November 13, 2007

John Gross
West 636 20th Avenue
Spokane, WA 99203

Dave Knight
Eastern Regional Office
WA Department of Ecology
4601 N. Monroe Street

Re: Spokane River Dissolved Oxygen TMDL

Dear Mr. Knight:

Please consider the following to be my comments on the above-referenced proposed Improvement Report.

Initially, let me reiterate that the water quality problems affecting the Spokane River, in both Idaho and Washington, have been known and documented for some time. I laud your efforts to finally make headway on addressing these issues. However, I have concerns about the means by which the current effort was realized. I am not necessarily opposed to regulation by collaboration but I do feel it has a time and a place. Both of these have expired relative to the Spokane River. It is also past time to take positive action in addressing water quality impairments to the Spokane. While the collaborators may (or may not) have made good faith efforts to plan for clean up, it is much less clear that such clean up will actually occur. Additionally, it would be impossible for future generations of Spokane River users to be included in the collaboration. These are the people we should be working for.

While not directly germaine to the issue at hand, I must express my disappointment that Ecology would entertain a Use Attainability Analysis on the Spokane. This is underscored by the vast work Ecology put into revising its Water Quality Standards. The current beneficial uses designated (salmonid spawning and migration, for example, being the most stringent relative to this effort) for the Spokane do occur and are, thus, attainable. It was a misguided effort from the start and I have trouble believing that your agency believed otherwise.

It is critical that efforts to address impairments on the Spokane be coordinated. To piecemeal solutions will only result in further planning and inaction. Specifically, there are a number of surface water dischargers to the Spokane in Idaho and Washington. Ecology has delegated authority to responsibly write discharge permits for such facilities in Washington. Washington also has the right to enforce on Idaho, in these and allied situations, that surface waters entering Washington from Idaho meet Washington Water Quality Standards. This begs a coordinated effort. The same applies to the hydroelectric impoundments on the Spokane in both States. Efforts to obtain new FERC licenses for these facilities are underway and Ecology has Section 401 authority in this process. Perhaps finally, the document at hand is termed a Dissolved Oxygen TMDL when, in fact, it is a Phosphorous TMDL. The Spokane is listed for other impairments as well and these notably include Temperature. Addressing temperature necessarily involves addressing instream flow. As I suspect you know, Washington has more than once successfully litigated the importance of instream flow to water quality. All of these circumstances point directly at the need for a coordinated and expansive clean up plan. The currently proposed TMDL falls far short of this but such collaboration is not without precedent. Your staff are involved in such an effort on the Pend Oreille, for example. I strongly believe that a coordinated clean up effort subordinates the following technical details.

Unmentioned in the preceding argument for a coordinated effort are surface and groundwater withdrawals from the Spokane and its aquifer. Neither is non-point source pollution addressed. These are also critical elements of a coordinated clean up effort.

TMDLs include a margin of safety. In this effort, the margin of safety should address potential expansion of current discharges and new discharges. It should also include calculation of new stormwater requirements that may affect currently permitted stormwater discharges. The implicit MOS of using a conservative model year (2001) is a step in the right direction but is less than an adequate MOS.

At a public meeting held by Ecology and discharger representatives, a discussion about water conservation came up. The discussion indicated that conservation will decrease the amount of nutrients delivered to the Spokane and its attendant groundwater. I hesitate to agree with this assertion. The issue is not whether nutrients are delivered in *X* or *Y* volume of water per time but the total amount of biologically available nutrients delivered per time. As such, I see conservation not directly pertinent to a *Phosphorous* TMDL but very much so to a Dissolved Oxygen TMDL. However, including conservation to an actual DO (not phosphorous) TMDL would be part of the coordinated effort espoused above.

I have witnessed the success of using grey water for irrigation purposes, specifically on golf courses. I see the community's efforts to explore this practice as a positive step. It will likely require an update to infrastructure but, again, this is a long term effort spanning generations and good ideas should be viewed with that in mind.

This, or any subsequent (or more effective past) TMDL should address CSO events. These events generally occur in the spring in this area and are very likely to result in nutrient inputs that affect periphyton growth later in the growing season. Remember that nuisance algal growth, while narrative, is also an applicable water quality standard.

The DO TMDL includes graphs that indicate that non-point source pollution is substantial (NOPOINT > NOSOURCE). However, the document includes little language addressing this fact. BMPs may be appropriate but these voluntary efforts beg regulatory teeth or some sort of incentives. It should not be hard to convince the City of Spokane to use less water on their street median grass but they continue to set the standard for overuse of water for lawns. Many communities (including marinas) require new developments to hook up to treatment plants rather than continue to permit on-site septic systems. (Bear in mind the caveat that legacy septic systems are likely a far more pressing problem than modern systems.)

The TMDL uses a 0.2 mg/L DO performance measure Where did this number come from and how do you measure it? DO is very problematic to measure. There are four or five different measurement techniques and each provides a different concentration measurement. The plan should be very specific about compliance points and dates. It should also reference a subsequent, and required, QAPP that assures us that this concentration can actually be discerned. In a laboratory setting, this is probably feasible but the TMDL addresses a system with many more sources of variability and measurement error than a lab. I am skeptical that the proposed concentration is of any real use. In any event, I assume that Ecology will use not only the no-discharge and no NPS scenarios, but also the unimpounded scenario in calculating natural condition for the entire length of the Spokane. Waters entering Washington from Idaho are clearly *not* natural background.

It is not clear to me why the TMDL includes an SOD scenario. I see its inclusion as a distraction to a focused effort and even I view this as unattainable.

While I have not commented specifically on the NPDES permits out for public review, I would like to take this opportunity to reiterate the directly applicable and obvious: The NPDES permits must ensure compliance with applicable water quality standards and discharges must meet provisions of those permits.

Thank you for the opportunity to provide feedback on this and other issues of mutual interest. I look forward to subsequent and positive steps in restoring the Spokane to a resource of importance to a variety of users.

/s/

John Gross