

OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 14JDA12 spillbay 2 gate inspection

COORDINATION DATE- 25 August 2014

PROJECT- John Day Dam

RESPONSE DATE- 5 September 2014

Description of the problem - John Day Dam spillway gates are required to be inspected every 5 years per EM-1110-2-1156. The spillbay 2 gate was last inspected in 2008. NWP has contracted with MVS and NAP Districts to perform climbing inspections on 18 of the spillway gates during the daylight hours during the September 8 through September 18, 2014 timeframe, and would like to include the spillbay 2 gate in this contract. Due to budget requests and gate inspection cycles, the next inspection would not be until 2018. The September 8 through 18 timeframe was selected to satisfy several requirements: 1) Avoid spillway gate operations during juvenile migration, 2) To occur during regularly scheduled Project maintenance of the gates (cranes and rigging crews required), and 3) funding will not be available in FY15. The gate inspection window cannot be moved.

Bay 2 is required by FPP to be in service in September: *From September 1–November 30, spill from Bay 2 (1 stop = approximately 1.6 kcfs spill) is provided for adult attraction during daylight hours (Table JDA-5).* NWP requests concurrence to use spillbay 3 for attraction flow for the estimated 4-hours maximum time that spillbay 2 would be closed. Gate inspection would be scheduled to occur in the afternoon hours on 9 or 10 September (as early as possible to avoid the peak of the Chinook run) Inspectors were reluctant to schedule gate 2 towards the end of the inspection period in the event inspections were completed earlier than projected.

Inspections are intended to inform the District of structural and operational integrity of the gates. The 2008 inspection of gate 2 concluded that the gate was in good condition. However, the JDA spillway tainter gates have known issues regarding potential overstress due to trunnion friction, and gate 2 is used nearly year-round for both upstream and downstream migrants. Routinely inspecting the gates would help to identify any developing issues. Consequences of gate failure could result in release of up to 100,000 cfs for catastrophic failure, with 0 cfs during repair or replacement.

Type of outage required- JDA spillbay 2 needs to be closed for approximately 4 hrs to allow for a climbing inspection. Bay 3 will be open at 1.6 kcfs during that time to provide equivalent attraction.

Impact on facility operation- JDA will be out of FPP compliance not only by having spillbay 2 closed during fish passage season but also by not providing attraction flow from an adjacent gate during the inspection. Spillbay 3 will be used to compensate for the lack of flow from spillbay 2.

Dates of impacts/repairs – Inspecting gate 2 will take about four hours, beginning at noon on 9 or 10 September. The entire inspection period will be from 8 – 19 September.

Length of time for repairs- Approximately 4 hrs and as early in the inspection schedule as possible. Inspection of gate 2 will be first to avoid hitting the peak of the fall Chinook run.

Expected impacts on fish passage –

Lamprey – no expected impacts.

Downstream migrants – no expected impacts.

Upstream migrants (including Bull Trout) - JDA-N entrance and attraction flow conditions are not expected to be significantly affected by the use of spillbay 3 in lieu of spillbay 2 for four hours in the afternoon on 9 or 10 September. Figure JDA-3 (2014 FPP), shows that ladder entry and approach by steelhead and Chinook starts to decline around noon – early afternoon.

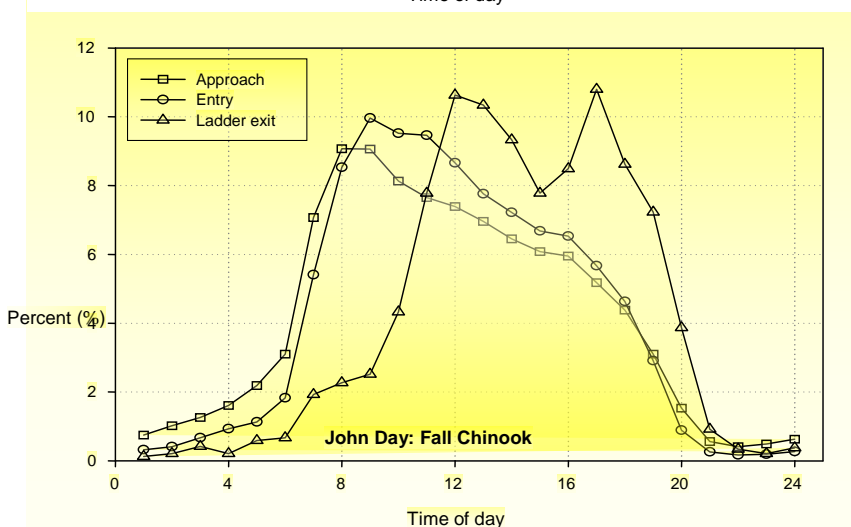


Figure JDA-1. Diel Distribution of Adult Salmonids at John Day Dam Fishway Entrances and Exits (Keefner & Caudill 2008).

Comments from agencies

CRITFC- -----Original Message-----

From: Tom Lorz [mailto:lorz@critfc.org]

Sent: Wednesday, August 27, 2014 4:46 PM

To: Mackey, Tammy M NWP

Subject: [EXTERNAL] Re: FPOM: official coordination - 14JDA12 spillbay 2 gate inspection

Not super excited about this if we get the run we are suppose to. Do later in the day and later in September if possible. If run still does not show up at the start of this work do then if possible. tom

Final results-

Bay 2 will be inspected early in the schedule and later in the afternoon, without adjacent bays closed.

Please email or call with questions or concerns.

Thank you,

Tammy

Tammy Mackey

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