OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 16BON118 B-branch erosion hydrosurvey COORDINATION DATE - 11 October 2016 PROJECT - BON RESPONSE DATE- 13 October 2016 (FPOM meeting) - comments are accepted until October 25.

Description of the problem –

Portland District is currently working on a plans and specifications package to conduct an emergency repair of the erosion at B-Branch, located on the south side of the spillway tailrace (Figure 1). Contract award is currently scheduled for end of November. Therefore, the PDT needs to get information to characterize the erosion as quickly as possible. There is uncertainty in design regarding the toe of slope at B-Branch and it is in the government's best interest to perform a Government ROV inspection to verify subsurface conditions.

Purpose for operating the spillway as requested: During the July hydrosurvey (see <u>16BON47</u>) the project tagged out the spillway with Gates 2-18 on seal, Gate 1 open for attraction flow, and Fish Valves FV-4-3 and F-4-4 closed and tagged out. During this ROV inspection, the fish valves will not be tagged out so that they can return to service when it does not hamper the inspection.



Type of outage required – Spillway bay gates 2-18 will need to be placed on sill (closed) with gate 1 at 0.5' opening. Fish valves 4-3 and 4-4 will be closed but not tagged out.

Impact on facility operation – There will be no attraction flow from the B-branch fishway entrance (south side of the spillway). Gate 1 will remain open at 0.5'.

Dates of impacts/repairs – 26 October 2016.

Length of time for repairs – About 4 hours. The spillway will be tagged out starting at 1200 and return to service by 1700. Bonneville will attempt to return the spillway and fish valves to service earlier if possible.

Expected impacts on fish passage –

Downstream migrants - Spill ended on 31 August. No impact to juvenile salmonids is expected.

Upstream migrants (including Bull Trout) – There will be no attraction flow from Bay 18, FV4-3, and FV4-4 for the B-Branch ladder entrance. According to Table BON-4 of the 2016 FPP, this outage could impact Fall Chinook and Coho passage, however, A-Branch, Cascades Island, and Washington Shore fishways will remain in FPP criteria. In addition, B-Branch attraction flow will remain in FPP criteria during the morning hours, when most fish enter the fishways. Any fish in the fishway at noon will likely be moving up the ladder and will not be impacted by the fish valves closing. Adult counts for that date for the last five years at Bradford Island are provided in Table 1.

Table BON-4. Species	Count Period	Earliest Peak	Latest Peak
Spring Chinook	Mar 14 – May 31	Apr 15	May 27
Summer Chinook	Jun 1 – Jul 31	Jun 3	Jul 31
Fall Chinook	Aug 1 – Nov 15	Aug 30	Sep 17
Sockeye	Jun 1 – Aug 15	Jun 20	Jul 13
Steelhead	Apr 1 – Mar 31	Jul 16	Sep 22
Winter Steelhead	Nov 16 – Mar 31	Mar 1	Mar 28
Coho	Jul 15 – Nov 15	Aug 29	Oct 11
Lamprey	Mar 15 – Nov 15	Jun 20	Jul 18

Table 1. Adult salmonid counts on 26 October at Bradford Island, from 2011-2015.

Bonneville Bradford Island										
Date	All Chinook	All Steelhead	Unclipped Steelhead	All Coho	Sockeye	Chum	Pink			
10/26/15	386	60	47	181	0	0	0			
10/26/14	107	50	25	414	0	2	0			
10/26/13	344	38	13	129	0	0	0			
10/26/12	59	52	17	60	0	0	0			
10/26/11	247	55	20	108	0	0	1			

Lamprey – minimal impact to lamprey is expected since all fishways will remain watered up and LPSs should not be impacted by the spillway outage.

Comments from agencies -

FPOM meeting comments-

Conder said that if the date needs to change, the MOC does not need any further coordination as long as the survey is done in the afternoon.

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----Original Message----
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From: Bettin, Scott W (BPA) - EWP-4 [mailto:swbettin@bpa.gov]

Sent: Tuesday, October 11, 2016 4:09 PM

To: Kovalchuk, Erin H NWP < Erin.H.Kovalchuk@usace.army.mil>

Subject: [EXTERNAL] RE: FPOM: Official Coordination 16BON118 MOC BI

erosion ROV survey on 26 October

That should be a good week to do it. We have heavy rain in the forecast for the next 10 days but the last week of the month is supposed to be

dry so even if flows are above turbine capacity we can spill enough out before the survey to get four hours of no spill if we have to. -s

Final results – FPOM concurred with this action at the October meeting.

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

Erin Kovalchuk NWP Operations Division Fishery Section Columbia River Coordination Biologist Erin.h.Kovalchuk@usace.army.mil