

MEMORANDUM FOR THE RECORD Spillbay 3 OOS

SUBJECT: On November 22, 2021 a decision was made to declare Spillway Gate 3 out of service until further notice, allowing it to be operated for emergency flood events only, unless stoplogs are installed due to the Trunnion bearing friction value being exceeded.

In 2012 the District performed a “Fit-for-service” evaluation which stated that a Trunnion friction value of 0.23 is the limit at which the weakest brace needs to be strengthened in order to be safe for operation. Gate 3 measured at 0.23 in 2019, and gate 3 was only measured because it was supposed to be the control. As a result, gate 3 has reached the limit stated in the 2012 report and must be repaired to be safe for operation. LMN has first generation greaseless bushings for Trunnion bearings and there is no simple way to inspect them or apply grease to them. In addition, LMN has a spillway gate structural design with slender brace members which are prone to buckling.

Management is currently looking at future actions and planning for a path forward, including talking to structural engineers to find the best course of action. It has been stated by management that all the spillbays are reaching their limits.

Friction coefficients were measured in all spill bays and a trial modification was attempted to add grease fittings to the trunnion bushing in bay 3 in late March. After the modification the friction coefficient declined to 0.08 and NWW Dam Safety determined bay 3 could be returned to operation on 19 April 2022.

- 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

Sincerely,
Denise Griffith
Project Fisheries