

## MEMORANDUM FOR THE RECORD

SUBJECT: 14 LGS 01 Adult Fish Collection Channel NPE, NSE Weir failures.

On Thursday, February 28, 2014 the adult fishway was returned to service. In the process, the fish ladder was watered up and the fish pumps were brought back on-line with NPE weir gates in the raised position and in automatic setting. The water forces placed enough pressure against the NPE gates that it prevented them from properly lowering. This caused the cables to become loose and slightly over spooled and caused the transducer targets and brackets to twist and wedge between bulkhead slots. Currently, NPE1 is stuck in a raised position and NPE2 is also stuck but the top is below the tailwater elevation. Both weirs depths do not meet FPP criteria. To correct the problem, this will require the shutdown of two fish pumps to reduce pressure on the NPE in order to lower them to working depths.

NSE1 and 2 transducer targets may have been installed at improper heights resulting in the targets being lowered to water surface elevations. The water forces damaged NSE1 target. The weirs were raised to remove the targets from the water to prevent further damaged and the power turned off. The fixed elevation of the weirs is estimated to be approximately 534 feet. Depending on tailrace water elevations, 6' criteria may not be met.

These items have been identified for repair.

The mechanical crews are currently working on this situation and have freed the weir gate cables. They now can be operated manually until the targets are repaired either later today or tomorrow morning.

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