

**MEMORANDUM FOR THE RECORD 18 LGS 15 Adjustable Spillway Weir malfunction**

**SUBJECT: Little Goose adjustable spillway weir unable to open after it was closed for Sockeye salmon passage.**

Background

Little Goose Lock and Dam received a new surface spill weir during the most recent winter maintenance period. The adjustable spillway weir (ASW) can be operated remotely and reduces the amount of labor necessary to change operation conditions. Little Goose operators were instructed to close the ASW from the hours of 04:00 through 16:00 daily, July 26 through August 01. The ASW failed to open at 16:00 on July 28 due to a failed encoder. The weir remained closed until July 31 at 16:20 when warranty work had been completed to remedy the problem.

In accordance to the Fish Passage Plan, Chapter 8, section 2.3.2.7.c., Little Goose will only close the ASW on or after August 1 and when daily average outflow drops below 35 kcfs and the forecasted inflow is below 35 kcfs for at least 3 consecutive days.

Path Forward

Currently the ASW is operating per the recommendations from the Technical Management Team (TMT) through August 1 and will then operate in accordance to the Fish Passage Plan.

Relevance to Adult Fish Passage

Adult summer Chinook salmon, Sockeye salmon and steelhead are currently the adult species migrating across Little Goose Dam.

Adult Sockeye salmon peak passage typically occurs between June 24 and July 25 at Little Goose (FPP, Table LGS-4).

Relevance to Juvenile Fish Passage

Currently, Subyearling Chinook salmon are the predominant species collected at Little Goose Dam. The ASW was not in operation each night from 16:00-04:00 on the nights of July 28, 29 and 30.

Estimated mortalities by species, and origin:

- A. Species – N/A
- B. Origin – N/A
- 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

Figure 1: Adult Chinook salmon counts at Little Goose Dam; 2018 and 10-year average.

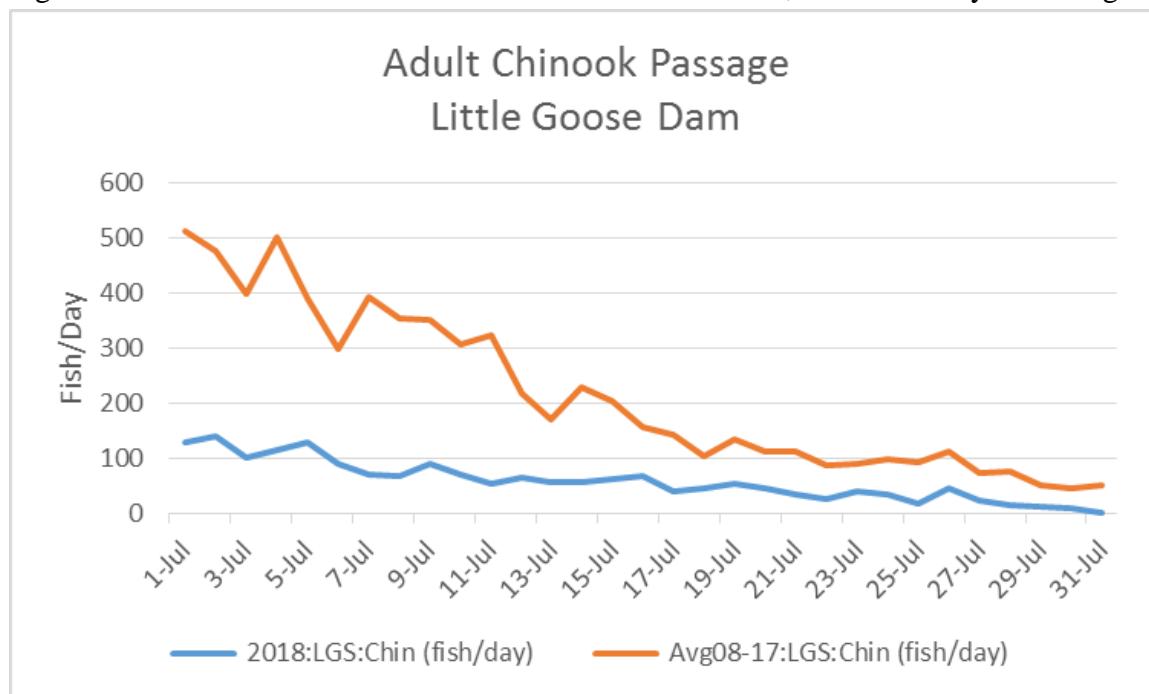


Figure 2: Adult Sockeye salmon counts at Little Goose Dam; 2018 and 10-year average.

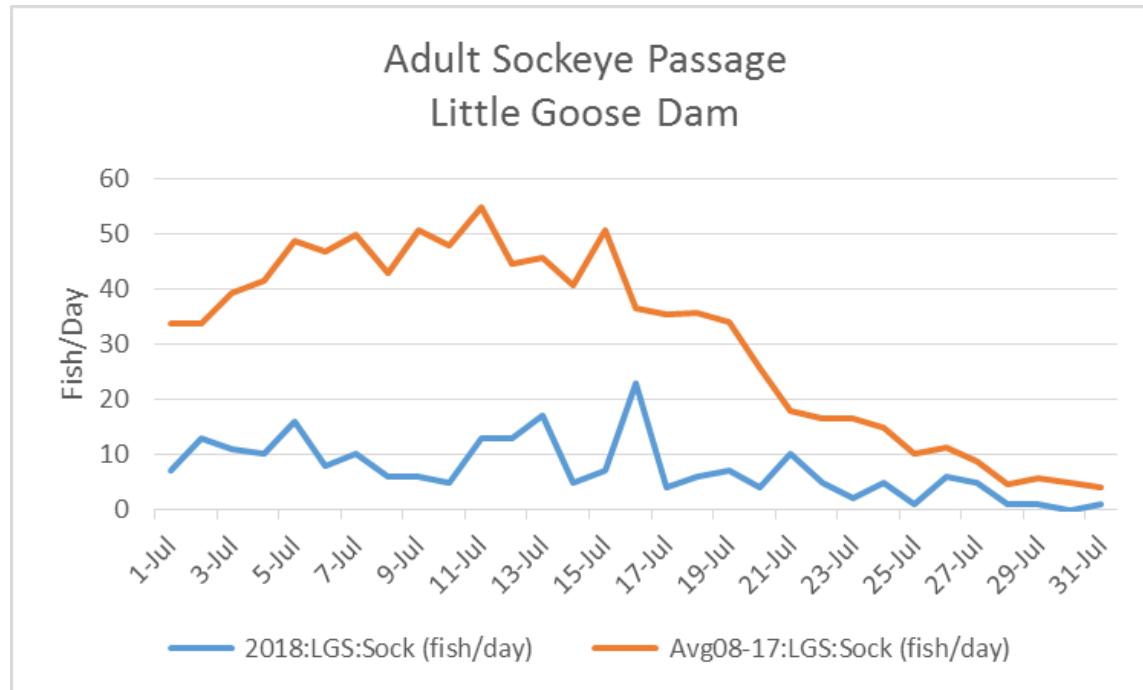


Figure 3: Adult Steelhead counts at Little Goose Dam; 2018 and 10-year average.

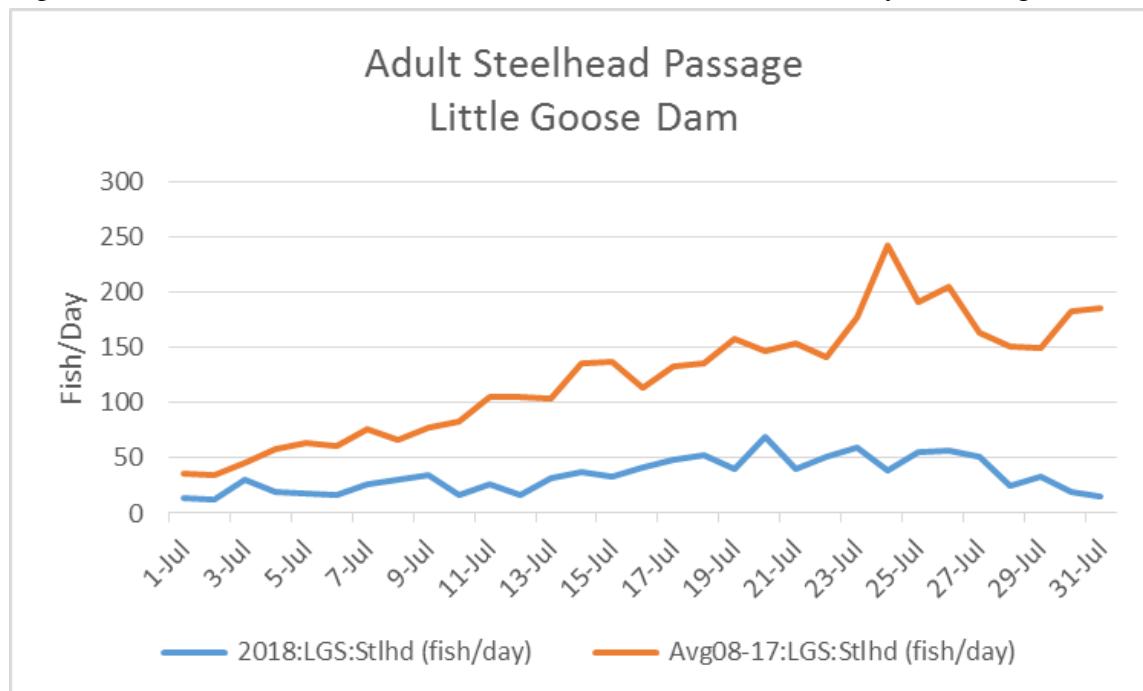
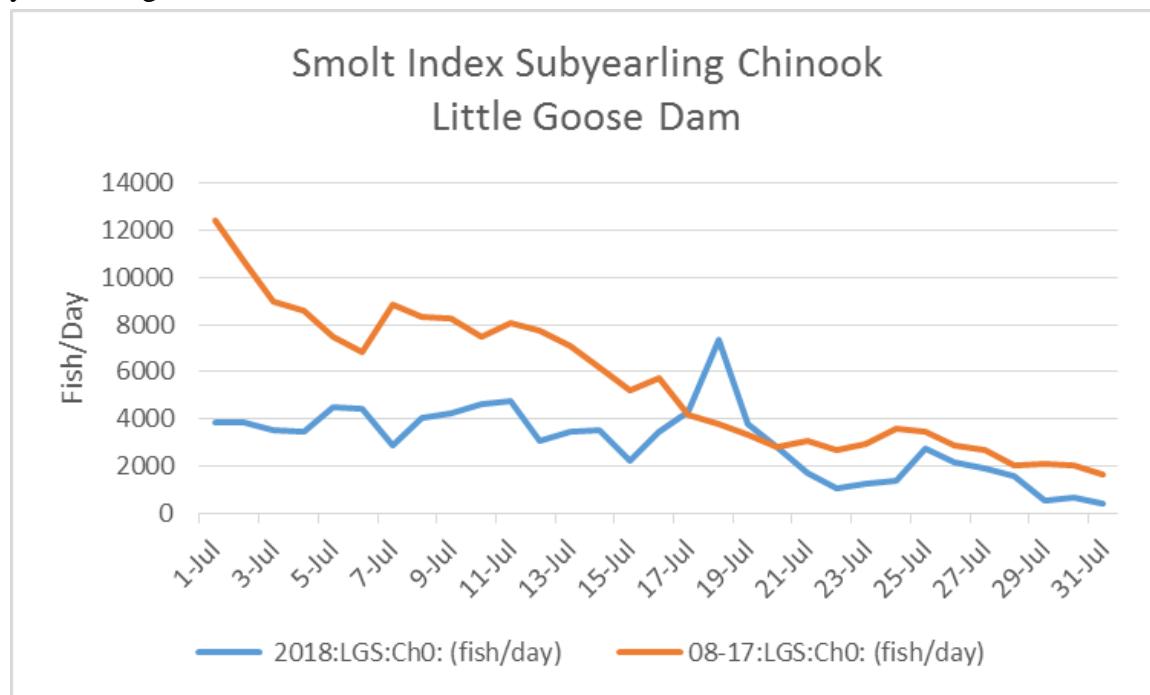


Figure 4: Juvenile Subyearling Chinook salmon index at Little Goose Dam; 2018 and 10-year average.



Sincerely,  
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