Fish Passage Plan (FPP) Change Form

Change Form # & Title: 25LGS002 – Fishway Cooling Pump Inspections
Date Submitted: 13-DEC-2024
Project: LGS
Requester Name, Agency: Deborah L. Snyder, USACE NWW
Final Action:

FPP SECTION: Chapter 8 (LGS), section 2.4.2.14.

JUSTIFICATION FOR CHANGE: Little Goose proposes monthly fish ladder cooling pump (FLCP) inspections as follow up and preventative measures to 23LGS09 MFR, "Fish Ladder Exit Cooling Pump Failure", 24LGS04 MFR, "Potential Noise Above Fish Ladder Exit", 18LGS14 MFR, "Adult Cooling Pump Malfunction", and 18 LGS16, MFR "Adult Ladder Cooling Pump Failure". The prior MFR events document multiple FLCP failures and implementation in 2023 of a specialized electrical harness feature upon installation of the replacement pump earlier this 2024 season.

The intent of this inspection series will be to check the power supply cable and clamps for potential signs of wear and /or damage. The process will not require pulling the pump itself, but rather an approximated maximum 4-hour shut down to unbolt and pull the top hatch, visually inspect cables and clamps, replace the hatch, and return the pump to service.

PROPOSED CHANGE: *Edits to existing FPP text in "track changes".*

2.4.2. Adult Facilities – Adult Fish Passage Season (March 1 – December 31)

2.4.2.14. Adult Ladder Exit Pool Cooling Pump. Operate the forebay exit pool cooling pump that sprays upstream of the fish ladder exit to enhance conditions for adult fish exiting the ladder and to supplement cooler water throughout the ladder. The water supply for the manifold at the exit pool originates from an added forebay pump with intake at elevation 543' in the forebay, which is 90' below minimum operating pool elevation 633'.

i. Begin operation of exit pool cooling pump after June 1 and no later than the day after the Little Goose forebay temperature string at 0.5 meters exceeds 64°F (18°C) at any time.

ii. Continue this operation until September 1 and until the Little Goose forebay temperature string at 0.5 m is below 68°F (20°C) for 3 consecutive days. Restart pumps if the temperature at 0.5 m reaches 68°F (20°C) at any time and follow above criteria on when to discontinue pump operation.

iii. The pump may be turned on or off at the Project Biologist's discretion if adult passage delays are observed either in the forebay or within the ladder, and operation of the pump is believed to influence the adult passage issue.

~~iii.~~**iv.** The pump may be turned off monthly for a minimum of 1 hour up to a maximum of 4 hours to conduct visual inspection of cables and clamps for potential signs of wear and /or damage. Inspections will take place between the

hours of 1300 and 1700 with the pump returned to service after. Results implicating repairs or modifications would be further coordinated per the process defined in FPP Chapter 1 – Overview, section 2.3.1, FPOM Memorandum of Coordination (MOC).

COMMENTS:

RECORD OF FINAL ACTION: