

WATER QUALITY TEAM MEETING NOTES

**September 10, 2002
National Marine Fisheries Service Offices
Portland, Oregon**

Introductions and Review of the Agenda.

Mark Schneider of NMFS, WQT co-chair, welcomed everyone to the meeting, held September 10 at the National Marine Fisheries Service's offices in Portland, Oregon. The meeting was facilitated by Richard Forester. The meeting agenda and a list of attendees are attached as Enclosures A and B. Please note that some of the enclosures referenced in these meeting notes may be too lengthy to routinely attach to the minutes; please contact Kathy Ceballos (503/230-5420) to obtain copies.

2. Review of Draft 2003 Water Management Plan.

Dick Cassidy led this presentation. First, he said, I wanted to provide an overview of how the TDG management plan fits into the Water Management Plan (WMP). We're in the process of changing, regionally, from a WMP that used to come out in the spring to a plan that now gets developed in the early fall, Cassidy said; because of that, some fundamental problems are created. It's a little like trying to fit a square peg in a round hole, first, because of the difficulties in forecasting this far in advance. Because of that fundamental problem, said Cassidy, the WMP is being developed as much as possible now, but we'll be producing two updates B one fall/winter, the other spring/summer. In other words, he said, the WMP will be evolving through the year.

We basically see the water quality appendix as also evolving, Cassidy continued; it will change later in the year, probably in the January/February time frame, as more information and forecast data becomes available. What we've done so far is use the approach from previous years' Water Management Plans, Cassidy said, between now and the end of September, we will be incorporating information from six monitoring-oriented RPAs B 130, 131, 132, 133, 143 and 198. All of this information will be included in Appendix 4, the TDG appendix to the Water Management Plan, Cassidy said; again, that appendix will be updated some time after February 2003 to reflect what we know about the upcoming water year.

Cassidy asked that any remaining comments on the 2003 Water Management Plan and Appendix 4 be submitted to him by September 25; after that, he said, it will be too late to include them in the final version of the document, which will then be released by September 30. Again, he said, both documents will be updated as soon as the first runoff volume forecasts are received for 2003 some time in February.

The WQT participants offered a variety of comments and suggestions at today's meeting. Margaret Filardo was especially concerned about the adequacy of some of the current monitoring locations and their influence on the spill decision-making process. It was agreed to put this topic on the October WQT agenda. After a few minutes of further discussion, Cassidy said he will address these and other comments in the final 2003 Water Management Plan. He said he will provide a further report at the October WQT meeting.

3. Alternate Forebay TDG Monitoring Location (RPA Action Item 132) B Results from 2002 John Day Scroll Case Test.

Joe Carroll said that, pursuant to the fixed monitoring subcommittee's guidance last year, there were some changes to the monitoring program in the Lower Columbia River this year. Carroll described the auxiliary water quality activities undertaken by the Corps in the Lower Columbia River in 2002:

1. Two auxiliary water quality data sondes installed at John Day Dam, one inline with the fish unit penstock, the other in powerhouse release water on the draft tube deck.
2. Temperature loggers were put in powerhouse release waters on the draft tube decks for Bonneville, The Dalles and John Day Dams during the period April-September 2002.
3. Vertical profile strings of temperature logging instruments were placed in the forebays of Bonneville, The Dalles and John Day Dams during the April-September, 2002 period.
4. A remote water quality data sonde was installed at Corbett Landing on March 8, 2002, to provide a comparison with the Camas/Washougal fixed monitor.
5. A remote water quality data sonde was installed at the west end of The Dalles powerhouse in forebay waters as an auxiliary instrument to the standard fixed forebay monitor.
6. Two remote water quality data sonde were deployed in the Bonneville Dam spillway tailwater channel 1,800 feet downstream from the spillway from April through September 2002.

Carroll said he is still reviewing the data from the John Day supplemental monitoring effort, and should have some actual data to present at the October 8 WQT meeting. In response to a question, Carroll said his hope is that the WQT will be able to discuss the appropriateness of these alternative monitoring sites, and what monitoring plans for the Lower Columbia in 2003 should include, at its October meeting. Cassidy

noted that any additional monitoring efforts in 2003 will be subject to the same budgetary constraints as all other aspects of the fish and wildlife program. Understood, said Schneider, but we here at NOAA Fisheries will be pushing for whatever is best for fish.

4. 2002 Corbett and Camas/Washougal TDG Monitoring Comparison.

John Lemons of the Corps led this presentation, noting that the Corps has begun sampling to explore possible alternative fixed monitoring site locations in the Lower Columbia. This year, beginning in March, we deployed an instrument at Corbett Landing, which has been logging data every 15 minutes, Lemons said. We have also deployed a second instrument at the west end of The Dalles powerhouse, for similar reasons, Lemons said.

Using a series of overheads, Lemons presented some of the early-season data from the Corbett and Camas/Washougal monitoring stations, from March and June. The June data shows that there are some reasonably significant and consistent differences between the two stations, with higher gas levels measured fairly consistently at Corbett. In response to a question, Lemons said the Corbett station is about seven miles closer to Bonneville Dam than the Camas/Washougal station.

With respect to the preliminary data from the two locations at The Dalles, Lemons said that, again, there were observable differences in the TDG levels at the two stations, with the auxiliary monitor at the west end of the powerhouse typically reading one to two percentage points higher. Carroll emphasized that this difference could be attributable to instrument bias, but it is consistent with observations made in the past. Typically, TDG levels seem to run one to three percentage points higher at the west end of the powerhouse under high spill conditions. Lemons also presented preliminary 12-hour average TDG calculations for the Corbett-Camas/Washougal and The Dalles auxiliary monitoring sites. Lemons said he will have more refined data to present at the next WQT meeting.

In response to a question from Schneider, Lemons reiterated that this data is extremely preliminary, and the Corps is not drawing any conclusions from it as yet. Again, we will revisit this topic at the October 8 WQT meeting, said Forester.

5. Report on RPA 143 Snake River Water Temperature Monitoring and Modeling.

Rick Emmert, co-chair of the RPA 143 subcommittee, briefed the WQT on the subgroup's interim report on the Snake River water temperature monitoring and modeling planning effort. He used a series of overheads, touching on the following major points:

- \$ What RPA 143 says
- \$ RPA 143 subgroup work products
- \$ RPA 143 subgroup membership and meeting schedule (seven to date, the next on October 8)

- \$ The subgroup approach B understanding the requirements and intent of the measure, identify relevant questions which need to be answered, select a model
- \$ Subgroup accomplishments to date B compilation of the questions matrix, characterization of existing river physical conditions (prepared historical temperature data lists, initiated current temperature and Met data collection), reviewed Dworshak Dam operations, reviewed IPC monitoring and modeling results, reviewed potential thermal models, reviewed TMDL process, reviewed fish ladder water temperature study, reviewed pertinent biological data (in progress), submitted progress report to WQT on September 10.
- \$ Next steps: finalize data collection for this year, report on characterization of the river based on 2002 data, begin criteria development, evaluate model packages to address these key questions.

Emmert noted that the draft RPA 143 plan is scheduled for submission to the WQT by July 2003, with the final plan completed by September 2003. Emmert noted that he has sent out copies of the draft progress report to the WQT membership; he asked that any comments on the draft report (or requests for additional copies) be submitted to him at Rick.L.Emmert@usace.army.mil. He added that there is no Appendix J; that was an error in the text. In response to a question, Emmert said he and Schneider will provide periodic updates on the RPA 143 subgroup's efforts, particularly once the model selection process begins.

6. Mainstem Province Water Quality Program Solicitation.

As most of you are aware, Schneider said, the Council is in the midst of its provincial review process; the mainstem/systemwide province was the last to be addressed. One thing that has happened is the development of program summaries for the various programs in that province, one of which was on the water quality program, he explained. After that, Bonneville issued a solicitation; the purpose of today's presentation is to share the results of that solicitation.

BPA received about a half-dozen water quality-related projects in response to their solicitation, Schneider said; he distributed Enclosures D and E. The first was a list of the proposed mainstem/systemwide water quality projects, including RPAs addressed, potential project benefits, ISRP comments and project costs. The second handout was a package of information relating to the upcoming CBFWA mainstem/systemwide province project review on September 23-27 at Portland's Sheraton Airport.

Schneider noted that there will be a meeting here at NMFS on September 18 to discuss the mainstem/systemwide water quality projects; if your agencies feel strongly about any of these proposed projects, he said, you may want to attend that meeting to provide any comments you may have. He then spent a few minutes going through the specific projects in Enclosure D:

Project 35013: Species- and Site-Specific Impacts of Gas Supersaturation on Aquatic Animals

Project 199602100: Gas Bubble Disease Research and Monitoring of Juvenile Salmonids

Project 35024: Evaluating the Sublethal Impacts of Current Use Pesticides on the Environmental Health of Salmonids in the Columbia River Basin

Project 35038: Develop Computational Fluid Dynamics Model to Predict Dissolved Gas Below Spillways

Project 35044: Determine Effects of Contaminants on White Sturgeon Reproduction and Parental Transfer of Contaminants to Embryos in the Columbia River

Project 35058: Evaluation of Food Availability and Juvenile Salmonid Growth Rates Under Differing Thermal and Sediment Regimes.

In general, said Schneider, only the first two or three projects appear to enjoy relatively strong support from the ISRP; again, if you or any of your agencies feel strongly about any of these projects, please attend the meeting on September 18, or communicate your comments to me.

7. Next WQT Meeting Date.

The next meeting of the Water Quality Team was set for Tuesday, October 8 from 1:30-4:30 p.m. at NMFS= Portland offices. Meeting summary prepared by Jeff Kuechle, BPA contractor.