

**OFFICIAL COORDINATION REQUEST FOR  
NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE-** 24JDA05 – Installing the Lamprey Modified SE-1 Weir in JDA SFL  
During the Adult Fish Passage Season

**COORDINATION DATE-** 4/8/24

**PROJECT-** John Day Dam

**RESPONSE DATE-** 4/22/2024

**Description of the problem** – The current John Day South Fish Ladder (SFL) entrance weir (SE-1) has a flat upper surface (Figure 1). This makes it difficult for lamprey to enter the SFL (on average about 60% of the lamprey pass JDA through the North Fish Ladder). Modifications are being made to a spare weir to allow for easier lamprey passage. These modifications include a rounded top (Figure 2), and a section of steel plating on the downstream face (Figure 3) for lamprey attachment. Additional modifications include painting, installing new guide wheels, new bushings, and replacing worn portions of the gasket.

Completion was originally expected during the winter maintenance season (by 3/1/24). Unfortunately, due to several unforeseen delays (long lead times for parts, holiday vacations, etc.), the window was missed. The weir is still being modified as of this memo's coordination date and is expected to be completed by 4/26/24. Since these modifications are expected to improve lamprey passage, JDA would like to install the weir once the modifications are complete.



Figure 1: The currently deployed SE-1 top. The flat surface makes it difficult for lamprey to enter the system.



Figure 2: Picture of the rounded top on the newly modified SE-1 weir. The rounded top will make it easier for lamprey to enter the ladder. Once deployed the detached rounded sections (shown sitting on top of the weir) will mount over the lifting brackets.



Figure 3: Picture of the steel plating installed on the downstream face of the newly modified SE-1 weir. The flat surface will provide an attachment point for lamprey before entering the SFL.

**Type of outage required** – Attraction water will be shutoff to the SFL for approximately 2-hours while the weir is replaced. During this time the North Fish Ladder will remain in service. Both SFL entrances on the northside of the powerhouse will remain open (NE-1 & NE-2) without attraction flows.

**Impact on facility operation** – The SFL AWS pumps will be turned off resulting in a loss of attraction water to the SFL.

**Dates of impacts/repairs** – Estimated outage date 4/26/24

**Length of time for repairs** – The estimated installation time is approximately 2-hours.

**Analysis of potential impacts to fish-**

The 10-year average for daily fish passage (April 21<sup>st</sup> – April 27<sup>th</sup>) at the SFL is as follows: 0-Coho, 0-sockeye, <1-lamprey, 3-steelhead, and 387-Chinook. The NFL has similar numbers except 520-Chinook passed on average (57% of the average daily passage). With attraction off at the SFL, and only the NFL in service, there would likely be delays for any fish drawn to the southside of the tailrace.

**Summary statement – expected impacts on:**

**Downstream migrants:** There is no expected impact to downstream migrants.

**Upstream migrants (including Bull Trout):** Potential delayed migration due to a lack of attraction water at the SFL. They will still have the NFL available for passage.

**Lamprey:** With <1 lamprey (on average) passing the dam during this time of year, and installing a weir better suited for their passage, the outage is likely to result in better passage efficiency while having very minimal impacts.

**Comments from agencies**

**From:** Tom Lorz <lorz@critfc.org>  
**Sent:** Thursday, April 11, 2024 10:49 AM  
**To:** Madson, Patricia L CIV USARMY CENWP (USA) <Patricia.L.Madson@usace.army.mil>  
**Subject:** [Non-DoD Source] Re: FPOM Official Coordination: 24JDA05 MOC Installing the Lamprey Modified SE-1 Weir in John Day SFL

Thanks this should not be a large impact. To reduce impacts I would suggest that this work occurs later in the day or at the end the day. Reviewing passage information may help selecting the best time for this work later in the day.

Thanks  
Tom Lorz  
CRITFC

FPOM Meeting Minutes April 11, 2024:

1.1.1.24JDA05 MOC Installing the Lamprey Modified SE-1 Weir in John Day SFL- We are on plan to get installed by the 25<sup>th</sup>. There is painting to be completed, measurement for as-builts, and then it will be ready to deploy. No comments.

**Final coordination results – Concurrence.**

**After Action:**

The SFL pumps were shutoff at approximately 10:30 AM on 23 April. The weir was fully installed by the crew's 1400 break. However, the weir cable had to be completely greased (along with a couple points on the winch motor). Due to the way PMs are handled, it was actually advantageous to utilize this opportunity to grease the entire length of the cable. The weir was lowered to >8-feet at approximately 1445. Due to limited operator availability, the pumps weren't switched back on until approximately 1530. After the pumps came on, JDF set the weir to approximately 8.5-feet of depth. The weir depth was recorded in the office to ensure the depth is kept >8-feet until the programming can be calibrated to the new weir specs.



Figure 4. newly modified SE-1 weir installed.

Please email or call with questions or concerns.  
Thank you,

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