# The Dalles Dam Fishway Status Report

01/12/19

Inspection Period:01/05/-01/11/2020

## THE DALLES DAM



The Dalles Project-Fisheries P.O. Box 564 The Dalles, OR 97058-9998 Phone: 541-506-3800

| The Dalles Dam             | Inspections<br>OOC |              | Total Number of Ins<br>Comments: | pections: 7                   | Temperat<br>Secchi: | t <b>ure:</b><br>5.0 | 42.8<br>feet | °F |  |
|----------------------------|--------------------|--------------|----------------------------------|-------------------------------|---------------------|----------------------|--------------|----|--|
| NORTH FISHWAY              |                    |              |                                  |                               |                     |                      |              |    |  |
| Exit differential          | 0                  | ≤ 0.5'       |                                  |                               |                     |                      |              |    |  |
| Count station differential | 0                  | ≤ 0.3'       |                                  |                               |                     |                      |              |    |  |
| Weir crest depth           | 0                  | 1.0' ± 0.1'  |                                  | Velocity of channel flow 2.69 | ft/sec. 1/5/202     | 20                   |              |    |  |
| Entrance differential      | 0                  | 1.0' - 2.0'  | Average for week =               | 1.34                          |                     |                      |              |    |  |
| Entrance weir N1           | 0                  | depth (≥ 8') | Average for week =               | 9.2                           |                     |                      |              |    |  |
| Entrance weir N2           | 0                  | Closed       |                                  |                               |                     |                      |              |    |  |
| PUD Intake differential    | 0                  | ≤ 0.5′       |                                  |                               | <u> </u>            |                      |              |    |  |

# **EAST FISHWAY**

# RTS last week Jan

| JUVENILE PASSAGE           |   |                  |   |  |  |  |  |  |  |
|----------------------------|---|------------------|---|--|--|--|--|--|--|
| Sluicegate operation       | 0 | nits 1-1, 8, 18- | Intakes open, Exit Closed                                       |  |  |  |  |  |  |
| Turbine trashrack drawdown | 0 | <1.5', biwkly    | 1/5/2020 fish inspection performed. Some juvenile shad present. |  |  |  |  |  |  |
| Spill volume/pattern       | 0 | None             |   |  |  |  |  |  |  |
| Turbine Unit Priority      | 0 | per FPP          |   |  |  |  |  |  |  |
| Turbine 1% Efficiency      | 0 | per FPP          |   |  |  |  |  |  |  |

## **OTHER ISSUES:**

#### **Operations**

North fish ladder in full operation

East fish ladder remains dewatered. Lower fishway equalized to tailwater.

Spillway closed

#### Outages

T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels

MU1 and MU2 restricted to 160 MW combined through 5/28/2020

MU13 OOS 9/23/2019 - 7/22/2020 for Hydraulic Oil System Repairs

MU2 FOOS through 1/2/2019 for hydraulic repairs

MU12 OOS 11/26/2019 - 2/10/2020 T6 GSU Replacement & Annual

MU11 OOS 11/6/2019 - 2/20/2020 T6 GSU Replacement & O/H

F1 & F2 OOS 12/1/2019 - 2/10/2020 for Annual, O/H, FUBB

ROV inspection intakes FU1/2, MU1, MU8, MU18 OOS 1/27 and 1/28

#### Maintenance

Calibration check of east openings 12/12/19, 1/5/20 North entrance openings and velocities in criteria.

Collection channel dewatering pumps 5 and 6 removed for rehab. Awaiting new pump motors installation.

Fishway automation replacement installation starting. Brackets for sensors installed at east entrance.

Exit weirs 154 and 155 removed. Wheel replacement and steel panel repair complete. Weir 155 guide repair complete. Gaps filled for lamprey pass improvement.

West entrance weir W1 cable problem corrected.

Repaired 2 of 4 failed south entrance diffuser valves. Planning underway for remaining diffuser valves.

Three expansion joint repairs on east fishladder completed.

Damaged weir cap east entrance E2 weir completed.

Weir 157 failed brake to be repaired before Mar1.

Spillway assessment (MRER); No funding for FY20. Spillgate 9 fish priority included.

### **Predators**

Green laser use continues for piscivorous bird hazing testing. Refer to tab. Laser use on DCCO foraging on juv. shad. No DCCO present on breeding sites.

USDA hazing resumes 4/15/20

Eagle numbers in normal range and locations. Cormorant and gull numbers fluctuating daily, with expected winter numbers.

No sea lion observations this week. Last sighting May9.

## Research/Construction/Contractors

Four Peaks fish counting concluded October 31. Cleaning count stations

AWS backup - Follow on contract in progress. Commissioning scheduled third week Feb.

PITAGS north and east fishladder data collection at count stations continues.

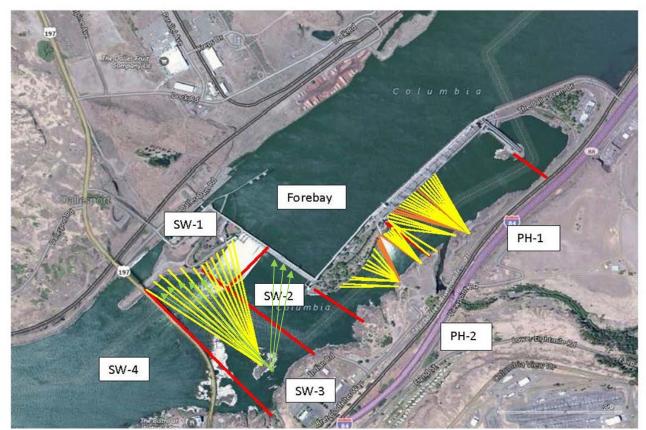
Dam angling 2019 total 2228 pikeminnow, 98 smallmouth bass and 6 walleye caught. Bass/Walleye released due to being state game species.

Fish unit breaker replace.- Planning third season work Dec1-end Jan. Commissioning first week of Feb.

Fish unit rehab - Phase 1A. Planning operation scenario during construction. No funding.

Approved by: Bryan Hert for Mike Colesar

Operation Project Manager The Dalles Dam

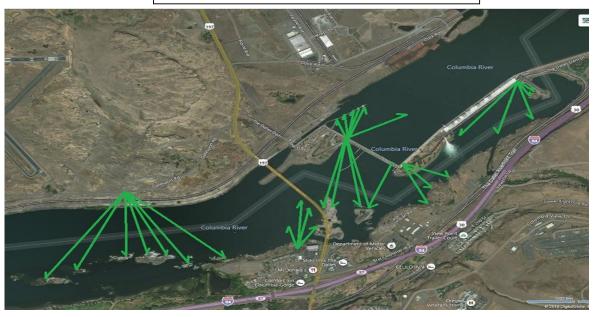


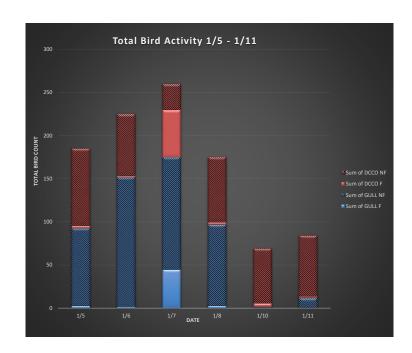
Red lines = avian zones

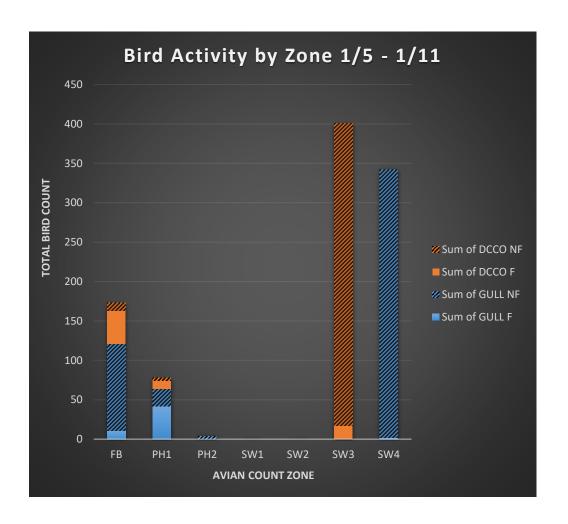
Yellow lines = current wires

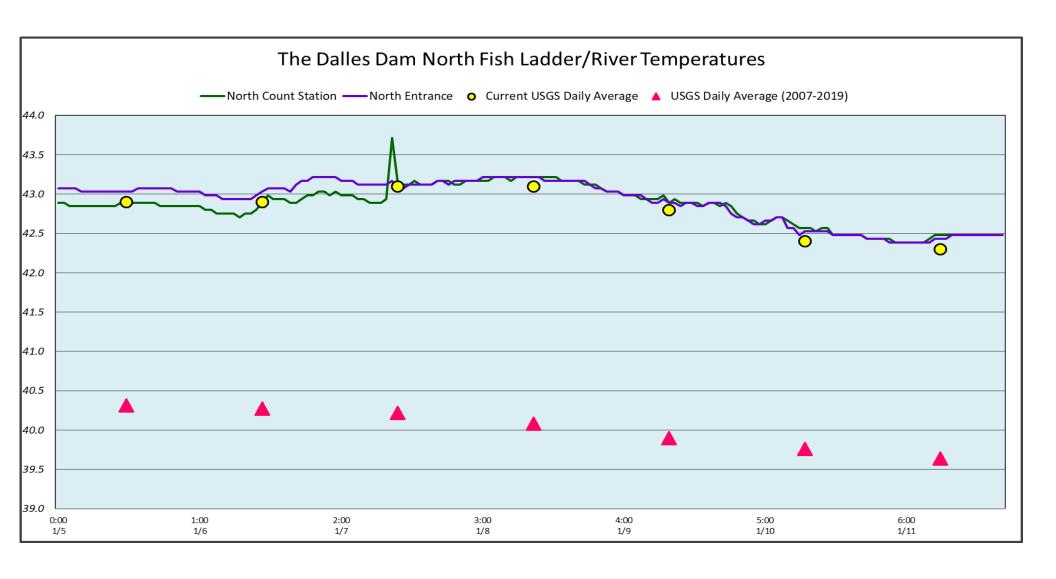
Orange lines = down or missing wires

Avian Lines (above) and laser deterrent zones (below)









# USGS Link

|      | Secchi: |       | °F   |
|------|---------|-------|------|
| 1/5  | 5.0     | Sun   | 42.9 |
| 1/6  | 5.0     | Mon   | 42.9 |
| 1/7  | 5.0     | Tue   | 43.1 |
| 1/8  | 5.0     | Wed   | 43.1 |
| 1/9  | 5.0     | Thurs | 42.8 |
| 1/10 | 5.0     | Fri   | 42.4 |
| 1/11 | 5.0     | Sat   | 42.3 |
|      | 5.0     | AVG   | 42.8 |
|      |         |       |      |

The Dalles Dam Daily Readings and Averages for Temperatures, Secchi, Entrances, and Spill

|       | North Ladd   | er Entrance |              | East Ladder |               |          |       |               |     |       |       |                |    |    |
|-------|--------------|-------------|--------------|-------------|---------------|----------|-------|---------------|-----|-------|-------|----------------|----|----|
| Date: |              | 7           |              |             | East Entrance |          |       | West Entrance |     |       |       | South Entrance |    |    |
|       | Differential | N1 Depth    | Differential | E1 Depth    | E2 Depth      | E3 Depth | JP 6  | Differential  | W1  | W2    | W3    | Differential   | S1 | S2 |
| 1/5   | 1.2          | 9.0         |              |             |               |          |       |               |     |       |       |                |    |    |
| 1/6   | 1.4          | 8.9         |              |             |               |          |       |               |     |       |       |                |    |    |
| 1/7   | 1.4          | 9.1         |              |             |               |          |       |               |     |       |       |                |    |    |
| 1/8   | 1.4          | 9.2         |              | La          | dder          | dew      | atere | ed for        | win | ter n | naint | enan           | ce |    |
| 1/9   | 1.4          | 9.3         |              |             |               |          |       |               |     |       |       |                |    |    |
| 1/10  | 1.3          | 9.4         |              |             |               |          |       |               |     |       |       |                |    |    |
| 1/11  | 1.3          | 9.4         |              |             |               |          |       |               |     |       |       |                |    |    |
| AVG:  | 1.3          | 9.2         |              |             |               |          |       |               |     |       |       |                |    |    |