

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

COORDINATION TITLE – 18TDA01 AWS In-Water Work Period Extension

COORDINATION DATE – Feb 9, 2018

PROJECT – TDA-E AWS Backup

RESPONSE DATE- Feb 14, 2018

Description of the problem -

The AWS backup contract work is on an extremely tight schedule due to last in water season weather challenges. Recent tests encountered a failure in one of the pressurizing tests of the pipes, resulting in a redesign of pipe supports. The project needs an additional 15 days beyond the Feb. 28 return dates to complete this modification. If the extension is not granted, the project would have to go into a third season which would have an extremely high cost.

Type of outage required – The east fish ladder will be out of service.

Impact on facility operation – The east fish ladder including all entrances would be out of service. The north ladder would be in service.

Impact on unit priority - None

Impact on forebay/tailwater operation – There is a soft constraint to keep the tail water at 78’.

Impact on spill – 7.5KCFS day time hours for the duration of the outage

Dates of impacts/repairs – March 01-15, 2018

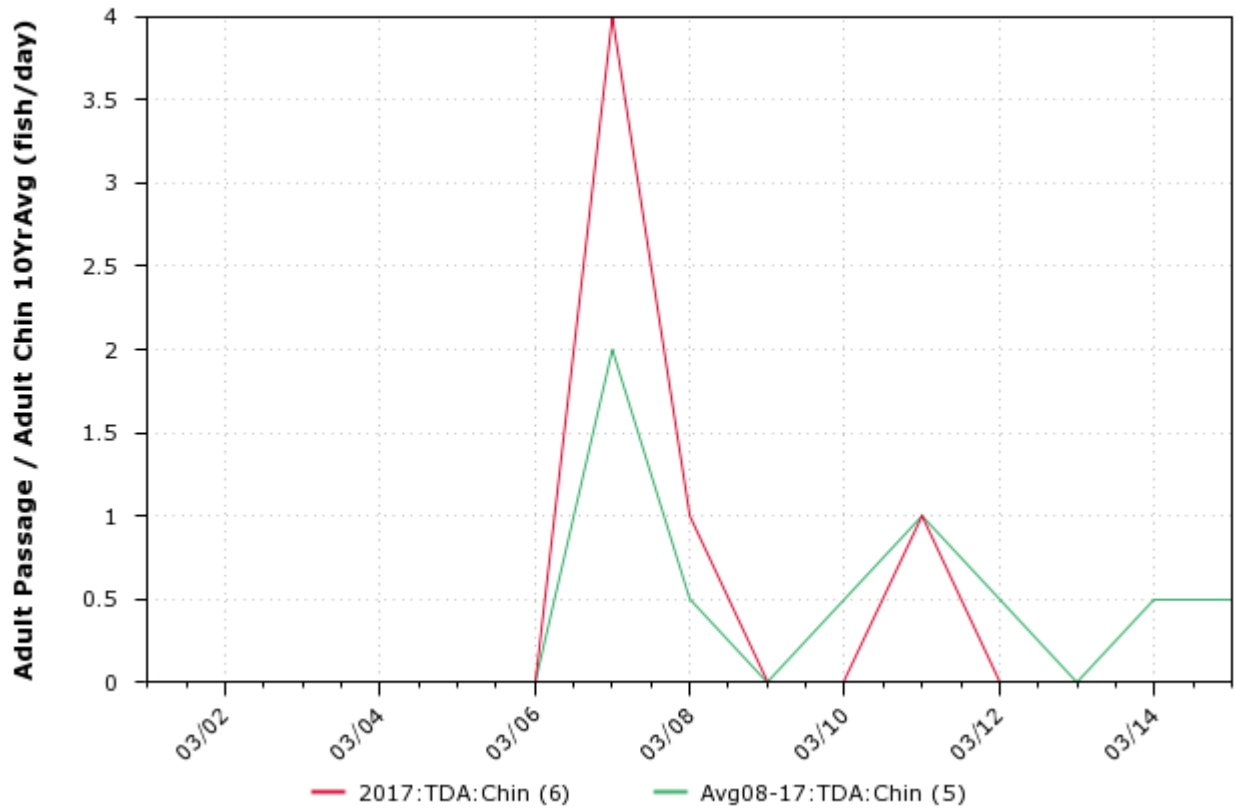
Length of time for repairs – 15 days

Analysis of potential impacts to fish

Table 1 - TDA-E March daily passage and averages for adult Chinook, 2003-2007 and 2012

Date	2003	2004	2005	2006	2007	2012	Average
1-Mar	0	0	1	0	0	0	0
2-Mar	5	1	0	0	0	0	1
3-Mar	0	0	0	0	1	0	0
4-Mar	5	0	1	0	0	0	1
5-Mar	7	1	1	0	1	0	2
6-Mar	16	0	0	0	0	0	3
7-Mar	16	0	0	0	0	0	3
8-Mar	9	1	0	0	0	0	2
9-Mar	25	0	0	0	2	1	5
10-Mar	18	8	1	0	1	1	5
11-Mar	20	7	1	0	0	1	5
12-Mar	30	7	0	0	1	1	7
13-Mar	20	4	2	0	1	0	5
14-Mar	168	7	2	0	1	1	30
15-Mar	95	15	2	0	0	1	19

**Adult Passage
Adult Chinook 10YrAvg**



DART Data Citation

Columbia River DART, Columbia Basin Research, University of Washington. (2018). Adult Passage Graphics & Text. Available from http://www.cbr.washington.edu/dart/query/adult_graph_text

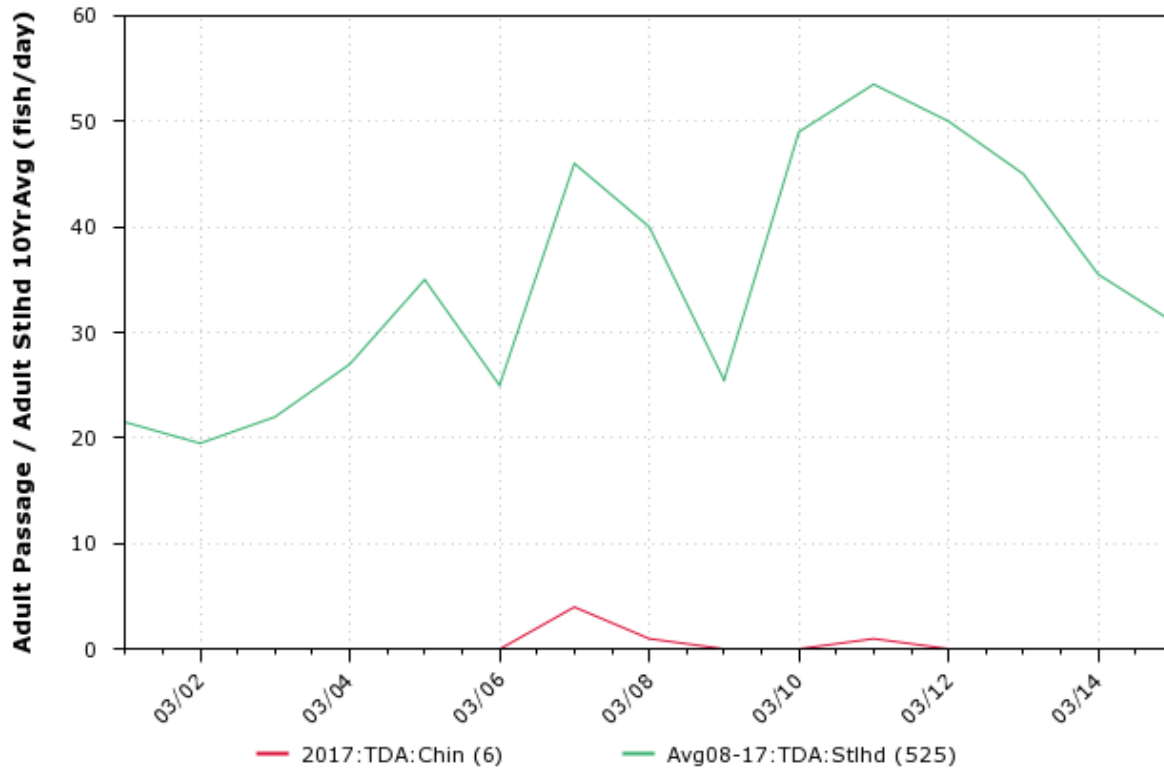
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06 Feb 2018 12:28:23 PST. Columbia River DART (Data Access in Real Time) www.cbr.washington.edu/dart.

Table 2 - TDA-E March daily passage and averages for adult Steelhead, 2003-2007 and 2012

Date	2003	2004	2005	2006	2007	2012	Average
1-Mar	16	0	15	2	19	13	11
2-Mar	67	1	12	7	28	14	22
3-Mar	25	8	22	8	31	16	18
4-Mar	99	12	33	11	31	21	35
5-Mar	105	124	16	9	25	27	51
6-Mar	65	40	9	7	20	17	26
7-Mar	82	32	14	0	20	34	30
8-Mar	50	83	27	20	27	25	39
9-Mar	112	120	35	23	38	16	57
10-Mar	74	130	27	25	25	19	50
11-Mar	71	121	33	23	32	10	48
12-Mar	33	74	17	16	43	19	34
13-Mar	56	85	28	18	45	18	42
14-Mar	32	60	28	20	43	26	35
15-Mar	27	60	25	22	38	23	33

Adult Passage Adult Steelhead 10YrAvg



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06 Feb 2018 12:33:11 PST

DART Data Citation

Columbia River DART, Columbia Basin Research, University of Washington. (2018). Adult Passage Graphics & Text. Available from http://www.cbr.washington.edu/dart/query/adult_graph_text

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Summary statement - expected impacts on:

Upstream migrating salmon – There is expected to be a delay to migrating salmon since the east fish ladder generally attracts more fish than the north. The north fish ladder will be in service and in FPP criteria.

Downstream migrants – There are no expected impacts. This is not a downstream passage route.

Upstream migrants Bull Trout – No impact. Very few bull trout have been counted at TDA in the last 10 years.

Lamprey - This work will occur outside the normal adult lamprey migration season. USACE counts of daily passage at TDA-E in March from 2003-2007 and 2012 recorded zero lamprey passing over the entire period. Larval and juvenile lamprey may migrate during this time but will not be affected by the work near TDA-E.

Comments from agencies – Notes from February FPOM meeting: Albright explained that an installed pipe was pressured tested and started moving. Structural engineers suggested adding three collars to the distribute pressure. The pipe has to be put back into position, the collars need to be fabricated and installed and the pipe has to be repainted. They are looking to see how they can be most efficient with their schedule and think they can do it in one week but it could be two weeks. The higher tail water is also affecting the work. A soft constraint to keep the tail water at 78’ was issued but there is too much water in the system. Bellerud expressed concern that the east fish ladder remains out of service during part of the spring run especially for steelhead. There were also concerns that the pipe moving could have caused other damage throughout the system. The ladder could return to service with the AWS system in a safe condition if it had to be. Conder suggested adding daytime spill of 7.5kcfs to attract fish to the north ladder. As the work progresses, if the team finds that the collar is not going to work, then FPOM recommends returning the ladder to service and going into a third season. This year, the contractor has been able to hold schedule and Albright felt confident they could complete the work in two weeks. At the next FPOM, the team will report back on the progress of the collar work. BPA needs to confirm the ability to spill. NOAA, USFWS, IDFG, CTUIR and Colville Tribes representatives concurred with the action as long as it includes the addition of 7.5KCFS of daytime spill.

Notes from the 180216 FPOM emergency call:

BPA will provide 15kcfs spill every other day for the first week or until the EFL returns to service. Fish passage at the north ladder will be monitored with the results provided to the group at the March FPOM meeting. The results of the monitoring will determine if spill is needed every day or every other day the second week.

Final coordination results – The extension can last up to 15 days. Spill will be provided at 15KCFS every other day starting March 01 through March 07. The north fish ladder counts will be monitored and the results brought to FPOM. The results will determine if spill is needed every day or every other day until the fish ladder returns to service.

After Action update

Spill was activated March 1,3 and 5, per FPOM coordination to attract fish passage to the north fishladder. The east fishladder was returned March 7. Fish Units returned to service after functional testing March 9 at 1132. Fish Field Unit collected north passage data for spill effectiveness. Results presented at March FPOM.

Date	All Chinook	Adult Chinook	Jack Chinook	All Steelhead	Clipped Steelhead	Unclipped Steelhead	All Coho	Adult Coho	Jack Coho	Sockeye
3/1/2018	0	0	0	0	0	0	0	0	0	0
3/2/2018	0	0	0	1	1	0	0	0	0	0

3/3/2018	2	2	0	4	2	2	0	0	0	0
3/4/2018	0	0	0	1	0	1	0	0	0	0
3/5/2018	0	0	0	1	1	0	0	0	0	0
3/6/2018	0	0	0	0	1	0	0	0	0	0
Total	2	2	0	7	5	3	0	0	0	0

Please email or call with questions or concerns.

Thank you,

Erin

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