

FISHWAY STATUS REPORT

Date: 8/4/12
 Inspection Period: 7/29 - 8/4/2012

THE DALLES DAM



US Army Corps
 of Engineers
 Portland District

The Dalles Project-Fisheries
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Fishways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

| The Dalles Dam | Inspections | Criteria | Total Number of Inspections: | 20 | Temperature: | 67.2 F |
|---------------------------------|-----------------|--------------|---|----|--|---------|
| | Out of Criteria | Limit | Comments | | Secchi: | 3.5 Ft. |
| NORTH FISHWAY | | | | | | |
| Exit differential | 0 | ≤ 0.5' | | | | |
| Count station differential | 0 | ≤ 0.3' | | | | |
| Weir crest depth | 0 | 1.0' ± 0.1' | | | | |
| Entrance differential | 0 | 1.0' - 2.0' | Average 1.3 | | Daily differentials & weir depths, see AVGS tab. | |
| Entrance weir N1 | 0 | depth (≥ 8') | Average 10.2 | | | |
| Entrance weir N2 | | Closed | Bulkhead installed | | | |
| PUD Intake differential | 0 | ≤ 0.5' | | | | |
| EAST FISHWAY | | | | | | |
| Exit differential | 0 | ≤ 0.5' | | | | |
| Removable weirs 154-157 | 0 | Per forebay | Auto adjusts 1' increments. | | | |
| Weir 158-159 differential | 0 | 1.0' ± 0.1' | | | | |
| Count station differential | 0 | ≤ 0.3' | 7/30/12 raked picketed leads, debris has been light this year. | | | |
| Weir crest depth | 0 | 1.0' ± 0.1' | | | | |
| Junction pool weir JP6 | 2 | depth (≥ 7') | Manually adjusted as needed. | | | |
| East entrance differential | 2 | 1.0' - 2.0' | Average 1.4 | | Fish units were off for an ROV inspection on 8/1/12. | |
| Entrance weir E1 | 0 | No criteria | Average 9.6 | | Daily differentials & weir depths, see AVGS tab. | |
| Entrance weir E2 | 0 | depth (≥ 8') | Average 9.7 | | | |
| Entrance weir E3 | 0 | depth (≥ 8') | Average 9.7 | | | |
| Collection channel velocity | 0 | 1.5 - 4 fps | Average 2.3 | | See Velocities tab for more complete information. | |
| Transportation channel velocity | 0 | 1.5 - 4 fps | Average 2.5 | | | |
| North channel velocity | 0 | 1.5 - 4 fps | Average 2.3 | | | |
| South channel velocity | 0 | 1.5 - 4 fps | Average 3.3 | | | |
| West entrance differential | 3 | 1.0' - 2.0' | Average 1.1 | | Fish units were off for an ROV inspection on 8/1/12. | |
| Entrance weir W1 | 0 | depth (≥ 8') | Average 8.1 | | | |
| Entrance weir W2 | 0 | depth (≥ 8') | Average 8.1 | | | |
| Entrance weir W3 | 0 | No criteria | Average Closed | | | |
| South entrance differential | 2 | 1.0' - 2.0' | Average 1.5 | | Fish units were off for an ROV inspection on 8/1/12. | |
| Entrance weir S1 | 0 | depth (≥ 8') | Average 8.3 | | | |
| Entrance weir S2 | 0 | depth (≥ 8') | Average 8.3 | | | |
| JUVENILE PASSAGE | | | | | | |
| Sluiceway operation | 14 | units 1,8,18 | MU 1 was forced out of service from 7/17-8/2. Sluiceways were opened under MU3. | | | |
| Turbine trashrack drawdown | 0 | <1.5', wkly | Range: 0.1-0.5' | | | |
| Spill volume | 1 | 40%, 24hr | Average 40.1 | | | |
| Spill Pattern | 0 | per FPP | | | | |
| Turbine Unit Priority | 10 | per FPP | MU1 and 2 were forced out of service on 7/17; returned to service on 8/2/12. | | | |
| Turbine 1% Efficiency | 0 | per FPP | | | | |

OTHER ISSUES:**THE DALLES****Birds:**

Fisheries personnel are collecting bird count data twice daily. USDA gull hazing contract ended 7/30/12. See bird tab for information on species, number and locations.

Operations:

Main Units 1 & 2 returned to service at 2147 hrs. 8/2/12.

Gatewell drawdown was completed on 8/3/12. All differentials were within criteria and ranged from 0.1' - 0.5'.

Calibration check completed 8/3/12. All entrance weirs, entrance channel/tailwater, and exit staff gauges in criteria.

North and East Fish Ladders, Ice/Trash Sluiceway and Spillway in operation per fish passage Plan.

MU11 out of service for 5 year over haul. Two decomposed subyearling chinook observed in scroll case 7/30/12. Draft tube fished 7/31/12; two sturgeon, two channel catfish, and one decomposed channel catfish captured and returned to tailwater. Cooling water strainer checked for juvenile lamprey, none observed.

Sea lion observed near zone PH-T1 8/4/12.

Adult shad observed between east count station picketed leads; captured and released into fish ladder.

Maintenance:

Mid-season Remote Operated Vehicle (ROV) east fish ladder diffuser grating 8/1/12. Fish Units out of service from 0745 hrs. to 1345 hrs.

The ROV inspection of the North fish ladder has been postponed until a Policy for the purpose of locking shared clearance isolation points can be agreed upon by both the NWCPUD and The Dalles Dam.

Current Outages :

MU10 out of service 7/23/12 0600 hrs. to 8/30/12 1700 hrs. for digital governor installation.

MU11 out of service 7/30/12 0746 hrs. to 9/6/12 for 5 year over haul, as builts, generator heaters, heat exchangers, and cavitation.

Studies:

Inland Avian Predation Management Work Group scheduled to meet next week at Westrick 8/6/12.

Supporting east fishladder backup water supply study as needed. No recent meeting activity. Fishlock and deep intake alternatives moving forward.

Research/Contractors:

The Columbia River Northern Pikeminnow Management Program Dam Angling: the pikeminnow dam angling crew has removed 2,933 northern pikeminnow from The Dalles Dam tailrace so far in 2012. This is more than the combined yearly total harvest totals for 2010 and 2011 (1,323 in 2010 and 1,204 in 2011).

ODFW Bass Dam Angling Project ongoing.

WDFW fish counters continuing 16 hr./day counting.

USFWS continues adult lamprey camera monitoring at the counting stations, between picketed leads. North exit dual frequency identification sonar (DIDSON) camera to be installed at a later date.

PSMFC sampling effort at the PUD turbine, once a week, from 0800 hrs. on Tuesday to 0800 hrs. on Wednesday. A complete sample again this week with three subyearling chinook in excellent condition collected. This is the final sample for this season.

Battelle is continuing the summer JSAT performance testing.

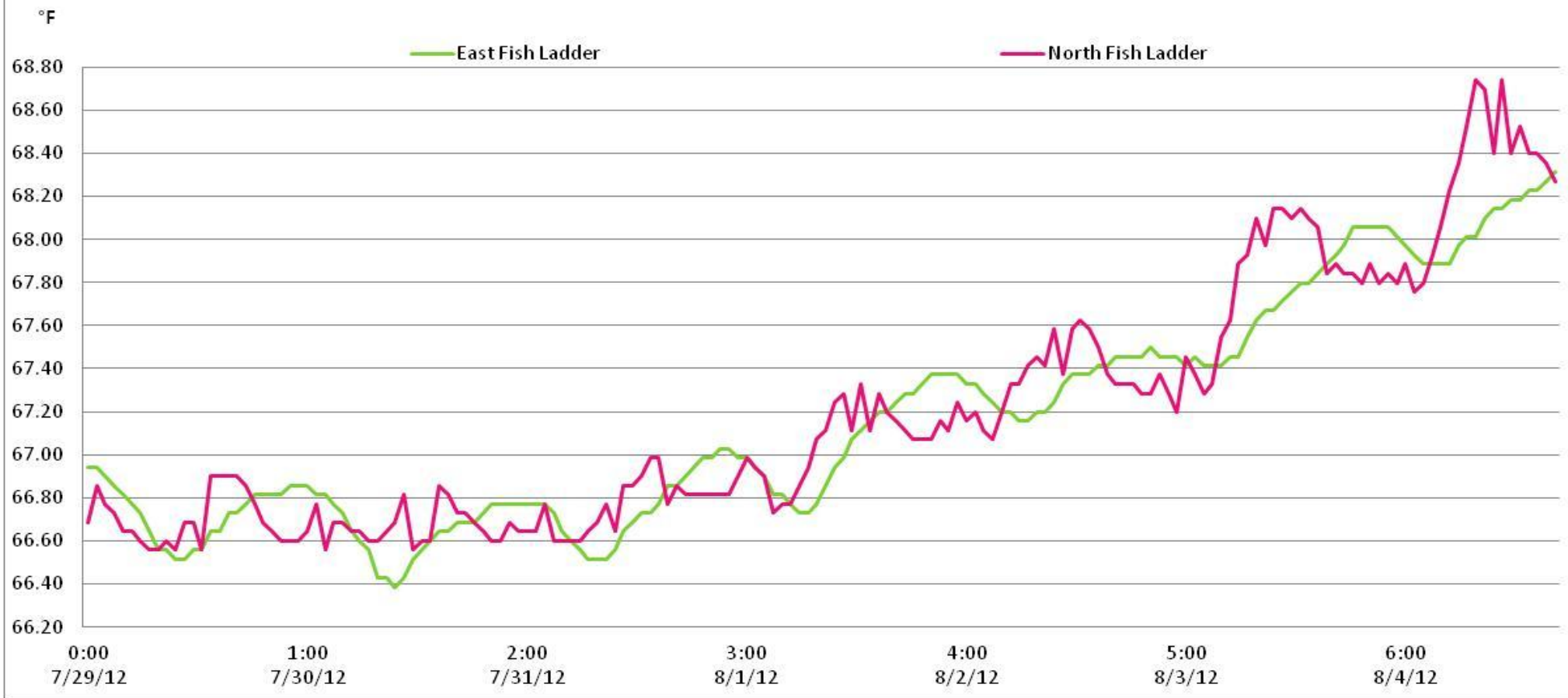
Approved by;
Ron D. Twiner
Operation Project Manager
The Dalles Dam

The Dalles Dam Fish Counts

| Date | East | North | East | North | Total | Total | East | North | | | | | East | North | | | | | |
|----------|---------|---------|---------|---------|-------|-------|-----------|-----------|-------|-------|--------|-------|---------|---------|---------|---------|---------|---------|--------|
| | Chinook | Chinook | Chinook | Chinook | East | North | Unclipped | Unclipped | East | North | East | North | Coho | Coho | East | North | East | North | Spill |
| | Adult | Adult | Jack | Jack | Sthd | Sthd | Sthd | Sthd | Sock | Sock | Coho | Coho | Jack | Jack | Lamprey | Lamprey | Pink | Pink | Volume |
| 29-Jul | 486 | 52 | 134 | 5 | 2651 | 197 | 1205 | 112 | 66 | 0 | 0 | 0 | 0 | 0 | 60 | 31 | 0 | 0 | 241.1 |
| 30-Jul | 457 | 74 | 133 | 7 | 2829 | 258 | 1232 | 160 | 65 | 1 | 4 | 0 | 0 | 0 | 74 | 47 | 0 | 0 | 237.2 |
| 31-Jul | 355 | 50 | 118 | 2 | 3012 | 162 | 1356 | 89 | 30 | 0 | 1 | 0 | 0 | 0 | 74 | 94 | 0 | 0 | 256.1 |
| 1-Aug | 190 | 89 | 83 | 6 | 2006 | 408 | 772 | 196 | 26 | 5 | 0 | 0 | 0 | 0 | 72 | 38 | 0 | 0 | 230.1 |
| 2-Aug | 329 | 76 | 98 | 16 | 2603 | 398 | 1060 | 160 | 22 | 2 | 0 | 0 | 0 | 0 | 73 | 65 | 0 | 0 | 226.4 |
| 3-Aug | 341 | 101 | 133 | 14 | 1836 | 511 | 815 | 245 | 18 | 2 | 0 | 0 | 0 | 0 | 64 | 23 | 0 | 0 | 222.1 |
| 4-Aug | 360 | 130 | 124 | 20 | 2300 | 756 | 964 | 368 | 11 | 5 | 0 | 0 | 0 | 0 | 31 | 40 | 0 | 0 | 211.5 |
| Wkly Tot | 2518 | 572 | 823 | 70 | 17237 | 2690 | 7404 | 1330 | 238 | 15 | 5 | 0 | 0 | 0 | 448 | 338 | 0 | 0 | 232.1 |
| % Split | 81.5% | 18.5% | 92.2% | 7.8% | 86.5% | 13.5% | 84.8% | 15.2% | 94.1% | 5.9% | 100.0% | 0.0% | #DIV/0! | #DIV/0! | 57.0% | 43.0% | #DIV/0! | #DIV/0! | |

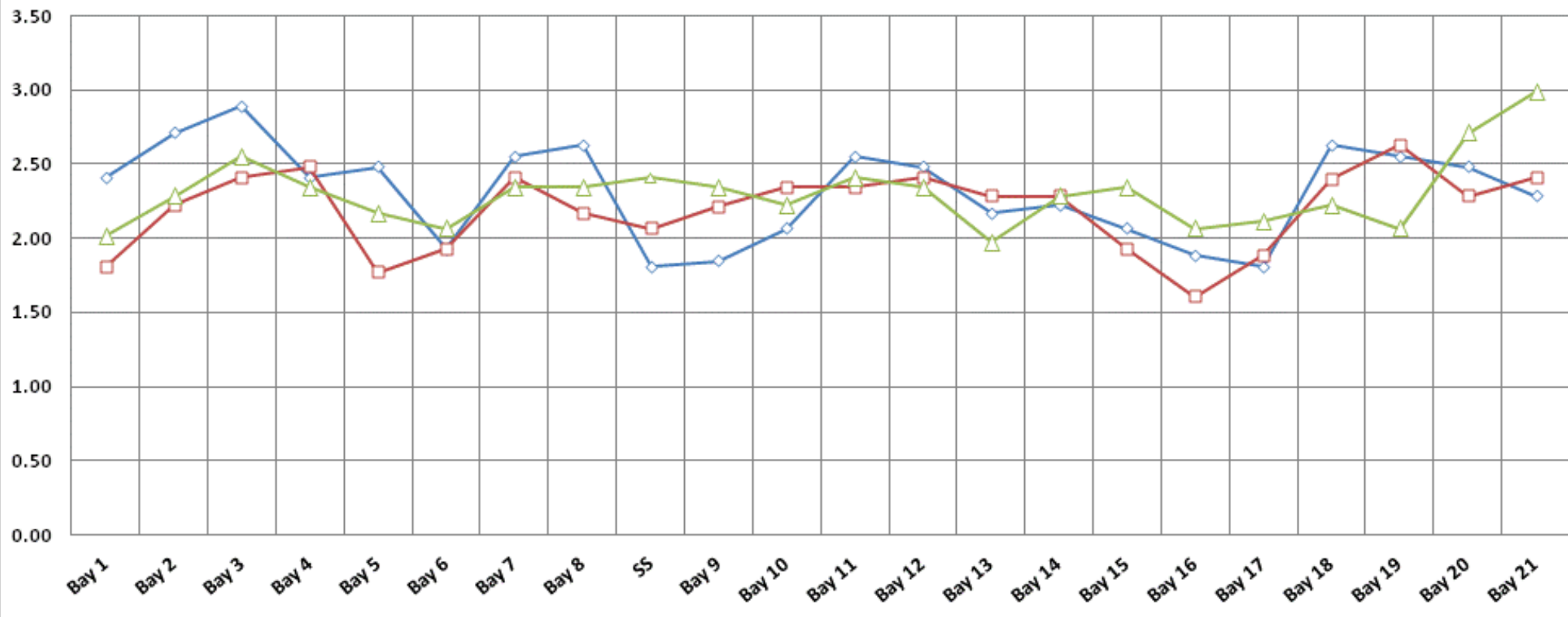
Spill range: 39.8 - 43.3%

The Dalles Adult Fish Ladder Water Temperatures



The Dalles Dam Collection Channel Velocities (fps)

7/18/2012 7/28/2012 8/4/2012



The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: No birds

SW-T3: Gull 0-2 foraging, 0-17 resting and 0-8 flying by; cormorant 0-1 resting

SW-T4: Gull 0-10 flying by, 0-3 foraging; cormorant 0-1 flying by

FB1: Cormorants 4-52 resting in towers, 0-1 foraging; Gull 0-10 resting, 0-4 foraging; Osprey 0-2 foraging, 0-1 resting

PH-T1: cormorants 0-11 resting and 0-8 foraging, and one sea lion.

PH-T2: No birds

PH-T3: 0-1 gull foraging; 0-1 cormorant resting

SW-T2: Gull 0-2 foraging; cormorant 0-1 resting, 0-1 foraging and 0-1 flying by

Oregon Shore

| Temp: | | Secchi: | |
|-------|-------|---------|-----|
| | 66.7 | SUN | 3.3 |
| | 66.7 | MON | 4.0 |
| | 66.7 | TUES | 4.0 |
| | 67.0 | WED | 3.5 |
| | 67.3 | THUR | 4.0 |
| | 67.7 | FRI | 3.0 |
| | 68.1 | SAT | 3.0 |
| AVG: | 67.18 | AVG: | 3.5 |

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

| North Fish Ladder | | | East Fish Ladder | | | | | | | | | | | | |
|-------------------|--------------|----------|------------------|---------|----------|----------|------|---------------|---------|----------|----------|----------------|----------|----------|---------|
| North Entrance | | | East Entrance | | | | | West Entrance | | | | South Entrance | | | |
| Date: | Differential | N1 Depth | Differential | E1Depth | E2 Depth | E3 Depth | JP 6 | Differential | W1Depth | W2 Depth | W3 Depth | Differential | S1 Depth | S2 Depth | % Spill |
| 7/29/12 | 1.4 | 10.2 | 1.6 | 10.5 | 10.5 | 10.5 | 9.3 | 1.4 | 8.1 | 8.2 | Closed | 1.6 | 8.0 | 8.1 | 39 |
| 7/29/12 | 1.4 | 10.2 | 1.1 | 9.6 | 9.6 | 9.6 | 6.9 | 0.9 | 8.1 | 8.2 | | 1.2 | 7.3 | 7.3 | 39.9 |
| 7/29/12 | | | 1.2 | 9.4 | 9.4 | 9.4 | | 1.0 | 8.2 | 8.2 | | 1.4 | 8.1 | 8.1 | |
| 7/30/12 | 1.3 | 10.4 | 1.2 | 10.1 | 10.1 | 10.1 | 7.4 | 1.2 | 8.1 | 8.1 | | 1.6 | 8.0 | 8.0 | 40 |
| 7/30/12 | 1.2 | 10.3 | 1.7 | 9.9 | 10.0 | 9.9 | 9.1 | 1.5 | 8.0 | 8.0 | | 1.7 | 8.1 | 8.1 | 39.3 |
| 7/30/12 | | | 1.5 | 10.6 | 10.5 | 10.6 | | 1.0 | 8.3 | 8.3 | | 1.2 | 8.5 | 8.6 | |
| 7/31/12 | 1.4 | 10.1 | 1.7 | 10.1 | 11.1 | 11.0 | 10.1 | 1.6 | 8.1 | 8.1 | | 1.7 | 8.1 | 8.2 | 39.8 |
| 7/31/12 | 1.4 | 10.2 | 1.7 | 10.5 | 11.1 | 11.1 | 9.4 | 1.5 | 8.2 | 8.1 | | 1.5 | 8.9 | 8.9 | 42.8 |
| 7/31/12 | | | 1.8 | 10.0 | 10.0 | 10.0 | | 1.5 | 8.1 | 8.1 | | 1.6 | 8.1 | 8.2 | |
| 8/1/12 | 1.1 | 10.2 | 0.4 | 10.1 | 10.1 | 10.1 | 9.9 | 0.0 | 8.1 | 8.1 | | 0.1 | 9.0 | 9.0 | 39.6 |
| 8/1/12 | 1.4 | 10.1 | 0.0 | 8.1 | 8.5 | 8.6 | 8.8 | 0.0 | 8.1 | 8.2 | | 0.9 | 8.3 | 8.2 | |
| 8/1/12 | | | | | | | | | | | | | | | |
| 8/2/12 | 1.4 | 10.2 | 1.6 | 9.0 | 8.9 | 9.0 | 7.5 | 1.2 | 8.0 | 8.2 | | 1.5 | 8.2 | 8.3 | 40.3 |
| 8/2/12 | 1.3 | 10.4 | 1.5 | 9.1 | 9.0 | 9.1 | 8 | 1.1 | 8.2 | 8.2 | | 1.4 | 8.3 | 8.4 | 39.3 |
| 8/2/12 | | | 1.1 | 8.9 | 9.5 | 9.6 | | 1.0 | 8.0 | 8.0 | | 1.5 | 8.2 | 8.2 | |
| 8/3/12 | 1.3 | 10.2 | 1.1 | 8.9 | 9.1 | 9.0 | 6.6 | 1.0 | 8.1 | 8.1 | | 1.5 | 8.1 | 8.1 | 40.5 |
| 8/3/12 | 1.4 | 10.1 | 1.4 | 9.0 | 9.0 | 9.0 | 9.2 | 1.3 | 8.1 | 8.1 | | 1.4 | 8.7 | 8.7 | 39.5 |
| 8/3/12 | | | 1.3 | 9.0 | 9.0 | 9.1 | | 1.1 | 8.0 | 8.0 | | 1.5 | 8.2 | 8.2 | |
| 8/4/12 | 1.3 | 10.2 | 1.6 | 9.5 | 9.4 | 9.5 | 8.2 | 1.2 | 8.1 | 8.1 | | 1.4 | 8.7 | 8.7 | 40.4 |
| 8/4/12 | 1.4 | 10.2 | 1.8 | 9.9 | 10.0 | 9.5 | 9.8 | 1.3 | 8.1 | 8.1 | | 1.5 | 8.6 | 8.6 | 40.5 |
| 8/4/12 | | | 1.9 | 9.1 | 9.3 | 9.1 | | 1.4 | 8.1 | 8.1 | 1.5 | 8.6 | 8.7 | | |
| AVG: | 1.3 | 10.2 | 1.4 | 9.6 | 9.7 | 9.7 | 8.6 | 1.1 | 8.1 | 8.1 | Closed | 1.4 | 8.3 | 8.3 | 40.1 |

Third fish way inspection for east fish ladder, east, west, and south entrances completed via automation system in fisheries office.