## **CENWW-OD-G**

## MEMORANDUM FOR THE RECORD 18 LGS 12 Adult cooling pump power

# SUBJECT: Little Goose is currently unable to provide power to the adult fish ladder cooling pump.

#### Background

Little Goose Lock and Dam experienced an overcurrent alarm at approximately 12:30 am the morning of June 19, tripping the "XJ" breaker that provides power to the adult fish ladder cooling pump, Inland Power and Light and the juvenile fish facility. In accordance to the Fish Passage Plan, Chapter 8, section 2.4.2.14 (Approved on June 18), Little Goose needs to operate the adult fish ladder cooling pumps after June 1 and when the 0.5 meter forebay water temperature exceeds 64°F. Since the approval of the criteria outlined in MOC 18 LGS 09, forebay temperatures at Little Goose first exceeded 64°F at 12:00 pm on June 19 (Figure 1).

### Path Forward

Currently, electricians are troubleshooting the issue and other staff are working to fund a contract for a diesel generator to provided power to the adult fish ladder cooling pumps. At this time, Little Goose does not have a date or time for starting the adult ladder cooling on either temporary or permanent power. These details will be updated when they become available.

## Relevance to Adult Fish Passage

Adult summer Chinook salmon are currently the predominant adult species migrating across Little Goose Dam. Peak passage for adult spring Chinook salmon typically occurs between April 20 and June 1 (Fish Passage Plan, Table LGS-4). The peak spring Chinook salmon passage at Little Goose occurred before the adult fish ladder cooling pump would've commenced operation (Figure 2).

Adult Sockeye salmon peak passage typically occurs between June 24 and July 25 at Little Goose (FPP, Table LGS-4). Little Goose expects to see peak Sockeye salmon passage similar to the 10-year average (Figure 3 and Figure 4).

#### 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

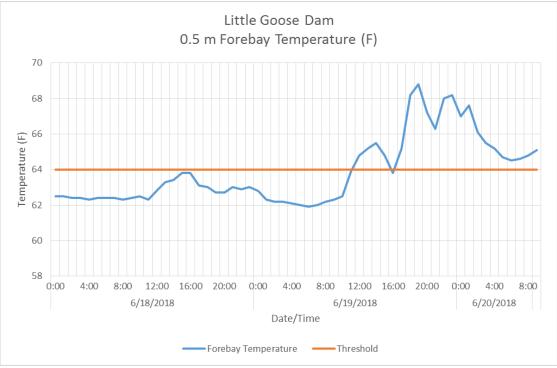


Figure 1: Little Goose 0.5 meter forebay temperature, June 18 through June 20, 2018.

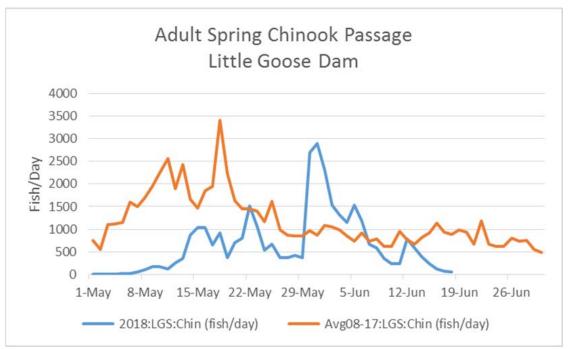


Figure 2: Adult Spring Chinook salmon counts at Little Goose and 10-year average.

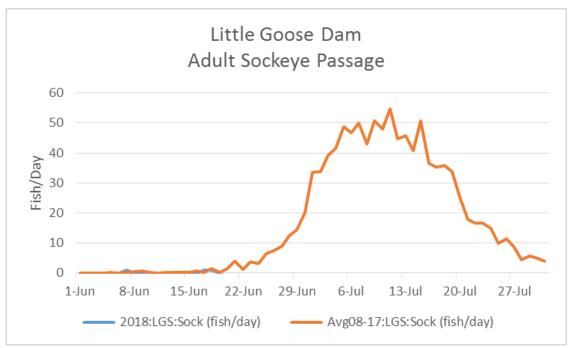


Figure 3: Adult Sockeye salmon counts at Little Goose Dam; 2018 and 10-year average.

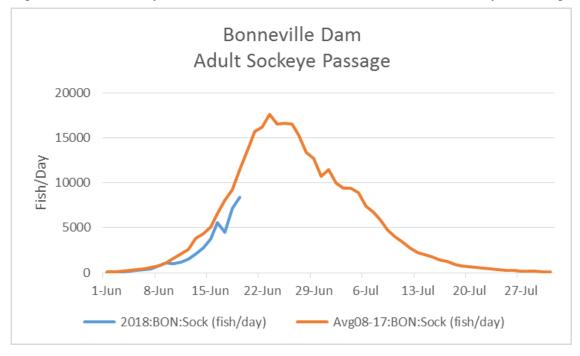


Figure 4: Adult Sockeye salmon counts at Bonneville Dam; 2018 and 10-year average.

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