

*OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE*

COORDINATION TITLE- 13BON65 CI FG6-18 diffuser cover replacement

COORDINATION DATE- 8 August 2013

PROJECT- Bonneville Lock and Dam

RESPONSE DATE- This is a notification, however, comments are always welcome.

Description of the problem- As described at the 8 August FPOM, BON mid-season fishway ROV inspection. The personnel hatch in the FG6-18 diffuser pit, at Cascades Island, was blown askew. About $\frac{3}{4}$ of the hole is exposed. FPOM discussed the risks to fish. **BON will close off FG6-18 and start to schedule an emergency dive as soon as possible.**

Type of outage required- Diffuser FG6-18 has been closed to discourage fish from entering through the displaced cover.

To facilitate the dive, FV5-3 and FV5-4 will be closed. FV5-9 may be throttled if divers need less flow.

Impact on facility operation- CI fishway will be out of FPP criteria for about half a day on 4 September.

Dates of impacts/repairs- 4 September 2013

Length of time for repairs- estimated to be about half a day.

Expected impacts on fish passage-

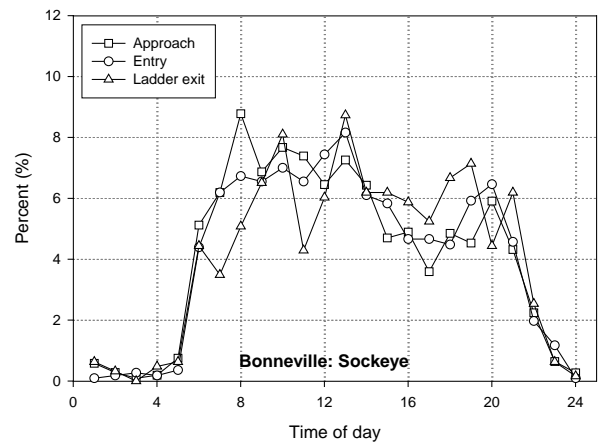
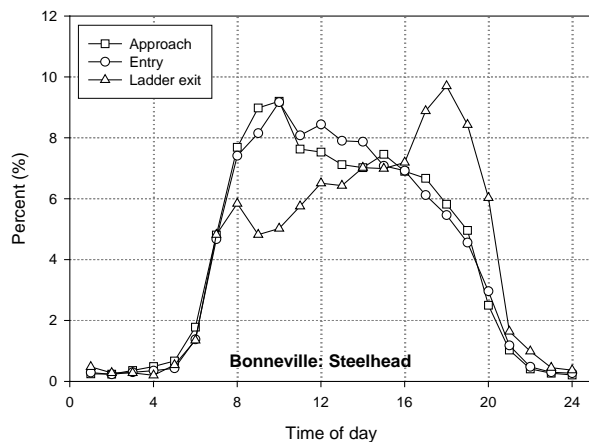
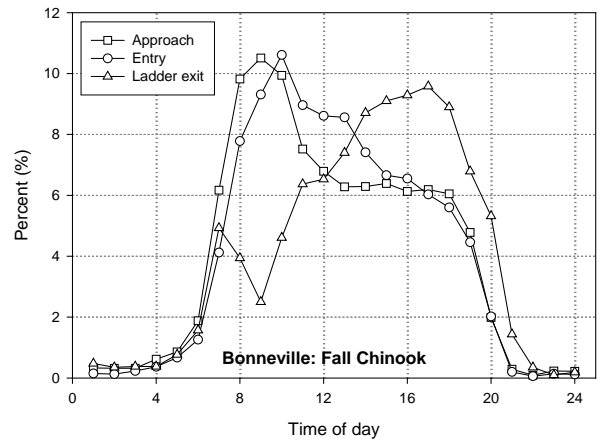
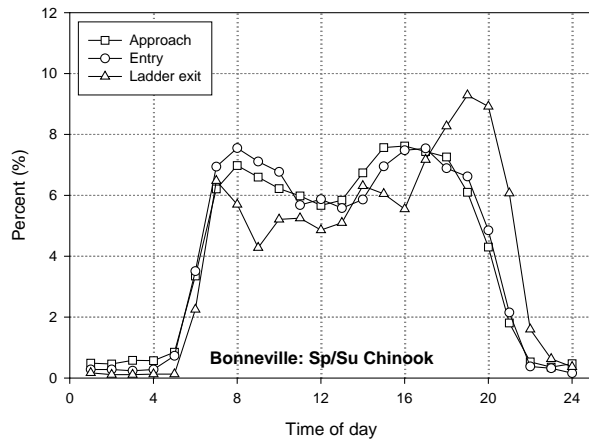
Impacts to Bull Trout are expected to be minimal since Washington Shore and Bradford Island will continue to operate within FPP criteria.

Impacts to lamprey are expected to be minimal as this outage will occur during daylight hours, when fewer lamprey migrate. Lamprey numbers also appear to be declining as the season progresses.

Downstream migrating salmonids- no anticipated impact due to the location of the work.

Upstream migrating salmonids- Fish numbers pick up as we progress through early to mid September, however, this repair is needed and both Washington Shore and Bradford Island fishways will remain in FPP criteria.

Looking at diel passage, dive operations may be coordinated to begin during the time of lowest entry.



Comments from agencies

CRITFC (via phone)- Lorz asked about the delay in getting divers (about a month after the problem was found). Aside from that, he was ok with the plan as described above.

-----Original Message-----

From: Tom Lorz [mailto:lorz@critfc.org]

Sent: Tuesday, September 03, 2013 4:20 PM

To: Mackey, Tammy M NWP

Subject: [EXTERNAL] Re: FPOM:official coordination- 13BON65 CI FG6-18 cover replacement (UNCLASSIFIED)

No problem with closing but move it to 17, we have too many adults we need to insure that they keep finding the entrances and move past.

NOAA Fisheries-

-----Original Message-----

From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]

Sent: Tuesday, September 03, 2013 4:24 PM

To: Mackey, Tammy M NWP

Cc: Hausmann, Ben J NWP; Bissell, Brian M NWP; Traylor, Andrew NWP; Lorz, Tom; Wills, Dave; Kiefer, Russell; Klatter, Bernard A NWP

Subject: [EXTERNAL] Re: FPOM:official coordination- 13BON65 CI FG6-18 cover replacement (UNCLASSIFIED)

Tammy, We are ok with the general diffuser work. I would like to see the bay 1 spill moved to bay 17 to improve attraction to that side of the spillway (rather than just closing it). Also, the shift should be early in the morning to get fish keyed away from the CI entrance. It might also be a good idea to minimize the use of this diffuser to the extent the project can while maintaining good ladder conditions, at least until the project can get a permanent fix in place. Thanks, Gary

BON Fisheries-

-----Original Message-----

From: Hausmann, Ben J NWP

Sent: Tuesday, September 03, 2013 4:56 PM

To: Mackey, Tammy M NWP; Bailey, John C NWP; Baus, Douglas M NWD; BPA Subject: RE: FPOM:official coordination- 13BON65 CI FG6-18 cover replacement (UNCLASSIFIED)

Tammy,

After discussion with the operators and Dive Safety, we feel we can do the repair with spillbay 1 open. If it affects their ability to dive/communicate, we will close it. The same goes for FV5-9--we believe the dive is possible without throttling it back but if conditions prove otherwise, we will cut back flow (NOT close). Regardless, the majority of the ladder will remain fairly normal with only lower diffusers and FV5-3 and 5-4 closed. As you know, the bulk of the ladder flow comes from the UMT and FV5-9 input so the only impact will be to entrance differential and lower weirs.

Ben

NOAA Fisheries-

-----Original Message-----

From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]

Sent: Wednesday, September 04, 2013 7:46 AM

To: Mackey, Tammy M NWP; Hausmann, Ben J NWP

Cc: Trevor Conder - NOAA Federal

Subject: [EXTERNAL] Re: FW: FPOM:official coordination- 13BON65 CI FG6-18 cover replacement (UNCLASSIFIED)

Tammy, A point of clarification. The reason we were thinking about moving bay 1 flow to the other side wasn't only for dive safety. It was also to move adult passage as much as we could to the other side of the spillway in an attempt to minimize the impact to passage. Probably too late to do this now... Gary

*On Tue, Sep 3, 2013 at 9:52 PM, Mackey, Tammy M NWP
<Tammy.M.Mackey@usace.army.mil> wrote:*

Classification: UNCLASSIFIED

Caveats: NONE

Please see Ben's message below.

Due to the diffuser location, it looks like ladder operations will be minimally impacted (aside from closing FV5-3 and FV5-4 which may be fairly closed anyway due to tailwater). We would like to attempt to do the repairs without closing Bay 1 and with minimal throttling of FV5-9.

It is expected the dive should take no more than four hours.

Please let me know as soon as possible if you have any concerns with this operation.

*Thank you,
Tammy*

Final results- *The dive occurred as coordinated, with Bay 1 remaining open. The clearance was accepted at 9:18 and released at 11:51. While replacing the cover on FG6-18, divers found the cover on FG6-19 loose. Both covers were put in place and weighed down with heavy blocks (1800 lbs each). These diffusers will not be used until proper repairs can be made during the winter of 2014/15.*

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

Tammy Mackey
NWP Operations Division Fishery Section
Columbia River Coordination Biologist
503-961-5733
Tammy.m.mackey@usace.army.mil