

Fish Passage Plan (FPP) Change Request Form

Change Form # & Title: 15BON005 – B-Branch Entrance Gates
Date Submitted: October 9, 2014
Project: BON
Requester Name, Agency: Brian Bissell, BON Fisheries
Final Action: APPROVED - [January 22, 2015](#)

FPP Section: 2.5.2.2. Adult Fish Passage Facilities – Main Dam Fish Ladders.

Justification for Change: SO-SG-4N and -4S are located at the B-branch entrance. This entrance does not currently have a variable-width entrance weir and these sluice gates operate depending on tailwater conditions.

SW-SG-3N and -3S are located at the Cascades Island entrance. They are permanently closed due to the variable-width entrance weir installed in May 2009.

According to Steve Schlenker (CENWP-EC-HD) there is a hydraulic benefit to having the north sluice gate open prior to the south.

Proposed Change:

2.5.2. Main Dam Fish Ladders.

2.5.2.2. Ladder entrances at Cascades Island are labeled SW-SG (Washington sluice gate) and entrances at Bradford Island are labeled SO-SG (Oregon sluice gate). Side entrances SW-SG-5 and SO-SG-7 shall remain closed. Downstream entrances SW-SG-1 and SO-SG-2 shall operate as continuously-open, free-flowing vertical slots. Downstream entrances SW-SG-3 and SO-SG-4, adjacent to shorelines, consist of pairs of sluice gates (north and south):- ~~SO-SG-4N and SO-SG-4S~~ at Cascades Island, ~~SW-SG-3N and -3S~~ shall be closed at all tailwater elevations. At B-Branch, when tailwater exceeds 17', SO-SG-4N and -4S shall be closed. When tailwater is between 9' and 17', sluice gate SO-SG-4N shall be open. When tailwater is below 9', both sluice gates ~~SO-SG-4N and -4S~~ ~~W-SG-3N and SW-SG-3S~~ shall be open. ~~When the tailwater is between 9' and 17', sluice gate SW-SG-3N shall be closed. When the tailwater exceeds 17', sluice gates SW-SG-3N and SW-SG-3S shall be closed.~~

Comments from others: 9/2/14 email from Steve Schlenker to Ida Royer: “According to the document that I already sent you the plates 5 & 6 shows SG-4N opening first (north). It should be the north gate as there is hydraulic benefit with the north gate being adjacent to the fixed weir and it creates more of a concentrated jet to project d/s into the tailrace. If the south opens first, then the jets from the sluice gate and fixed weir are split. Incidentally I got the information about north & south valves interchanged (I forgot which way North was, or was thinking of the mirror image of Cascade Island).”

10/9/14 FPOM: Not approved until FPOM can review Schlenker email w/ justification.

1/16/15 NOAA memo: “No objections to the proposed change.”

Record of Final Action: 1/22/15 FPOM: APPROVED