# Fish Passage Plan (FPP) Change Form

**Change Form # & Title**: 21IHR006 – RSW Spill Rates

**Date Submitted**: 2 September 2021

**Project**: Ice Harbor Dam

**Requester Name, Agency**: Lisa Wright, Corps

**Final Action: APPROVED 14-October-2021**

**FPP Section**:

Chapter 6 IHR, section 2.3.2.6. RSW Operating Criteria.

**Justification for Change**:

FPOM approved adding Lower Granite RSW spill rates vs forebay elevation in Change Form 21LWG006 on 9/9/21 and requested adding the same information for the other Snake projects.

**Proposed Change**: *(see following page for edits to existing FPP in track changes)*

**Comments**:

 14-OCT-2021 FPOM: Van Dyke asked if the lower Columbia surface passage routes also have data for flow versus forebay that could be added. Wright will look into that. Van Dyke also asked whether the GDACS data reported on the website were based on these half-foot increments or more on a curve. Wright and Peery were uncertain but think it’s more on a curve.

**Record of Final Action**: APPROVED at FPOM 14-OCT-2021.

Proposed Change:

**2.3.2.6. Removable Spillway Weir (RSW).**

Ice Harbor Dam has one removable spillway weir (RSW) in spillbay 2 that, when open, provides a surface route for fish passage. The RSW can be opened and closed from the control room.

The spill rate through the RSW is a function of the forebay elevation – as the pool elevation increases, more water is spilled over the RSW:

|  |  |
| --- | --- |
|  **IHR Forebay Elevation (ft)** | **RSW Spill Rate (kcfs)** |
| 437 | 7.1 |
| 437.5 | 7.6 |
| 438 | 8.1 |
| 438.5 | 8.7 |
| 439 | 9.2 |
| 439.5 | 9.8 |
| 440 | 10.4 |

The RSW will be in the raised position and operational during spill for juvenile fish passage (**Appendix E**)and spill for adult steelhead (**section 2.2**):

Raise the spill gate to where it does not touch flow passing down the RSW.

During high flows, if the Northwest River Forecast Center (NWRFC) inflow forecast for Ice Harbor is above 200 kcfs, coordinate with RCC and CENWW-OD-T to initiate aggressive forebay debris removal to avoid impeding RSW operation. If inflow exceeds 260 kcfs, the upstream river gauge flow is increasing, and the NWRFC inflow forecast is above 300 kcfs, stow the RSW (complete rotation to the landing pad).

During summer spill (June 21-August 31), when daily average total project outflow is less than 30 kcfs and inflow is forecasted to remain below 30 kcfs for at least three days on a declining hydrograph, close the RSW and spill according to patterns with no RSW in **Table IHR-6**. If daily average project outflow subsequently increases above 30 kcfs and inflow is forecasted to remain above 30 kcfs for at least three days, re-open the RSW.Continue to open and close the RSW according to these criteria throughout summer spill.