FISH PASSAGE O&M COORDINATION TEAM Adult and Juvenile Fish Facilities Status Report U.S. Army Corps of Engineers Walla Walla District October 14, 2004

Construction

<u>New Removable Spillway Weir at Ice Harbor</u>: An RSW is scheduled for installation by next spring. The contractor mobilized in late August and early September. On-site work thus far has largely involved surveying bay 2 to confirm the dimensions and ensure the RSW will fit properly. Divers are doing much of the survey work. The RSW is being fabricated in Vancouver and is scheduled for delivery to Ice Harbor on February 20, 2005. Installation will be completed by March 19.

<u>Repair of AWS Pumps 2 and 3 at McNary</u>: 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. There were no bidders when the repair contract was first advertised. A repair contract was finally awarded on September 14 and work is scheduled to be completed by November 1. 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.

<u>Rehabilitation of Spillway Gates at McNary</u>: Four spillway gates will be rehabbed beginning in October 2004. This involves resurfacing wheels, installing low-friction seals, and painting. Work will be completed by February 2005, allowing for the use of 22 spillway bays. One or more additional gates may be rehabbed if funding is available. This work was scheduled for earlier in 2004 but was delayed because of contracting issues.

Operations and Maintenance - Juvenile Fish Facilities

All facilities are operating. Lower Granite and Little Goose will end fish transport on October 31. Transport ended on October 1 at Lower Monumental and September 19 at McNary. All projects, including Ice Harbor, will continue primary bypass until at least December 16. Total fish collection numbers are shown in the following table, although McNary was in primary bypass on alternate days until June 24 (no fish were counted during primary bypass).

	Fish Collection in Millions			
	LGR	LGS	LMO	MCN
2004 to-date	11.8	5.1	1.3	8.7

<u>Testing of Primary Dewaterer at Little Goose</u>: The primary dewaterer has developed cracks in some of the I-beams and welds over the years, apparently due to vibration. Vibration testing will take place in October, in an effort to determine a fix. A detailed test plan will be coordinated with the fish agencies.

<u>High Mortality Rates at Lower Monumental</u>: Mortality rates were unusually high from mid-August to early September, apparently due to columnaris. Aug 1 to 11: 22 morts / 2397

collected = 0.9% mortality rate, <u>Aug 12 to Sep 5: 344 / 3759 = 9.2%</u>, Sep 6 to Oct 1: 9 / 1044 = 0.9%. The vast majority of fish involved were subyearling fall Chinook. Outward signs of columnaris were also observed at Lower Granite and Little Goose, but mortality rates were much lower.

Operations and Maintenance - Adult Fish Facilities

All adult fishways are in operation. Aside from the problems with AWS pumps 2 and 3 at McNary, mentioned above, there is only one other item of particular significance to report.

<u>Shaft Alignment of AWS Pump at Lower Monumental</u>: Pump 2 was taken out of service on September 27 to fix the pump shaft, which was out of alignment by 0.035 inch. After repairs, the pump was returned to service on October 7. Two-pump operation continued during the interim.

Research

<u>Operation of Adult Fish Trap at Lower Granite</u>: Several organizations have been using the trap lately: University of Idaho (recapturing fish tagged at Ice Harbor), WDFW (run reconstruction and broodstock for Lyons Ferry Hatchery), NPT (broodstock for Nez Perce Tribal Hatchery), IDFG (age structure), USFWS (radio-tracking and run composition).

<u>Radio-tracking of Juvenile Fall Chinook</u>: The USGS and USFWS will be conducting a BPA-funded radio-tracking study of juvenile fall Chinook in the Lower Snake River during the upcoming months. Fish will be captured in the Lower Granite reservoir, tagged, and tracked to below Ice Harbor Dam. Most of the receiving antennas are already in place as a result of other studies. Work begins about the third week of October and ends in mid-April.

<u>Bird Predation in the Mid-Columbia River</u>: The University of Washington has been studying bird predation on fish near Rock Island Dam and the Potholes. Chelan County PUD is funding the study. A reference collection of fish is being made, from which keys will be developed for identifying bones and otoliths found in bird stomachs. The UW has had some difficulty obtaining adequate fish samples so they have asked for help in collecting fish at the Lower Snake River dams. Corps, WDFW, and ODFW personnel working at the Lower Granite, Little Goose, and Lower Monumental juvenile fish facilities have agreed to help with the collection. About 1,000 fish of 30 species in various length classes are needed. None of the species are ESA-listed.

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