

## FPP Change Request Form

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**Change Request Number & Title:** 14LWG007 Adult spill ops thermal barrier

**Date Submitted:**

**Project:** Lower Granite

**Requester Name, Agency:** Bill Hevlin, NOAA Fisheries

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### Location of Change - FPP Project and Section:

Specific alternative spill operations at Lower Granite Dam, different from the Fish Passage Plan, meant to reduce adult salmon tailrace delay and/or blockage by the improvement of tailrace hydraulic conditions conducive to fish locating fishway entrances and passage up the ladder.

Additional caveats/baseline: Auxiliary pumps (1&2) will be turned on when ladder temperatures exceed 68 degrees for a 12 hr period for three days consecutively. Or should we use adult fish trap daily temperatures as they exceed 68 degrees. Or ladder temperatures measured at (location needs to be specified – fish count window, turn pool, exit pool, or below count station?)

### Proposed Changes (in track changes to existing section):

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Three Alternative Operations Are Proposed -

When a passage delay or blockage is noticed at the adult fish count station, (perhaps by a decline of -25 to 40 sockeye per day delay or a significant decline in 200 fall Chinook passage per day?) the project notify CENWW – OD for coordination with FPOM on will alternative spill operations, following the guidelines specified in alternative 1 below. If adult passage is not noticeably stimulated with the 1<sup>st</sup> alternative operation after 2 days?, then the 2<sup>nd</sup> operation will be tried. And if the 2<sup>nd</sup> alternative does not produce results after 2 days, the 3<sup>rd</sup> operation will be used. The order of alternatives will continue until improvements in fish passage occur. This emergency operation will continue when water temperatures have been reduced and improvements to fish passage are noted.

1<sup>st</sup> Alternative Operation:

At 5 am, close the RSW in spillbay one, and go to a uniform spill pattern with the same spill volume. At 11 am, restore the RSW operation, with training spill. Spill volume does not change during this alternative operation, just the spill pattern. Unit one has priority operation, followed by units 2 and 3.

2<sup>nd</sup> Alternative Operation:

At 5 am, close the RSW, but continue training spill, and increase flow to the powerhouse south units at a volume similar to the RSW. Unit one has priority operation, followed by units 2 and 3. At 11 am, restore the RSW operation with training spill. The spill volume lost during the 6 hour period, due to the closure of the RSW, will be incrementally made up over the remaining 18 hours that day.

3<sup>rd</sup> Alternative Operation:

At 5 am, close all spillbays, including the RSW and training spill, and increase flow to the south powerhouse units at a similar volume. Restore the RSW and training spill at 11 am, and

incrementally over the remaining 18 hours make up the spill volume lost during the 6 hour period.

**Trigger and Justification for Change:**

The next statement is very broad and we believe some quantifiable triggers should be established. The trigger/justification for the alternative spill operation will be any FPOM fishery agency representative raising concern about the possibility that an adult passage delay or blockage may be occurring at Lower Granite Dam. We believe the triggers for moving between alternatives should be further described and it should be noted that as flows recede, unit 1 becomes more important. Should a flow where unit 1 becomes critical be identified?

**Comments from others:**

\*NEW\*14LWG007 LWG adult spill. Hevlin would like to have this pattern available in the event anyone notices an adult passage delay. There are three options. Setter said NWW would like to add some temperature criteria as well. FPOM will continue to work on this change form and discuss further in April. Laughery provided a handout with varying river flows. Kiefer said he is reluctant to come up with a trigger now since it could lead to not acting soon enough or acting too soon when action isn't needed. Setter said she would like to know what might trigger a response from FPOM so NWW could be more prepared. Lorz asked if it is even possible to do anything this year. Setter said the Project will have the same options available as last year. There is no expectation that mitigation this year will be different than last year.

**Record of Final Action:**