

Fish Passage Plan (FPP) Change Form

Change Form # & Title: 25LGS001 – Spill Operations
Date Submitted: 11-DEC-2024
Project: LGS
Requester Name, Agency: Lisa Wright, Corps RCC
Final Action:

FPP SECTION: Chapter 8 (LGS), sections 2.2. Spill Management and 2.3.2.7. ASW.

JUSTIFICATION FOR CHANGE: Removes outdated information regarding surface spill and points to the FOP for all spill operations, March 1-November 15 (spring spill, summer spill, and fall/winter surface spill). The dates for surface spill have been expanded per the 2023 MOU and the operation is no longer explicitly for “adult steelhead overshoots” as originally defined in the BiOp.

PROPOSED CHANGE: *Edits to existing FPP text in “track changes”.*

2.2. Spill Management

2.2.1. Spill operations for fish passage ([spring spill, summer spill, and fall/winter surface spill](#)) are defined in the *Fish Operations Plan* (FOP), which is included in the Fish Passage Plan as **Appendix E**.

~~**2.2.2. Surface Spill for Adult Steelhead Overshoots.** Surface spill will be implemented at John Day, McNary, and the four lower Snake River dams as described in the FOP (**Appendix E**) and summarized below to provide non-powerhouse downstream passage for adult steelhead that overshoot natal tributaries prior to spawning or that strive to repeat a subsequent reproduction cycle (iteroparity). This operation was first implemented in fall of 2020 at McNary and the four lower Snake projects March 1–30 and October 1–November 15 for 4 hours in the morning, 3 non-consecutive days a week, pursuant to terms and conditions in the 2020 NOAA Fisheries Columbia River System (CRS) Biological Opinion. This operation is also considered in the 2020 USFWS CRS Biological Opinion as a means of providing safe and effective downstream passage for adult steelhead and other fish.~~

~~**2.2.2.1.** Starting in 2024, this operation will be expanded pursuant to the “U.S. Government Commitments in Support of the Columbia Basin Restoration Initiative”, as included in the 2023 Memorandum of Understanding (MOU)⁴. Details of this operation are defined in the FOP (see section 6 of **Appendix E**) and summarized below:~~

- ~~• March 1–20: ASW in high crest for 4 hours in the morning, 7 days/week.~~
- ~~• March 21–April 9: ASW in high crest 24 hours/day, 7 days/week.~~
- ~~• September 1–November 15: ASW in high crest for 4 hours in the morning, 7 days/week.~~

⁴ See “Fall/Winter Spill Operations” in Attachment 2, Appendix B of the MOU, page 88 of 92 (pdf page 141): pweb.crohms.org/tmt/JointMotion_TermSheet_CourtOrder_and_Extensions_2023_and_Stay_Motion_MOU_2450-1.pdf

2.3.2.7. Adjustable Spillway Weir (ASW).

2.3.2.7.a. Little Goose has one adjustable spillway weir (ASW) in spillbay 1 that provides a surface route for fish passage. The ASW can be operated from the control room and the crest elevation can be adjusted lower or higher to pass more water or less water, respectively, according to the flow and forebay criteria defined below.

2.3.2.7.b. The ASW spill rate is a function of the crest elevation versus forebay elevation – as the pool elevation over the crest increases, more water is spilled over the ASW. Therefore, to maintain the intended spill rate over the ASW (approximately 7-8 kcfs at high crest and 11-12 kcfs at low crest), the ASW crest elevation will be set relative to the current forebay operating range, as defined below in **Table LGS-5**:

Table LGS-5. ASW Crest Elevation Relative to Forebay Range to Maintain High Crest Spill at ~7-8 kcfs and Low Crest Spill at ~11-12 kcfs.

LGS Forebay Operating Range (ft)	ASW High Crest Elevation (ft) = ~7-8 kcfs spill	ASW Low Crest Elevation (ft) = ~11-12 kcfs spill
MOP (633.0 - 634.5)	622'	618'
0.5' Raised MOP (633.5 - 635.0)	622.5'	618.5'
1' Raised MOP (634.0 - 635.5)	623'	619'
1.5' Raised MOP (634.5 - 636.0)	623.5'	619.5'
2' Raised MOP (635.0 - 636.5)	624'	620'
2.5' Raised MOP (635.5 - 637.0)	624.5'	620.5'
3' Raised MOP (636.0 - 637.5)	625'	621'
3.5' Raised MOP (636.5 - 638.0)	625.5'	621.5'

2.3.2.7.c. [The ASW will be operational during spill for fish passage \(spring spill, summer spill, and fall/winter surface spill\), as defined in the FOP \(Appendix E\).](#)

2.3.2.7.ed. High Crest (ASW-Hi):

i. The ASW high crest spills approximately 7–8 kcfs when operated relative to the forebay operating range (**Table LGS-5**). High crest spill patterns are in **Table LGS-8** and **Table LGS-9** (30% Spill).

ii. *Unless flow conditions defined below are met, ASW spill for fish passage will occur with the ASW at high crest (approximately 7-8 kcfs spill).*

2.3.2.7.de. Low Crest (ASW-Lo):

i. The ASW low crest spills approximately 11–12 kcfs when operated relative to the forebay operating range (**Table LGS-**). Low crest spill patterns are in **Table LGS-8** and **Table LGS-10** (30%).

ii. Change the ASW to low crest elevation relative to forebay (**Table LGS-5**) to pass more water during high flow (i.e., spring freshet) when the following flow criteria are met: 1) day average total project outflow above 85 kcfs, and 2) NWRFC inflow forecast above 85 kcfs for at least the next 3 days.

iii. When the previous day's average outflow drops below 85 kcfs and is forecasted to stay below 85 kcfs for at least the next three days, change back to high crest elevation relative to the forebay range.

2.3.2.7.ef. No ASW (Bay 1 Closed):

i. On or after August 1, when day average project outflow drops below 35 kcfs and is forecasted to stay below 35 kcfs for at least 3 days, close the ASW and spill per patterns in **Table LGS-11** (No ASW).

ii. The ASW will not be closed before August 1 even if the low flow criteria are achieved to avoid impacting subyearling migration unless an adult passage delay is observed or due to unit operational constraints at low flow. Closing the ASW prior to August 1 will be coordinated through FPOM by CENWW-OD-T.

iii. Re-open the ASW in high crest if day average project outflow subsequently increases above 35 kcfs and is forecasted to stay above 35 kcfs for 3 or more days. Continue to open and close the ASW according to these criteria for the remainder of the summer spill season.

COMMENTS:

RECORD OF FINAL ACTION: