

MEMORANDUM FOR THE RECORD

SUBJECT: 21BON076 Downstream Migrant Channel Emergency Relief Gate Trip

Overview:

The primary juvenile migration mode of transportation at Bonneville Dam - Powerhouse Two is the DSM2 (Downstream Migrant channel). The DSM channel elevation is maintained by a combination of add-in water, regulating (Units 11-14), and non-regulating orifices. The channel elevation should remain between 64.2' and 64.4'. If the water elevation exceeds the range of 64.2' - 64.4', to prevent flooding, the Emergency Relief Gate (ERG) located at the north end of the DSM is triggered open, causing a rapid release of water from the DSM back to the river.

Discussion:

On 28 July, routine raking of trash racks in the PH2 forebay occurred for units 18, 11, and 12. When these trash racks are being cleaned, the corresponding unit is taken out of service, STS's are stopped, and DSM orifices are closed until trash raking is completed. When trash raking operations were completed, the corresponding units were returned to service by the end of normal business hours on the 28th. At 1723 hours multiple orifices were placed back into "auto" status simultaneously, triggering them to open. This caused a rush of water, increasing the DSM channel elevation above 64.4'. At this time, the ERG was triggered open, flushing water out of the DSM. The ERG was reset and closed at 1735 hours and operations returned to normal.

Sincerely,

Bonneville Project Fisheries