## **CENWW-ODL**

## **MEMORANDUM FOR THE RECORD: 20 LWG 03**

## SUBJECT: Adult fish trap dewatering fish mortality.

On March 24, the adult fish trap was set with the turnpool gate to only allow ladder passage (trap out of operating position) with no attraction water coming into the turn pool, drain open for fish to flush to the river, a sanctuary/recovery pool, and flush water for the return channel. Due to COVID-19 concerns, all NOAA staff were sent home to telework. Prior to leaving the Project, NOAA personnel notified the project biologist the status of the adult trap who accepted responsibility for the trap. The project biologist inspected the trap and verified the turn pool gate position, attraction pool status, that there was flow, a sanctuary pool, flush water in the return loop, and the exit drain was open, but did not check return channel gate valve position. It was believed if any fish remained in the trap they would be able to volitionally leave through the standard route used when dewatering. With the stay at home order and mission essential personnel only staffing orders, there was minimal staff on site for facility operation and inspections only. It was thought safe to leave the recovery pool and return loop channel in this configuration until staff was available for HECP procedures and dewatering. No issues were noted during fish ladder inspections. Prior to dewatering the trap on April 27, adult fish mortalities were observed below the grating. The project biologist was notified and walked the trap to see if any issues could be identified. It was noted the return channel gate was about 10-12 inches open. It is likely that the gate was left in this position while operations were terminated on the March 24 and was not identified as a problem until April 27. Fish from the main ladder could have fallen back through this opening into the adult trap return channel. Fish that did not leave the trap may have been attracted to this level of flow and possibly expired while trying to re-enter the main ladder through the small opening, however this was not observed or reported. The return channel gate was closed to about 2 inches to prevent additional fish from entering the channel. The next morning at 0700 hours April 28 the adult trap was completely dewatered with the assistance of barge rider biological technician and the assistant project biologist who was called in to work. During dewatering there were 34 fish observed at different stages of decomposition. All these fish were presumed to likely be adult steelhead. There was an estimated 250 live fish, primarily peamouths and suckers, sent back to the river during dewatering. No fish were found in the attraction pool.

For the future, we will work with Lower Granite and FPOM to revise language on trap shutdown procedures, to include that dewatering shall occur within 24 hours of close of trap operations, and add to the Fish Passage Plan as appropriate. It is with my deepest regret to report this incident.

- A. Species Steelhead
- B. Origin Unknown
- C. Length N/A
- D. Marks and tags N/A
- E. Marks and Injuries found on carcass N/A

- F. Cause and Time of Death N/A
- G. Future and Preventative Measures N/A

Sincerely, Elizabeth Holdren Supervisory Fisheries Biologist Lower Granite Project Ph. (509) 843-2263