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Office of Water and Watersheds
Spokane River Water Quality—Stakeholder Meeting
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Greetings, Thank you for coming

We have a prepared statement for you today, and we will offer copies to anyone who would like one.

Today we are meeting to talk about the current status of work by the states of Washington and Idaho, and EPA, on actions to improve water quality in the Spokane River. Before I do that however, I want to acknowledge the dedicated people at Ecology who have done such a great job of developing the Spokane River TMDL. Even though we are here to talk about a course change, the solid work they accomplished in producing the TMDL is to be commended. I also want to apologize to all those dedicated stakeholders who were poised to take action to clean up the phosphorus entering the river. I regret that EPA's decision to change course will result in Ecology and others having to once again revise the TMDL. I also regret that the course change will mean delay of implementing actions to reduce phosphorus.

Now to the task at hand. Many of you know that EPA has been heavily involved in the effort to improve water quality in the Spokane River, and, as you all know, we recently announced a significant change in course on the Idaho permits which then also affects the Washington TMDL. I will talk about why we decided to change course. But the purpose of this meeting is not only to talk about why EPA changed course but, more importantly, set the stage for moving forward. In fact, that is the primary goal of this meeting. To accomplish that goal, I believe it is necessary to tell you how and why EPA took the path it did originally and why we need to change course now.

First, it is safe to say that the Lake Spokane dissolved oxygen problem is serious and complex. I think it is also appropriate to state that we have a collective goal which is to come up with a set of actions that protects the recreational fishery in Lake Spokane from harm due to diminished oxygen levels. From a regulatory standpoint, the problem facing Lake Spokane is one of the most complex issues many of us have ever worked on. Before I outline what we tried to do to address the problem and remedy the dissolved oxygen sags in Lake Spokane, I want to first note that we know what causes the problem: the growing communities in the Spokane River watershed are discharging too much phosphorus and other oxygen demanding pollution into the river, and it is depleting the oxygen level in Lake Spokane and results in nuisance algae growth. This, coupled with the fact that the river becomes a lake, results in a system that has very little capacity to absorb oxygen depleting pollutants. This problem is going to get worse over time unless wastewater treatment plants dramatically improve treatment of wastewater and discharge a cleaner effluent into the river that has a lot less phosphorus in it than it does today. Likewise, the public and other entities in the area that collectively contribute the nonpoint

load of oxygen depleting pollutants need to use conservation practices that result in less phosphorus and higher oxygen levels in Lake Spokane.

The goals for water quality in Lake Spokane are set by the Washington state water quality standards, which were approved by EPA. The standard for dissolved oxygen in Lake Spokane and other lakes and reservoirs in Washington is very stringent. It requires oxygen levels almost indistinguishable from the natural condition. Nobody would argue against a goal that brings us almost to zero pollution. But to achieve an almost zero impact in a populated watershed like the Spokane is exceedingly difficult. You've all heard the question: "How clean is clean enough?" I am sure many people here today have that question on their minds.

Before I go any further, I want to note that not all the news about the effort to clean up the Spokane River is bad news, despite what you may have read in the newspaper. First, while there are many legal and policy debates concerning these efforts, the extensive scientific work has been generally accepted by all involved, agencies and stakeholders alike. The model developed by Portland State University and used in decision-making has undergone extensive, external peer review by water quality experts. There is no debate about the science behind the agency decisions on this project.

Another piece of good news is what we have learned about new phosphorus control technologies. We now know that the latest technologies can drastically reduce phosphorus to levels below what was previously believed to be technologically and economically feasible. The local communities have stepped up, studied the new treatment technologies, and are running pilot studies at their plants. The permits we were proposing in Idaho would have been among the toughest in the nation for phosphorus, six times lower than levels allowed in Chesapeake Bay. The Idaho communities had agreed to accept the challenge of those limits, and they should be commended for that. While agreement from dischargers on effluent limits is not a pre-condition for moving forward with permits, it is good when it happens because it reduces the risk of lawsuits which result in delays.

So what happened? Why the change? The newspaper headlines said that "EPA made a mistake." What was the mistake that they are referring to? I want to outline the reason for our original position on this project and the reason for the change to that position.

Four years ago, this process began with an effort by the state of Washington to develop a TMDL for Lake Spokane. We recognized immediately, on first reading the 2004 draft TMDL, that the standard for Lake Spokane was extremely stringent. Many questioned whether it was possible to meet.

The cities along the river reacted to the stringency of the TMDL by requesting that Ecology consider a change to the standard. Ecology was opposed to a standards change prior to a comprehensive attempt to meet the standard. Nevertheless, Ecology held extensive discussions with the stakeholder community about all aspects of the TMDL, including efforts to devise a pollution trading mechanism, the delta management concept,

to provide some flexibility for Washington sources over an implementation period of 20 years. At the time, the path forward for that draft TMDL was highly uncertain.

Meanwhile, our job at EPA was to re-issue three permits on the Idaho side of the border. Regulations require that NPDES permits for point sources that can affect water quality in a downstream state have effluent limits that comply with the downstream state's water quality standards. So, for the Idaho permits, this means that EPA has to write the permits to ensure that the effluent limits in the permits comply with both Idaho water quality standards and Washington water quality standards

In attempting to comply with those regulations, we had a critical decision to make about the Idaho permits. Do we delay their issuance an unknown length of time until the Washington TMDL is complete, or do we find a way to set limits independent of the TMDL? We chose to detach the Idaho permits from the TMDL and develop a set of permit limits that we believed would be protective of water quality in both Idaho and Washington. Lake Spokane was chosen as the point of compliance for both the Idaho permits and the Washington TMDL because it is the location in the watershed that is most sensitive to nutrients. So, while on different paths, both the Idaho permits and the Washington TMDL would be protecting the same most sensitive resource, Lake Spokane.

Why did we do this? Several reasons: First, we had a job to do, and it was and is to issue permits to the cities in Idaho. Second, our permits program was very unsure about the schedule of the TMDL, given the legitimate questions about whether it was possible to achieve the standard. Third, we came up with a set of limits that required installation of state-of-the-art technology. Fourth, they would be the lowest phosphorus limits in the country. Fifth, they would result in Idaho having no measureable effect on Lake Spokane dissolved oxygen; specifically, modeling showed the effect was approximately 0.15 mg/L. And sixth, remarkably, the three cities agreed to these limits.

EPA set effluent limits for the Idaho permits that are so low that the effect on dissolved oxygen in Lake Spokane would be too small to measure. Concurrently, this enabled Washington in their draft TMDL to allow pollution sources in the State of Washington to decrease dissolved oxygen concentrations by the amount allowed under Washington's water quality standard, which is 0.2 mg/L.

When EPA issued the Idaho permits for public comment, we received numerous comments that took issue with the approach we used to interpret Washington's water quality standard and the way we then set the effluents limits for the three point sources in Idaho. It was pointed out that we failed to fully take into account the cumulative contribution of both the Washington sources and the Idaho sources, as required by the revised Washington water quality standard. Taken together, the allocations for point sources and nonpoint sources in both states exceeded the .20 mg/L allowed by the standard.

While the impact was predicted by the model to be too small to measure, the limits we proposed for the Idaho permits did have a mathematical impact on the DO of the lake

based on the modeling. Again, that impact was around 0.15 mg/l (0.2 mg/l is considered immeasurable). We viewed that impact as being so small that Washington could consider it as virtually identical to natural background, which then allowed Ecology to develop its TMDL to reduce pollution in Washington and to give the 0.2 mg/l to the sources in Washington.

While we thought this was acceptable on policy grounds, our approach left the door open to criticism that Idaho's immeasureable impact of 0.15 mg/l, combined with an immeasureable impact from Washington sources of 0.20 mg/l, would result in a combined impact that would be measureable. Simple addition would estimate the impact at 0.35 mg/l, but I would note here that we have never run the model with all the limits for point and nonpoint sources to estimate that precise, combined impact. So we don't know the precise impact of the proposed Idaho permits and Washington TMDL, but clearly the number would be higher than 0.2 mg/l, and 0.2 mg/l is the allowable impact in Washington's standard.

We felt that our low phosphorus limits would satisfy the intent of the standard. For us, it met the test of "clean enough". For others, it did not meet that test and they mounted strong opposition on legal grounds during the public comment period.

Many people may think that comments they make to the government are not heard. This is not true. Public comments can really make a difference in what happens and does not happen in our environment. After a thorough review of public comment and extensive internal deliberation, we concluded that, from a legal perspective, we had erred in our interpretation of the Washington water quality standards by not considering the Idaho and Washington sources cumulatively in determining the effluent limits for the Idaho dischargers. Therefore, under the current standards, both the TMDL and the Idaho NPDES permits need to be revised so that, taken together, all sources in Washington and Idaho are accounted for and appropriate limits set that do not exceed the .20 mg/l decrease in dissolved oxygen allowed under the Washington dissolved oxygen standard. At EPA, responding to public comments is an important job. In this case, the legal concerns about the cross-border pollution have led us to change course.

What is the path forward? Frankly, we do not know what the final option will look like, but we still have three boxes to check off in our decision-making: the legal basis, the science, and the policy. Clearly, we need to change course on the legal basis for the Idaho permits and Washington TMDL. This part is straightforward: we must re-connect the Idaho and Washington sources in a single analysis that results in a combined impact less than 0.2 mg/l in Lake Spokane.

The science is also straightforward: We have a good, peer-reviewed model of the system. Instead of splitting the analysis into Idaho and Washington impacts, we need to start running the model all the way from Lake Coeur d'Alene to Lake Spokane, and include all sources in those simulations. The main issue on the science side is the workload of running the model, and we will need to be efficient in going about this work.

So, the legal and science aspects are fairly straightforward. The policy aspect, on the other hand, remains a complicated one. It is the same challenge we have all been dealing with for several years now. I would characterize that challenge as requiring us to grapple with tough questions on 6 topics:

1) Limits of technology: The standard pushes us beyond the capabilities of municipal treatment systems built to date.
2) Water quality trading: How can it be used to bridge the gap between what's technologically achievable and what the standard requires?
3) Regulatory flexibility: The difficulties in making water quality standards revisions.
4) The role of FERC licensing in TMDL development.
5) Principles and considerations for allocating loads between Idaho and Washington.
6) Agency resources for modeling.

I listed the questions about the limits of technology first for a reason. At this point, the available data indicate that if all the cities along the river installed state-of-the-art treatment, the river would still exceed the 0.2 mg/l of oxygen depletion in Lake Spokane. This situation looms large over this project, and we need to find a path forward that addresses this challenge and enables us to move forward with the TMDL and the permits so that cleanup can commence and phosphorus inputs reduced.

We are open to any ideas that move us forward and bring improvements on the ground as soon as possible.

Thank you for your attention, and thank you for your efforts to bring cleaner water to Lake Spokane.