

MEMORANDUM FOR THE RECORD – 18 LGS 07 MFR Plugged Orifices

SUBJECT: Orifices 1A1, 1A2 and 3A2 were discovered plugged on May 18 at approximately 05:05 am. Orifices were backflushed numerous times through the night at 17:00, 20:25, 01:25 and 03:20 prior to the discovery of the plugged orifices. Orifices were immediately backflushed to remove debris. A total of 924 dead juvenile salmonids were collected on the separator due to this incident. Orifices were backflushed again at 06:50 on May 18 and project staff were able to clear significant quantities of debris. Dead fish observations have ceased and orifices have been monitored without any additional plugs. To ensure safe passage, project staff will conduct emergency trash raking on May 19.

Currently there is approximately 200 square feet of floating woody debris in the immediate forebay, however, there is much larger amount of debris that is caught by the boat barrier upstream of the project (see photo below).

Clipped Yearling Chinook	Unclipped Yearling Chinook	Clipped Steelhead	Unclipped Steelhead	Clipped Coho	Unclipped Coho	Clipped Sockeye	Unclipped Sockeye	Total
594	189	17	10	10	57	37	10	924

- A. Species – Chinook salmon *Oncorhynchus tshawytscha*, Steelhead *Oncorhynchus mykiss*, Coho salmon *Oncorhynchus kisutch* and Sockeye salmon *Oncorhynchus nerka*.
- B. Origin – Hatchery and Wild
- C. Length – N/A
- D. Marks and tags – All fish were examined for PIT tags and coded wire tags (CWT) by ODFW and Anchor QEA employees. Of the 924 fish, 14 were marked with PIT tags (Table 1) and 66 were marked with CWT. Of the 66 marked with CWT, 53 were unclipped yearling chinook and 13 were unclipped coho salmon.
- E. Marks and Injuries found on carcasses – Some descaling was observed.
- F. Cause and Time of Death – Orifices 1A1, 1A2 and 3A2 were plugged with debris.
- G. Future and Preventative Measures – Project staff will conduct trash raking on May 19 and continue to backflush orifices at least 5 times daily to ensure orifices remain free of debris for safe fish passage until further notice.

Table 1: Ptagis data query pertaining to PIT tagged fish mortalities related to orifice plug.

Tag ID	Wild/Hatchery	Species/Run/Rear	Marks
3DD.0077BC1868	Hatchery	Summer Sockeye	AD
3DD.0077DBD733	N/A	N/A	N/A

3DD.0077B6782E	Hatchery	Spring Chinook	AD
3DD.0077A85F7C	Hatchery	Spring Chinook	AD
3DD.0077A22F32	Wild	Spring Chinook	
3DD.0077A18EAA	Wild	Spring Chinook	
3DD.0077A4F190	Hatchery	Spring Chinook	AI, CWT
3DD.00779DE020	Hatchery	Spring Chinook	AD
3DD.0077A9746A	Hatchery	Spring Chinook	AD
3DD.0077B4AC32	Wild	Spring Chinook	
3DD.00779C4929	Hatchery	Summer Chinook	AI, CWT
3DD.0077B643B8	Hatchery	Spring Chinook	AD
3DD.0077B953D8	Hatchery	Spring Chinook	AD
3DD.0077D497B7	Hatchery	Summer Chinook	AD



Sincerely,
 Scott St. John
 Project Fisheries Biologist
 Little Goose Dam
 (509) 399-2233 ext. 263
 Scott.St.John@usace.army.mil