

Water Quality Team Meeting Notes

July 10, 2006

1. Greetings and Introductions.

The July 10 Meeting of the Water Quality Team was chaired by Mark Schneider and facilitated by Robin Harkless. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Kathy Ceballos at 503-230-5420.

2. Update on Lower Columbia Water Quality Monitoring.

Jill Leary of the Lower Columbia River Estuary Program said she, Blaine Ebberts, Mark Schneider and Jim Britten had recently visited TDG monitoring sites on the Sandy River delta and mile marker 42 in the Columbia. Leary said data have been collected at these sites for four weeks, but have not been fully analyzed and are not ready for presentation at today's meeting. I'll provide our draft report to Mark Schneider once it's available, Leary said; it was agreed to revisit this topic at the August WQT meeting.

3. Initiating the TDG Waiver Process.

ODEQ's Agnes Lut updated the WQT on the status of the current Oregon TDG waiver and the anticipated schedule for waiver the renewal process. She noted that the existing waiver expires at the end of the 2007 spill season. Under Oregon Environmental Quality Commission rules, the application for the new waiver must be submitted by November 31, 2006. At the Commission's June 2007 meeting, the EQC will discuss the waiver request and any other 2008 water quality changes. Any changes or requests will need to be accompanied by a clear and concise rationale, as well as the same kind of documentation and data that have been submitted in the past, Lut said. Adams said the Corps plans to submit an annual waiver request similar to that submitted under Washington's process, which covers the full calendar year.

Lut noted that WDOE proposed revisions to its water quality standards on June 28, with final approval likely some time next summer. She said a press release describing these revisions is available at <http://www.ecy.wa.gov/news/2006news/2006-109.html>. Schneider said he will distribute the press release to the WQT membership by email.

4. Briefing on 2006 Water Quality Monitoring Results to Date.

At the last WQT meeting, you requested that I give you a preliminary report on the biological monitoring data collected this spring, said Margaret Filardo. A total of 9,000 fish were sampled for signs of GBT this spring, she said; the information I have to present today is preliminary. She noted that biological monitoring data will be collected through August; a final 2006 biological monitoring report will be presented to the COE in November.

Using the overhead projector, Filardo touched on the following topics:

- TDG readings during the spring freshet – Snake River (graph)
- TDG readings during the spring freshet – Lower Columbia River (graph)
- Fish observed with signs of GBT during this period (table)
- The effects of lack-of-market spill on total TDG levels – in future years, it might be more beneficial to fish to attempt to find a better balance between daytime and nighttime spill
- In-season review of TDG data when spill exceeds court-ordered or BiOp levels might lead to a better operation for fish.
- Summary of 2006 biological monitoring data to date: involuntary spill, coupled with the project operation limitations at Lower Granite Dam, resulted in higher TDG levels that caused GBT signs in fish over prolonged exposure periods.

In closing, Filardo said her presentation will soon be available from the FPC website.

5. Discussion and Comments on the Draft Corps of Engineers Report, “Total Dissolved Gas Characterization of the Lower Columbia River Below Bonneville Dam.”

Jim Adams briefed the WQT on the comments received by the Corps to date on this draft report; these comments were submitted by NOAA, CRITFC, and the Fish Passage center. Various WQT participants wondered how the Corps plans to incorporate these comments into the final report and requested a formal written response to the comments submitted.

A lengthy discussion ensued. Some of the questions, comments and suggestions expressed at today’s meeting included:

- Greater statistical specificity is needed in the report (answer: the Corps agreed to provide this data).
- The range of spill volumes depicted in figure 18 is significantly larger than the volumes that would be required in the future for voluntary spill under the

Biological Opinion. NOAA Fisheries observed that the report concludes that difference between the gas levels monitored at the three monitoring stations shown in figure 18 during BiOp spills of 100 to 110 kcfs is negligible (answer: the objective of Fig. 18 was to display the data trend, using 2002 data, not to make any judgments about the magnitude of the difference between the readings).

- With respect to TDG production and the environmental effects TDG on lower river temperatures, changes in TDG pressure appear to be contributing to a distinctive “thermal signature” in the Camas vicinity.
- The Corps needs to distinguish between actual and planned spill in using Camas / Washougal as a point of reference for management applications. This is an important distinction because the TDG sources of greatest concern to the Corps in the Lower Columbia are spill caused by excess hydraulic capacity and lack of market, not the BiOp spill program.
- Various WQT members suggested that this report ventures very close to the policy arena, rather than the technical arena. As written, the report does not represent a regional consensus, and this needs to be made clear in any dealings at the policy level. (Answer: the intent of the report was not to build policy recommendations, but to air technical issues and provide comprehensive technical data on gas and temperatures downriver to inform water quality management decision-making.)
- It would be more appropriate for the Corps to use data from a year other than 1998, in which very high levels of involuntary spill occurred. It was further suggested that a paired evaluation of differences -- a breakdown between planned vs. actual spill – would allow the Corps to draw more valid conclusions for management purposes.
- What policy questions is this report designed to answer? What are the implications of the report? What does the Corps plan to do with the report?
- The background discussion included in the report is incomplete, because it does not reflect the input of the WQT technical subgroup formed to deal with issues generated in the ongoing debate over Camas/Washougal fixed monitoring station. The report needs to reflect the input of the technical subcommittee of the WQT.
- The data from the corner collector probably isn’t representative of broader in-river conditions. Total river flow at the time the corner collector data were recorded was significantly less than the typical flow during the spill season. At lower total river flow, there is less dilution and higher recorded TDG levels, which contribute to a misleading characterization of the corner collector’s contribution of gas to the river. The Corps should do a more rigorous statistical comparison of the data, including a discussion of all the variables that explain the data as well as any necessary model runs. They should also consider developing additional sampling locations for the purposes of monitoring voluntary spill, such as Bonneville’s upstream bypass.

At the close of this discussion, Adams said the Corps will discuss a process for responding to the comments received, in written form if possible. He said

Mike Schneider will revise the report to reflect the comments and suggestions made at today's meeting. Adams said he will provide it to the WQT when it is available; he added that he will provide an update on what the Corps intends to do with the report after it is finalized at the August WQT meeting.

6. Next WQT Meeting Date.

The next meeting of the Water Quality Team was set for Tuesday, August 8. Meeting summary prepared by Jeff Kuechle, BPA contractor.