CENWW-ODH **June 18, 2020**

MEMORANDUM FOR THE RECORD - 20 IHR 05

SUBJECT: North shore AWS pumps turned off to clear debris

An adult fishway inspection conducted on June 16 showed that the north shore fish entrance (|NSE-1) channel/tailwater head differential was 0.7' (criteria of 1'-2') and the north shore auxiliary water supply (AWS) pump discharge chamber/tailwater head differential was 0.7'. The pump discharge chamber head had been about 2.5'-3.5' on recent inspections with two pumps operating. The decrease in the discharge chamber head and increased amperage readings of the pumps indicate that debris could be clogging the pump intake trash racks and adding strain on the pumps due to the loss in pump efficiency. In an effort to allow the debris to fall off of the trash racks, all of the north shore AWS pumps were turned off from 1400 hours to 1614 hours on June 16. After the pumps were turned back on, the powerhouse operator noted that the discharge chamber head increased to approximately 2.5' and the channel/tailwater head was 0.9' on the fishway control system readout

On the morning of June 17, the channel/tailwater head was observed to be 0.7'-0.8' on the fishway control system readout, with 10' of depth at NSE-1. At approximately 0830 hours, the operator raised the gate to reduce the entrance depth to closer to 8', and increase the entrance head to 1.4' on the readout. A fishway inspection will be conducted on the afternoon of June 18 to verify that that entrance is operating in criteria.

Adult fish that were looking to enter the north fish ladder would have been delayed while the pumps were turned off. On June 16, 99 adult chinook and 3 jack chinook were counted ascending the north fish ladder, which was 37.1% of fish using the fish ladders. During the previous day, June 15, there were 49 adult chinook and 5 jack chinook using the north fish ladder, equal to 19.3% of fish using the ladders. On June 16, the pumps were turned off during the mid to late afternoon time frame, when there are generally less spring/summer chinook approaching the ladder and trying to find the entrance than during the morning hours (see the diel distribution graphs in Figure IHR-2 of the Fish Passage Plan).

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