

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

**COORDINATION TITLE** – 22TDA MOC 14 Hydro-Survey of TDA Spillway and Navigation Lock

**COORDINATION DATE** - 12 October 2022

**PROJECT** - The Dalles Lock and Dam

**RESPONSE DATE** - 26 October 2022

**Description of the problem** – As part of the Periodic Inspection at The Dalles Lock and Dam, a hydro-survey of the spillway and downstream approach is needed. The last hydro-survey was conducted in 2018 and due to low tailwater there were data gaps. In reviewing previous hydro-surveys, a minimum Bonneville forebay of 74 feet should provide sufficient tailwater to get full coverage of The Dalles spillway. During the spillway hydro-survey The Dalles north ladder fish entrance will need to be shut down (Wasco PUD shutdown as well) while the survey is north of the 8/9 wall and The Dalles south spillway entrance to the east ladder will need to be shut down while the survey is south of the 8/9 spillwall.

**Type of outage required-**

- **Minimum Bonneville Forebay of 74 feet**
- **Maximum 4-hour outage of the Wasco PUD and North Ladder Fish Entrance**
- **Maximum 4-hour outage of the South Spillway Entrance to the East Fish Ladder**
- **Fish units flow reduced by – 30% to provided criteria for the east and west entrances.**

**Impact on unit priority** - None.

**Impact on forebay/tailwater operation** - None at TDA but requesting a minimum forebay at Bonneville (the request is in the normal range).

**Impact on spill** - Spill operations have finished for the season.

**Dates of impacts/repairs** – Week of October 31<sup>st</sup>, 2022

**Length of time for repairs** - 0700 to 1500.

**Analysis of potential impacts to fish:**

During the final week October, The Dalles has a 10-year average passage of approximately 1,000 total salmonids a day. Of these fish, approximately 95% use the east fish ladder and of those approximately 80% use the east fishway entrance. The east and west fishway entrance will maintain criteria during this operation. The operation will affect 15% of the total run. The closures will be in 4-hour blocks for each entrance resulting in 30% of the total daylight passage hours.

## 1. 10-year average passage during the period of impacts.

Dam	TenYrYears	ChinookAdult	ChinookJack	CohoAdult	CohoJack	Steelhead	UnclippedSteelhead	Sockeye	Lamprey
TDA	2012to2021	2883	768	254	14	1661	680	0	0

Fig 1. The ten-year average passage for all species at The Dalles Dam during the week of 31 October to 4 December (Data from FPC).

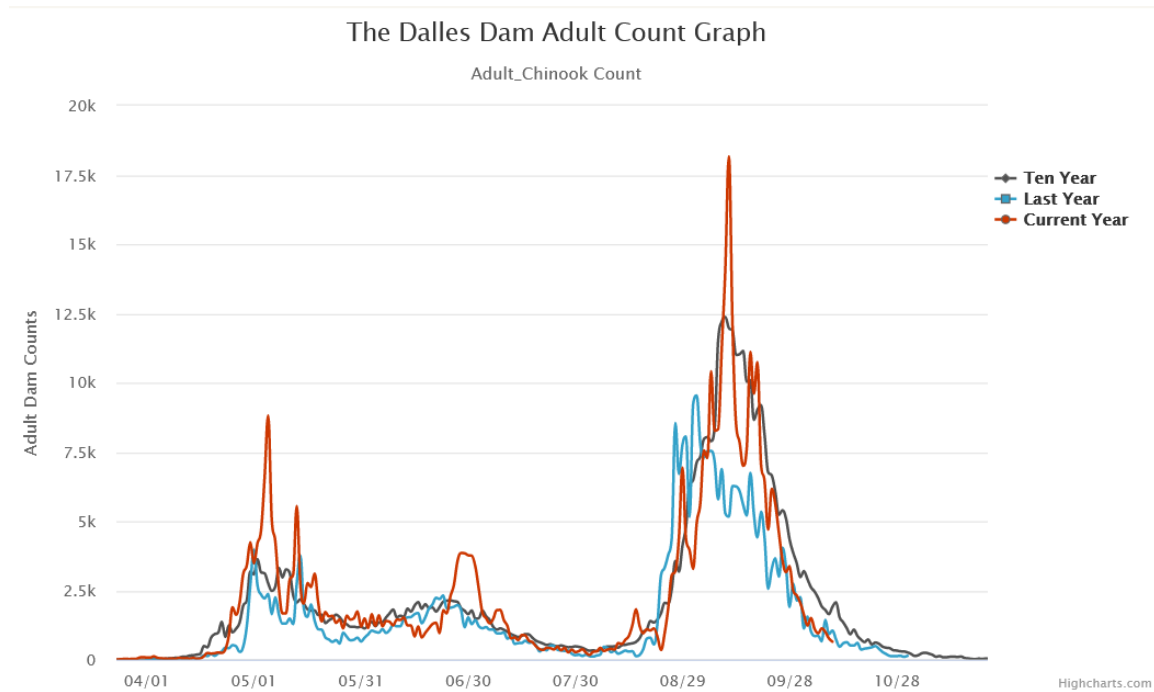


Fig 2. A graph of adult passage at The Dalles Dam. By the time of the operation, most salmonids have passed the dam (Data from FPC).

## 2. Statement of the current years run:

The Dalles Dam Historical Fish Passage

Species	Ten-year average	Current year	Above/Below average
Spring Chinook	113533	147118	Well above average
Fall Chinook	315442	2788921	Below average
Coho	51650	48242	Slightly below average
Sockeye	256662	580579	Well above average
Steelhead	113929	93864	Below average
Lamprey	11277	21776	Well above average

Fig 3. The current years run at The Dalles Dam compared to the 10-year average (Data from FPC).

**Impacts to upstream migrants (including Bull Trout) by date:**

Some minimal delay may be seen at The Dalles during the maximum 4-hour closures as a result of the operation. However, the east and west fish ladders will maintain criteria throughout the operation and will provide passage. 95% of fish utilize the east fish ladder entrance, this rate may see a slight increase during the survey.

**Impacts to upstream migrants (Lamprey)**

The ten-year average for lamprey passage during this time shows no lamprey passing during this work period. Any affects from the operation are expected to be minimal.

**Impacts to downstream migrants:**

Impacts are expected to be minimal as the majority of salmonid and lamprey juvenile passage has concluded by the date of the operation.

**Comments from agencies:**

The MOC was presented to the FPOM group during the 13 October 2022 monthly meeting and no comments from any agencies were received.

**Final coordination results:**

The BON forebay operation and survey will be completed as planned.

Please email or call with questions or concerns.

Thank you,

Steven Sachs  
Fish and Wildlife Field Biologist  
Fisheries Field Unit  
USACE Portland District  
(971) 284-6422

Laurie Ebner  
Hydraulic Engineer  
CENWP-ENC-HD  
Work – 503-808-4880  
Cell – 503-250-3404