OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 17 LMN 01 Ladder Outage COORDINATION DATE - 20 January 2017 PROJECT - Lower Monumental RESPONSE DATE - 31 January 2017

Description of the problem: The original ladder outage schedule does not allow for long enough north ladder outage window to complete the floating orifice bulkhead seal work. This work must be completed before the channel can be fully dewatered for the grating replacement scheduled for 2018 winter outage.

Type of outage required: No unit outage is required for this request. This change will extend the duration of the north ladder outage and shorten the outage time for the south ladder.

Impact on facility operation: Little impact on facility operation as least one fish ladder will always remain in service during entire maintenance period.

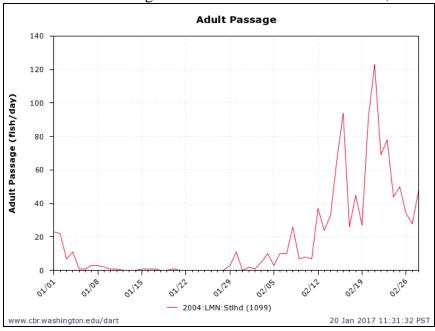
Dates of impacts/repairs:

Original ladder outage schedule: North January 3 January 30
— South February 6 February 28

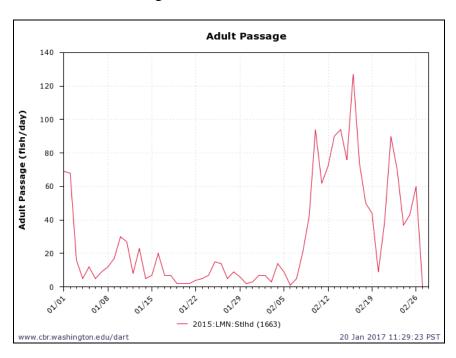
Proposed ladder outage schedule: North- January 3 - February 10 South- February 12 - February 28

Expected impacts on fish passage: Little impact on fish passage is expected as at least one ladder will still remain in service during entire maintenance period. Steelhead are the only adult species passing through the Ice Harbor ladders during this time of year. The most recent winter adult fish counts at Ice Harbor Dam took place in 2004 and 2015. Steelhead passage graphs from January 1 – February 28 for these years immediately follow this paragraph. In 2004, the total number of steelhead passing through Ice Harbor during this period totaled 1,099. Daily counts averaged 19 steelhead per day, ranging from none (multiple dates in January) to 123 on February 21. In 2015, the total number of steelhead passing through Ice Harbor during this period totaled 1,663, averaging 28 steelhead per day. Daily counts in 2015 ranged from 1 on February 2 to 127 on February 16.

Adult Steelhead Passage at Ice Harbor Dam: Jan 1 – Feb 28, 2004.



Adult Steelhead Passage at Ice Harbor Dam: Jan 1 – Feb 28, 2015.



Comments from agencies

```
----Original Message----
From: Tom Lorz [mailto:lort@critfc.org]
Sent: Friday, January 20, 2017 2:56 PM
To: Bailey, John C CIV CENWW CENWD (US) <John.C.Bailey@usace.army.mil>
Subject: [EXTERNAL] Re: MOC - 17 LMN 01 - Lower Monumental Ladder
Outage Schedule
this should be fine, keep us updated if the dates need to be changed.
thanks
tom lorz
----Original Message----
From: Trevor Conder - NOAA Federal [mailto:trevor.conder@noaa.gov]
Sent: Monday, January 23, 2017 9:59 AM
To: Bailey, John C CIV CENWW CENWD (US) <John.C.Bailey@usace.army.mil>
Cc: Gary Fredricks <gary.fredricks@noaa.gov>; Bill Hevlin
<bill.hevlin@noaa.gov>; Lorz, Tom <lort@critfc.org>
Subject: [EXTERNAL] Re: MOC - 17 LMN 01 - Lower Monumental Ladder
Outage Schedule
```

I have read through the Memo of Coordination 17 LMN 01 Lower Monumental Outage Schedule and do not expect substantial delays to adult steelhead from this extended outage of the north ladder since it will be early in the season and there will concurrent operation of the south ladder. Since steelhead passage increases mid February with the spring spawning migration, we will need to consider additional attraction flow to the south ladder if the north ladder outage is expected to extend beyond the period described in this MOC.

-Trevor

John,

Final results

Approved by FPOM 2/9/2017

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

Chuck Barnes Supervisory Fisheries Biologist Lower Monumental Dam Office: (509) 282-7211 Cell: (509) 724-1982

Charles.a.barnes@usace.army.mil