OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 17TDA12 Fish Unit Breaker Measurements Update COORDINATION DATE- Mar 28, 2017
PROJECT- The Dalles Dam
RESPONSE DATE- March 30, 2017

Description of the problem

Type of outage required – The fish unit breaker replacement project has an install/swap over date of January 2018. Before starting the manufacturing process, the contractors need to make field measurements to assure proper fit. They were scheduled to be onsite Mar 28-31, 2017. The contractor now cannot make it to the site until Apr 11, 12 and 13, 2017. They need to field measure each breaker, which requires the fish unit off. This request is for each fish unit to be out of service, **one at a time**, during night time only Apr11 and 12, with Apr13 as contingency plan in case the measurements take longer than anticipated. Night time hours include 10PM to 5AM.

Impact on facility operation – One fish unit off. The other fish unit will increase discharge to maximum. Entrance criteria may be close to maintainable with the expected high tailwater.

Dates of impacts/repairs – April 11-13, 2017.

Length of time for repairs – 2 to 3 nights.

Analysis of potential impacts to fish

- 1. 10-year average passage by run during the period of impact for adults and juvenile listed species, as appropriate for the proposed action and time of year; *Total for both fishladders chinook passage 10 year average on these dates is 231-379 fish per day.* Steelhead passage is 10-18 fish per day. No data could be found for night passage on these dates.
- 2. Statement about the current year's run (e.g., higher or lower than 10-year average); Run forecast for Chinook in lower Columbia is ~3% higher than the 10yr average. No forecast data could be found for steelhead.
- 3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action); Exposure to fish using the east ladder is highly dependent on spillway volume. There will voluntary spill on these dates. When spill exceeds 100kcfs, ~ 95% fish will use the east ladder. When spill is 15 100kcfs, percentage using the east decreases as low as 60% of total passage. Fish will likely continue to use the east fishway entrances with one fish unit flow and near entrance criteria.

4. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.); for the small percentage of chinook and steelhead that pass at night, this could potentially increase passage time.

Summary statement - expected impacts on: Given that low chinook and moderate steelhead passage is expected on these dates, low percent use fishways at night and 1 fish unit will be in operation providing near entrance criteria, overall expected impacts on chinook and steelhead are expected to be negligible.

Downstream migrants – No impact expected on juvenile passage.

Lamprey – No impacts expected. Misses normal lamprey run timing.

Bull Trout – impacts to Bull Trout are expected to be similar to other upstream migrating salmonids. Very few Bull Trout have been counted at TDA in the last 10 years. "WDFW and COE provided a list of anecdotal sightings/captures of bull trout in the mainstem Columbia River. From 2000 through 2012 there were eleven bull trout reported. Three were downstream of Bonneville Dam, with two at the mouth of Hamilton Creek (CRM 143) and one in 2005 at the Bonneville Dam Smolt Monitoring Facility (CRM 144). Upstream of the dam, one bull trout was found at Cascade Locks (CRM 149), two at Drano Lake (CRM 162), two at the mouth of the Klickatat River (CRM 180.5), one in 2002 at the John Day Dam Smolt Monitoring Facility (CRM 215), and one sighting at Dog Creek Falls by a reputable WDFW creel sampler who observed 18-24" cuts or dollies working old redds below the splash pool over the course of two weeks. "

Expected impacts on fish passage –

Upstream migrants – Minimal to no impact. Night only with approximately 70% criteria flow.

Downstream migrants – No impact. Does not affect juvenile passage routes.

Lamprey – No impacts expected. Lamprey passage normally does not occur during March.

Comments from agencies

Breaker Outage

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----Original Message----
From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]
Sent: Wednesday, March 29, 2017 8:55 AM
To: Kovalchuk, Erin H CIV USARMY CENWP (US)
<Erin.H.Kovalchuk@usace.army.mil>
Cc: Cordie, Robert P CIV CENWP CENWD (US)
<Robert.P.Cordie@usace.army.mil>; Lorz, Tom <lort@critfc.org>
Subject: [Non-DoD Source] Re: FPOM: Official Coordination 17TDA12 MOC
Fish Unit Breaker Outage Update
A little more risk to fish because of the later date, but not much given
the short duration and nighttime timing. I'll stand by my earlier
comments on this one. Thanks, Gary
----Original Message----
From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]
Sent: Monday, March 20, 2017 1:47 PM
To: Kovalchuk, Erin H CIV USARMY CENWP (US)
<Erin.H.Kovalchuk@usace.army.mil>; Cordie, Robert P CIV CENWP CENWD (US)
<Robert.P.Cordie@usace.army.mil>
Cc: Lorz, Tom <lort@critfc.org>
Subject: [EXTERNAL] Re: FPOM: Official Coordination 17TDA12 MOC Fish Unit
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Finally, an easy one. No comments or concerns with the work as proposed. Thanks, \mbox{\ \ Gary}
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----Original Message----

From: Tom Lorz [mailto:lort@critfc.org] Sent: Monday, March 20, 2017 3:10 PM

To: Kovalchuk, Erin H CIV USARMY CENWP (US)

<Erin.H.Kovalchuk@usace.army.mil>

Subject: [EXTERNAL] Re: FPOM: Official Coordination 17TDA12 MOC Fish Unit

Breaker Outage

this is also ok, the last one, TDA backfill, had no issue since I had read all the back and forth between the two elder statesmen....

After Action Update:

Fish unit 2 was forced out of service for exciter problems Apr 24 – May 2, so measurements were taken during that outage. Fish unit 1 was taken out of service Apr 27 from 2207 to 0314hrs and measurements were completed.

Please email or call with questions or concerns. Thank you,
Bob Cordie
Robert.P.Cordie@usace.army.mil
TDA Project Fisheries
541-506-7800

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