



*Papermakers since 1911.*

3320 N. ARGONNE  
SPOKANE, WASHINGTON 99212-2099

PHONE: 509.924.1911  
FAX: 509.927.8461

December 17, 2010

Via e-mail ([mgil461@ecy.wa.gov](mailto:mgil461@ecy.wa.gov) and [swqs@ecy.wa.gov](mailto:swqs@ecy.wa.gov))

Ms. Melissa Gildersleeve  
Watershed Management  
Department of Ecology  
P.O. Box 47600  
Olympia, WA 98504-7600

Re: Comments on Scope of Surface Water Quality Standards Triennial Review

Dear Ms. Gildersleeve:

Please accept these comments on behalf of Inland Empire Paper Company (IEP) that the Department of Ecology should address in the current triennial review of the state water quality standards.

IEP has a long standing commitment to attainment of the highest water quality possible in the Spokane River and Lake Spokane watershed. IEP has been an active participant in the Spokane River Collaborative Process and in the development of the 2010 Spokane River Dissolved Oxygen TMDL (2010 TMDL). We hope that Ecology will carefully consider refinements to the state water quality standards (WQS) that will enhance and support the implementation of the TMDL. The suggestions below are also consistent with Governor Gregoire's recent decision to evaluate current rule-making efforts to minimize negative impacts to Washington State's struggling businesses (Executive Order 10-06). The comments below will provide short-term and long-term benefits to Washington State's businesses, and should be placed on an immediate path towards rule-making to preserve current jobs and promote future growth.

### **1. Compliance Schedules**

The WQS currently limit compliance schedules to ten years. WAC 173-201A-510(4)(c). EPA regulations under the Clean Water Act do not mandate this limitation and it is understood that

attainment of stringent waste load allocations in the Spokane River may reasonably take up to twenty years. *See* Memorandum of Agreement and Foundational Concepts, Appendix D to the 2010 TMDL.

The Legislature recognized this limitation in the current WQS and has directed Ecology to amend the WQS to provide for compliance schedules of up to twenty years where appropriate. The 2009 legislation is codified at RCW 90.48.605. The statute provides:

The department shall amend the state water quality standards to authorize compliance schedules in excess of ten years for discharge permits issued under this chapter that implement allocations contained in a total maximum daily load under certain circumstances. Any such amendment must be submitted to the United States environmental protection agency under the clean water act. Compliance schedules for the permits may exceed ten years if the department determines that:

(1) The permittee is meeting its requirements under the total maximum daily load as soon as possible;

(2) The actions proposed in the compliance schedule are sufficient to achieve water quality standards as soon as possible;

(3) A compliance schedule is appropriate; and

(4) The permittee is not able to meet its waste load allocation solely by controlling and treating its own effluent.

IEP requests that Ecology include this precise language in this revision of the WQS so that it is available for development of the current NPDES permits in the Spokane River watershed, and implementation of forthcoming TMDL's throughout the State that will require an extended schedule to achieve compliance of the WQS.

## **2. Conflicting Interpretations of WQS as Applied to Reservoirs**

Ecology continues to maintain two different interpretations of how its dissolved oxygen criteria apply to a man-made reservoir. With respect to dischargers Ecology has stated that a reservoir meeting the definition of a lake under the WQS, WAC 173-201A-20, are "treated the same as a natural lake." Appendix I to 2010 TMDL. For dischargers this means that they must meet a water quality standard of no more than a 0.2 mg/l depression in dissolved oxygen from "natural" conditions, based on the conditions created by an artificial impoundment. WAC 173-201A-200(1)(d) Table 201(1)(d)(ii).

With respect to dam operators, however, Ecology has recognized that reservoirs are not natural conditions. Ecology has explained in guidance under the dam compliance provisions in the WQS, 173-201A-510(5), that dam operators are not subject to strict compliance with dissolved oxygen criteria in reservoirs because reservoirs are not natural conditions. As a consequence, the dam compliance sections of the WQS do not require strict compliance with dissolved oxygen criteria but only those measures that are "reasonable and feasible." Ecology has been clear that WAC 173-201A-

510(5) is “written the way it is because of the recognition that the reservoir is not a natural condition.” *See* WDOE Water Quality Certifications for Existing Hydropower Dams Guidance Manual Comments and Responses, at 12 (February 2005). In the same document Ecology is equally clear that the applicable dissolved oxygen criterion in a reservoir is “narrative.” *Id.*, at 57.

The interpretation of the criterion as applied to dam operators is consistent with the definition of “natural condition” in the WQS. “Natural conditions” are defined as “the surface water quality that was present before any human-caused pollution.” WAC 173-201A-020. “Pollution” is defined to include any “alteration of the physical, chemical, or biological properties of any waters of the state.” *Id.* In Appendix I to the 2010 TMDL Ecology recognizes that Lake Spokane is not natural because it was created by human actions.

During the TMDL process Ecology failed to justify its disparate interpretation of the WQS and specifically why dischargers are subject to a numeric criterion based on conditions in an artificial reservoir. Appendix I lacks any coherent analysis by concluding that it would be difficult to model dissolved oxygen impacts from dischargers if the modeling assumed natural background conditions in a free flowing river. According to the analysis in Appendix I that approach would mask dissolved oxygen problems because they would appear to be non-existent. Ecology has in fact taken the position with the Federal Energy Regulatory Commission that there would be no dissolved oxygen deficit in the free flowing river without the presence of Long Lake Dam.

The constraints on modeling should not drive an interpretation of the WQS. The WQS should be consistent for both dam operators and dischargers. Ecology should clarify in the triennial review that the dissolved oxygen criteria as applied in a man-made reservoir are narrative for all parties. Ecology should resolve this issue now as it will continue to delay and add considerable expense to the improvement of water quality in Lake Spokane and the Spokane River. The potential also exists that this error in Ecology’s interpretation of the WQS could result in the loss of businesses and future growth in the Spokane River watershed and other locations in Washington State where a similar scenario may occur.

### **3. Specific Reservoir Standards**

As an alternative to Item #2 above, Ecology should consider specific dissolved oxygen criteria for reservoirs. Both Ecology and EPA staff stated during the 2009 and 2010 TMDL development process that it is very unlikely that Lake Spokane will ever achieve the dissolved oxygen criteria due to thermal stratification of the lake in late summer and the dynamics associated with operation of the Long Lake Dam hydropower project. Ecology should adopt a rule similar to Oregon and Idaho to address stratification of reservoirs.

In Oregon a reservoir is deemed in compliance with water quality criteria for dissolved oxygen if (a) the water body has thermally stratified due to the presence of an impoundment, (b) the water body has three observable layers defined as the epilimnion, metalimnion and hypolimnion, (c) a layer

exists in the reservoir to support beneficial uses, and (d) all practical measures have been taken to maximize the layers meeting the dissolved oxygen criteria. OAR 340-041-0061(15). Under the state of Idaho water quality standards the dissolved oxygen criteria do not apply to the hypolimnion in stratified reservoirs. IDAPA 58.01.02.100.

#### **4. Beneficial Use Designation**

Ecology should review the basis for the beneficial use designation for the Spokane River from Long Lake Dam (RM 33.9) to Nine Mile Bridge (RM 58.0). The current use designation of core salmon/trout in WAC 173-201A-602 is not supported by available evidence throughout the lake. Ecology provided a two page document during the TMDL process that is titled "Summary of Ecology Information Regarding Aquatic Life Uses in Lake Spokane." (For your convenience the summary is submitted with these comments as Attachment 1.) There is no identification in the document as to its author or the date that it was generated.

The document concedes there are no definitive studies that have assessed salmonid populations in Lake Spokane. The use designation is described as being based on anecdotal information and aspirations that habitat can be created where none existed before.

One of the references in the summary is the detailed analysis of existing beneficial uses in the Spokane River and Long Lake Reservoir Use Attainability Analysis, pp. 3-29 to 3-40 (2004). The analysis in this report describes limited salmonid habitat in the upper and more riverine conditions in Lake Spokane. There is no indication from the information in this report that the hypolimnion in the lake has ever been suitable habitat for salmon or trout.

Ecology should evaluate the available information and revise the designated uses in the lake to reflect actual conditions. It would be appropriate to consider different use designations for the unique conditions in the lake, the riverine sections and deeper portions of the reservoir. Ecology should also consider different use designations based on the depth of the reservoir.

#### **5. Nutrient Criteria**

Ecology should also consider adopting nutrient criteria in lieu of dissolved oxygen criteria. EPA has encouraged Ecology to take this action and EPA eco-region nutrient criteria played a role in evaluating and developing the WLAs in the 2010 TMDL.

Furthermore, dischargers should only be subject to meet the criteria based on the fraction of phosphorus in its effluent that is biologically available. The Ecology funded bio-available phosphorus research study on the Spokane River indicates that a substantial fraction of the phosphorus in discharger effluent after tertiary treatment is not biologically available. Ecology, in adopting nutrient criteria, should make clear that the criteria only apply to the biologically available fraction of nutrients in receiving waters.

Ms. Melissa Gildersleeve  
Department of Ecology  
December 17, 2010  
Page 5

## 6. Effluent Trading

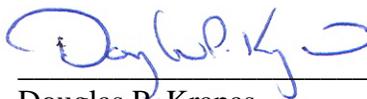
It is generally accepted that implementing treatment technology alone will not be sufficient to meet the stringent WLAs in the 2010 TMDL. *See* 2010 TMDL, at 62 (“Phosphorus reductions will occur from a combination of installing the most effective phosphorus removal treatment to reduce point sources and from reducing nonpoint sources through target pursuit actions.”) Ecology is working with all interested parties through the TMDL Implementation Advisory Committee on effluent trading opportunities to close the gap or delta between what can be achieved through treatment and the assigned WLAs. It is critical that the WQS be updated to explicitly authorize and facilitate effluent trading.

The current WQS does not expressly authorize trading and several comments on the draft TMDL have questioned whether trading is allowable absent express authorization in the WQS. Ecology should consider amending WAC 173-201A-450 Water Quality Offsets or create a new section in the WQS that authorizes trading consistent with EPA guidance and consistent with the goals of the emerging trading program for the Spokane River.

Inland Empire Paper Company appreciates the opportunity to submit these comments for your consideration during this triennial review. Implementation of the 2010 TMDL will be a significant challenge over the next twenty years. Communities and businesses will be well served by careful consideration of how the water quality standards can best be framed to support this effort in the Spokane River watershed. This would make an enormous difference for the Spokane River and hopefully serve as a positive precedent for water quality improvement plans in other watersheds.

Sincerely,

Inland Empire Paper Company



---

Douglas P. Krapas  
Environmental Manager

Cc: Kevin Rasler  
Encl