change and trading framework needs revised accordingly.
- Ecology will provide a chart showing range of needs as a means to help the committee understand scope of what trading may need to help accomplish.

Identifying Phosphorus Reduction Opportunities for Trading Framework

Kelly Susewind led discussion. He reviewed the chart Maximum Total Available Phosphorus Sources

Key Points:

- Tributaries offer limited available phosphorus reduction during the critical period for when modeling shows reduction is most needed (summer).

- Related allocations for reductions in tributaries must first be met before additional reduction to support permit needs can be credited. There are three potential ways to consider meeting this threshold: 1) wait until allocation percent reductions are met; 2) specify BMPs that must be employed to meet the reduction and give credit for going beyond those BMPs; and 3) establish discount ratios for any BMPs applied prior to meeting percent reduction.
- No percent reductions assumed for groundwater and storm water allocations. Therefore, what can be qualified is immediately available.
- Amount available is based on modeling. For instance, up to 2.4 may be available from storm water in Idaho (Coeur d'Alene). How much can actually be qualified and quantified for the purposes of a trade is yet to be determined. Same consideration relates to BMPs for non-point sources.
- Qualifying and quantifying main stem sources are likely to be easier. Infrastructure projects with clear measurement points are easiest. BMPs for non-point tributary sources are likely to be most difficult.
- Ecology will work on developing standards to assure credit for properly implemented trade will be held until a point in the future where effectiveness of trade can be reviewed, e.g.—worth more or less based on monitoring results.
- The model is “locked in” and will be used as the basis for quantifying the value of credits. The model will be adjusted at the 10 year assessment based on factors that could increase allocation, e.g.-- bioavailability variable; or factors that could decrease allocation, e.g.— storm water issues amplify with development.
- Credit is expected to be extended in correlation to the month the phosphorus reduction is available.
- For storm water, request to consider using storm water permits as a way to create certainty and enshrine enforcement mechanism.
- Considering aeration for Lake Spokane is not considered feasible because you can't treat lake in lieu of reducing phosphorus in the river.
- County recommends focus on Suncrest and Little Spokane options.
- Those interested in recommending phosphorus reduction project(s) are encouraged to submit ideas to Dave Moore as early action step to help prioritize options.

Early Thoughts on How Ratios Will Be Modeled

Tony Whiley led discussion based on PowerPoint presentation and draft discussion paper on location ratios. Ecology requested comments on Tony's paper be sent to David Moore by Thursday, November 18th. Following any modifications to this memo, Ecology will begin modeling work on establishing river location ratios.

Key Points:

- There is a challenge in quantifying ratios when the river is dynamically loaded with point and non-point sources. For modeling, use of river segments will be used to help disaggregate effect of different sources. Suggested that segments already used in PSU model be used as much as possible.
- For point sources, there will be monitoring at each point. For non-point sources, more reliance on modeling, including use of a safety margin, is needed to quantify results.
- The scenario load is based on the base model run.
- Ratios will be adjusted for several variables, e.g.—seasonality, distance to reservoir, tributary, etc.

Next Steps / Future Meeting /Adjourn

- Ecology will create a table showing potential phosphorus reduction needs beyond technology to meet the TMDL wasteload allocations or wasteload assumptions. Total needs will be shown, regardless of whether they are met through trading or another tool.
- Ecology will provide time line showing overlay of trading framework with permits.
- Ecology will define eligible BMPs.
- Ecology will clarify terms and tools for considering “bubble technique” as trading option.
- Ecology will present initial ideas around verification and monitoring.
- Updates will be given on non-point source study and bioavailability study. Noted that UW researcher may be available for BAP update.
- Further clarification will be given on development of ratios/river modeling.

The target date for next meeting is early December. A doodle poll will be sent out to find best available time.

There was also a request for access to comments on draft permits. Ecology will post on their web site, including Ecology’s response to comments; and River Forum will provide notification and link to Ecology web site.

The meeting was then adjourned at 12:00 p.m.