Spokane DO TMDL Nonpoint Source Workgroup Meeting

June 11, 2014 10:15 am - 12:00 pm Dept. of Ecology Building, Spokane

Participants:

Ben Brattebo, Spokane County Llyn Doremus, Ecology Andy Dunau, Spokane River Forum Walt Edelen, Spokane Conservation District Scott Fields, Coeur d'Alene Tribe Charlie Kessler, Stevens Co Conservation District Dave Knight, Ecology Greg Lahti, WSDOT Meghan Lunney, Avista Rick Noll, Spokane Conservation District Amanda Parrish, The Lands Council Lynn Schmidt, City of Spokane Elaine Snouwaert, Ecology Eric Staggs, Lake Spokane Association Karin Baldwin, Ecology

Workgroup Vision, Goals & Operating Procedures: The workgroup agreed to the vision, goals, ground rules, and operating procedures below. Members of the group can ask to revisit the language in the future if need be.

<u>Vision</u>: A collaboratively functioning, task-oriented group that shares information on issues pertaining to nonpoint sources of nutrient pollution in the Spokane River basin, and actively works to reduce those sources.

Goals:

- Identify pathways for quantifying reductions in phosphorus from implementing nonpoint source best management practices.
- Track implementation projects.
- Prioritize and partner on projects to reduce nonpoint pollution.
- Leverage funding, knowledge, contacts, etc. to successfully complete projects.
- Identify empirical data to measure success of NPS reduction.

Ground Rules:

- Set phones to silent
- Only one person talks at a time; don't interrupt or have side conversations
- Everyone participates
- Accept differences of opinion

Operating Procedures:

- Comfortable consensus: All participants can at least live with and group members will support recommendations.
- End meetings with next steps and outcomes.
- Report progress to, and seek input from the Spokane DO TMDL Advisory Group.

Quantifying Nutrient Reductions from Implementing Nonpoint Source BMPs: We began working on this difficult issue by defining what quantifying nonpoint source reductions means.

- <u>In the long term</u>, quantifying reductions means determining the amount of phosphorus removed using years worth of data measured at the tributary confluences. The phosphorus data should be analyzed in concert with stream flow information to detect a trend in the phosphorus concentrations.
- <u>Short term</u> quantification may involve information from studies about individual BMPs, or qualitative information such as the number of BMPs installed.

To learn how to quantify nonpoint source reduction, the group identified the following needs and existing information:

Needs/Gaps	Existing
Baseline conditions on the public's	Baseline conditions on water quality within the
attitudes/awareness/knowledge	watershed
Current research or ongoing studies from professors	Inventory of BMPs implemented
Inventory of what is possible (where we can and should work) it may be better to prioritize what we can work on and fix that.	BMP reduction studies in literature
What are the biggest phosphorus sources?	Tools for prediction/models such as STEPL, WARMF
When should we expect to see a change?	

Project Proposals for fall funding cycle:

- Ecology's Water Quality funding cycle opens up at the end of September, so now is the time to start talking with other partners to develop project proposals.
- The NRCS has a new program called the Regional Conservation Partnership Program (see more details at http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/). Water quality improvement and protection are a priority for funding. Pre-proposals are due July 14 and must have a letter of support from NRCS's State Conservationist. Talk to Elaine Snouwaert or Walt Edelen if you have ideas.
- The USGS has matching money for a study to determine if septic systems from the Suncrest area are contributing to nutrient loading in Lake Spokane. This study would cost \$75,000. The USGS has \$25,000 in matching funds available. The USGS will redirect their funding after Friday, June 20, if we can not find commitments for the remaining \$50,000. Ecology is willing to put in some funding, but

needs partners to meet the total amount. Here are more details about the study that Llyn Doremus presented:

- Septic systems reduce the rate of phosphorus transport, but do not remove phosphorus.
- The study would evaluate nitrogen isotopes in shoreline plants for evidence of nutrient transport in the Suncrest area and undeveloped shorelines. The USGS would compare nitrogen isotope ratios from plants at shoreline locations impacted by septics, locations of aquatic plants, and non-impacted areas.
- The USGS would also collect groundwater from shoreline locations around the lake, in the Suncrest area, and from wells upgradient from Suncrest. Samples would be analyzed for phosphorus, ortho-phosphate, nitrate & nitrite, ammonia, and dissolved oxygen.
- Determining if septic systems are contributing nutrients to Lake Spokane is the first step. If septic systems are contributing, another study would be needed to quantify the amount of phosphorus entering the lake.

Next Steps:

- Karin will gather information on items needed to quantify reductions from installing BMPs for the next meeting.
- Karin will send a Doodle poll in late July or early August to assist scheduling our next meeting in September.