### FISH PASSAGE O&M COORDINATION TEAM

Adult and Juvenile Fish Facilities Status Report
U.S. Army Corps of Engineers
Walla Walla District
August 12, 2004

### Construction

Significant problems persist with two of McNary's Oregon shore AWS pumps. Pump 3 has been out of service since July 31 of last year due to damage to the bearings and pump shaft. Repairs are scheduled to begin in November and be completed by March, although completion may be further delayed due to a 22-week delivery time for a new pump shaft. Pump 2 has been out of service since July 8. After dewatering, the pump was found to have damaged upper and lower bearings, and pump shaft sleeve. It will likely be at least early September before repairs can be completed. This is a very high priority for the Corps. In the meantime, the remaining AWS pump is providing reasonably good passage conditions.

## Operations and Maintenance - Juvenile Fish Facilities

All facilities are operating and there are no significant problems to report. Daily fish barging ended May 30 and alternate day barging will continue until August 16 (August 17 at McNary). Trucking will then take place with the projects using 3,500-gallon tankers or 300-gallon midi-tankers as fish numbers warrant. Ice Harbor continues primary bypass.

	Fish Collection in Millions			
	LGR	LGS	LMO	MCN
2004 to-date	11.8	5.0	1.3	8.8

The primary dewaterer at Little Goose has developed cracks in some of the I-beams and welds over the years, apparently due to vibration. Vibration testing is needed to determine how this problem can be minimized or eliminated. The testing would involve varying the amount of water entering the structure (from about 30 to 350 cfs) and varying the water routes out of it (e.g. briefly shutting off the main flume to the holding facility). This would affect operations at the holding facility, but considering the low fish numbers no adverse effects to fish are expected. The test would take one or two days and needs to be done before September 30. A detailed test plan will be developed and coordinated with the fish agencies.

North powerhouse loading at McNary began on July 22 (same day as last year) and will likely continue into September (ended September 30 last year).

For the past few months, up to about 20 western grebes have been in the juvenile fish collection channel at McNary. Since lethal take has not been permitted and other efforts had failed, a "grebe roundup" was held on August 10. Eight personnel from the Corps and USDA/Wildlife Services spent two hours dip netting 12 grebes from the channel. Birds were placed in burlap sacks and released a short distance below the dam. Three birds avoided capture and remained in the channel.

# Operations and Maintenance - Adult Fish Facilities

All adult fishways are in operation with no significant problems to report, other than those mentioned above for McNary.

Adult fish passage at Lower Granite bottomed out on July 24 when only 5 steelhead and no other salmonids passed the project. Comparing hourly temperatures in the exit pool with those at the north shore entrance, temperature differentials ranged from 7.4 to 10.8 F that day. Summer temperature differentials in the adult fishways are, in general, maximal at Lower Granite, less so at Little Goose and Lower Monumental, and of apparent little consequence at Ice Harbor and McNary.

### Research

Nothing to report.

### Other

<u>Doble Testing</u>: Testing at Ice Harbor will take place September 8-9, requiring outages of turbine units 1 and 2. Similar testing at Lower Monumental from August 30 – September 3 will require the entire plant to be off line from 0600 - 1700 hours each day.

Spillway Stilling Basin Surveys: Surveys at Dworshak and all lower Snake River dams are scheduled over the next month. A boat will use electronic equipment to determine the condition of the river bottom. There may be some brief swapping of turbine unit operation to accommodate the boat work. Similar work is scheduled for the McNary forebay, within 100 feet of the powerhouse. There, north powerhouse loading will continue but it may be necessary to briefly reduce turbine unit loading.

AWS Pump Outage at Lower Monumental: The following plan was approved by NOAA (Hevlin) and FPC (Basham) last May, provided that two pumps are in good shape before the outage begins. ---- "Project personnel at LoMo would like to schedule an AWS pump outage from August 16-27 to change out a turbine. They would continue with 2-pump operation during the outage, and Bill Spurgeon says 2-pump operation works well under MOP conditions. They are in the process of rebuilding a turbine and would like to install it during the proposed outage - before next next winter. If they can do that, then they can rebuild the one currently operating and have it ready for installation next winter. So, both rebuilt turbines would be ready at the start of the 2005 season. If they can't get the August outage (or some other time), then they would install one rebuilt turbine next winter and install the other the following winter. It's too much work to install one next winter, and rebuild and install another one during the same winter." ----- The project is now requesting dates of August 23 to September 3, due to a delay in finishing the annual maintenance on turbine unit 3.

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