

# FISHWAY STATUS REPORT

**Date:** 10/07/12  
**Inspection Period:** 9/30 - 10/06/12

## THE DALLES DAM



**US Army Corps  
of Engineers**  
Portland District

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

Fishways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections: 21		Temperature: 64.9 F	
	Out of Criteria	Limit	Comments		Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'	Count station windows cleaned twice weekly.			
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	Average	1.2	Daily differentials & weir depths, see <b>AVGS</b> tab.	
Entrance weir N1	0	depth (≥ 8')	Average	9.4		
Entrance weir N2		Closed	Bulkhead installed.			
PUD Intake differential	0	≤ 0.5'				
<b>EAST FISHWAY</b>						
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'	Picket leads raked every other day. Count station windows cleaned twice weekly.			
Weir crest depth	0	1.0' ± 0.1'				
Junction pool weir JP6	0	depth (≥ 7')	Manually adjusted as needed.			
East entrance differential	0	1.0' - 2.0'	Average	1.5	Daily differentials & weir depths, see <b>AVGS</b> tab.	
Entrance weir E1	0	No criteria	Average	9.5	Manually adjusted.	
Entrance weir E2	0	depth (≥ 8')	Average	10.0		
Entrance weir E3	0	depth (≥ 8')	Average	10.1		
Collection channel velocity	0	1.5 - 4 fps	Average	2.5	See <b>Velocities</b> tab for more complete information.	
Transportation channel velocity	0	1.5 - 4 fps	Average	2.3		
North channel velocity	0	1.5 - 4 fps	Average	2.8		
South channel velocity	0	1.5 - 4 fps	Average	3.1		
West entrance differential	0	1.0' - 2.0'	Average	1.5		
Entrance weir W1	0	depth (≥ 8')	Average	8.9		
Entrance weir W2	0	depth (≥ 8')	Average	9.0		
Entrance weir W3	0	No criteria	Average	Closed		
South entrance differential	0	1.0' - 2.0'	Average	1.4	Daily differentials & weir depths, see <b>AVGS</b> tab.	
Entrance weir S1	0	depth (≥ 8')	Average	8.4	Manually adjusted.	
Entrance weir S2	0	depth (≥ 8')	Average	8.4		
<b>JUVENILE PASSAGE</b>						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range:	0.1' - 0.5'		
Spill volume	0	40%, 24hr	Average	On seal		
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

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

Bird observations consist mostly of grebes in the forebay, cormorants resting either on rocks near the east fish ladder entrance or roosting on the north electrical towers, mergansers, and a few gulls also observed around the project. Fisheries personnel are collecting bird count data twice daily.

**Operations:**

Gatewell drawdown was completed on 10/6. All differentials were within criteria and ranged from 0.1' to 0.5'.

Calibration not completed during reporting period due to persistent wind.

There has been a request by Oregon Department of Transportation (ODOT) on 10/2 from 0800 to 1200 hrs. that The Dalles outflow be held as low as reasonably possible, and no greater than 70 KCFS, hard constraint. The low flow is necessary for ODOT to do pier inspection on the downstream bridge. Underwater inspection was to be done by divers accessing the piers from a jet boat. This operation was requested by ODOT, coordinated with Bonneville Power Authority (BPA), The Dalles Dam, and Reservoir Control Center (RCC).

The Columbia River Inter-Tribal Fish Commission (CRITFC) 10/2 - 10/4 has made a request that The Dalles pool operate within a 1.5' band. The goal of this operation is to limit pool fluctuation to reduce rapid water level drops that entangle nets, minimize boat access problem, and to avoid nets being torn from their anchors. This was coordinated with CRITFC, BPA, TDA and RCC.

The Dalles north and east fish ladders, ice and trash sluiceway in service and conforming to fish passage plan (FPP).

Fisheries personnel have observed daily adult shad morts found between the east fish ladder count station picketed leads.

MU2 out of service for five year over haul. There were no fish observed 10/2 in the scroll case. On 10/3, three juvenile sturgeon and eight channel catfish salvaged and released to tailwater.

**Maintenance:**

Draft fishway dewatering schedule out for review.

**Current Outages:**

MU22 out of service 9/04 0609 hrs. to 10/11 1700 hrs. for digital governor Install and annual maintenance.

MU14 out of service 9/24 0606 hrs. to 11/1 1700 hrs, for digital governor, annual maintenance MU15, MU16, and T8 forced out of service due to high levels of combustible gas in the transformer oil. Return to service 11/1.

MU2 out of service 10/1 0748hrs. to 11/8 1700 hrs. for five year over haul, as built, generator heater, heat exchangers, and cavitation.

**Studies:**

Pacific States Marine Fisheries Commission (PSMFC) PIT Tag Information System (PTAGIS) team have set up radio frequency noise detectors at the counting stations. The detectors will be in operation for ~ one month. This is in preparation for the installation of the temporary Thin Wall PIT Tag Antennas. PSMFC scheduled to collect data from the two listening posts near the counting windows 10/4.

The Dalles Dam Adult PIT Tag Detection System Alternatives 100% review complete. It is believed that PIT tag detection capability at The Dalles Dam will provide adequate information to inform regional fisheries dialogue regarding the potential losses of fish between Bonneville and McNary Dams.

East Fishway backup water supply study, no activity.

**Research/Contractors:**

The Columbia River Northern Pikeminnow Management Program Dam Angling: angling being concentrated at John Day Project for this report period. United States Fish and Wildlife Service dual frequency identification sonar (DIDSON) camera testing continues at the north fishway exit for lamprey detection. Underwater video cameras are also deployed between the picketed leads at the fish count stations in the north and east fishways and the upper section of the north fishway. Monitoring lamprey passage will continue to 10/30.

Battelle has removed all acoustic telemetry gear from TDA. The only remaining Battelle equipment is the trailer at main unit 6 and the remaining deployed hydroacoustics equipment on deck and in water. There was an issue with removing one trolley on the powerhouse (pier nose 17/18) due to possible equipment entangled on USGS RT gear. A dive contract is expected to occur this winter in order to remove all spillway and powerhouse equipment. This will include derelict USGS equipment from previous studies.

Washington Department of Fish and Wildlife fish counters continuing 16 hr./day through the end of October.

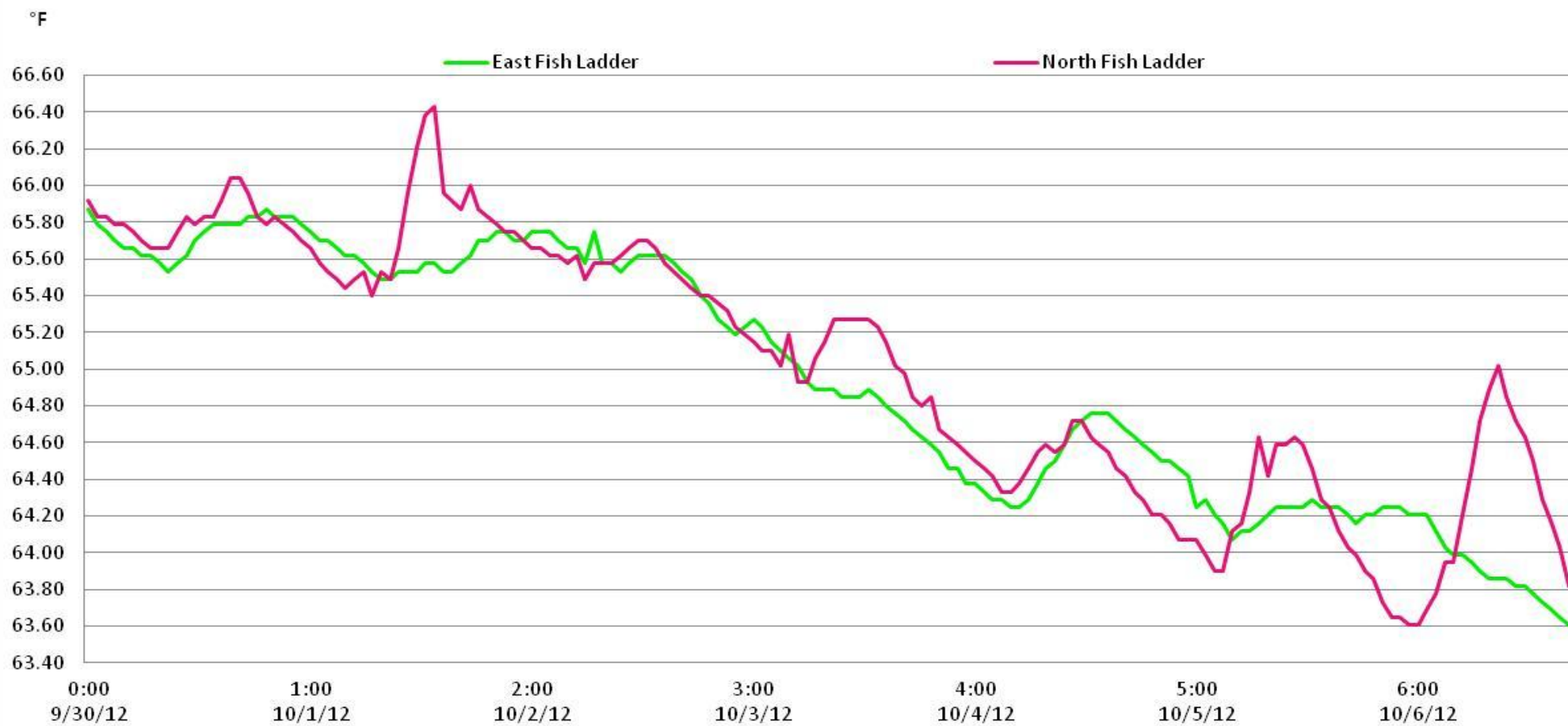
Approved by;  
Ron D. Twiner  
Operation Project Manager  
The Dalles Dam

## The Dalles Dam Fish Counts

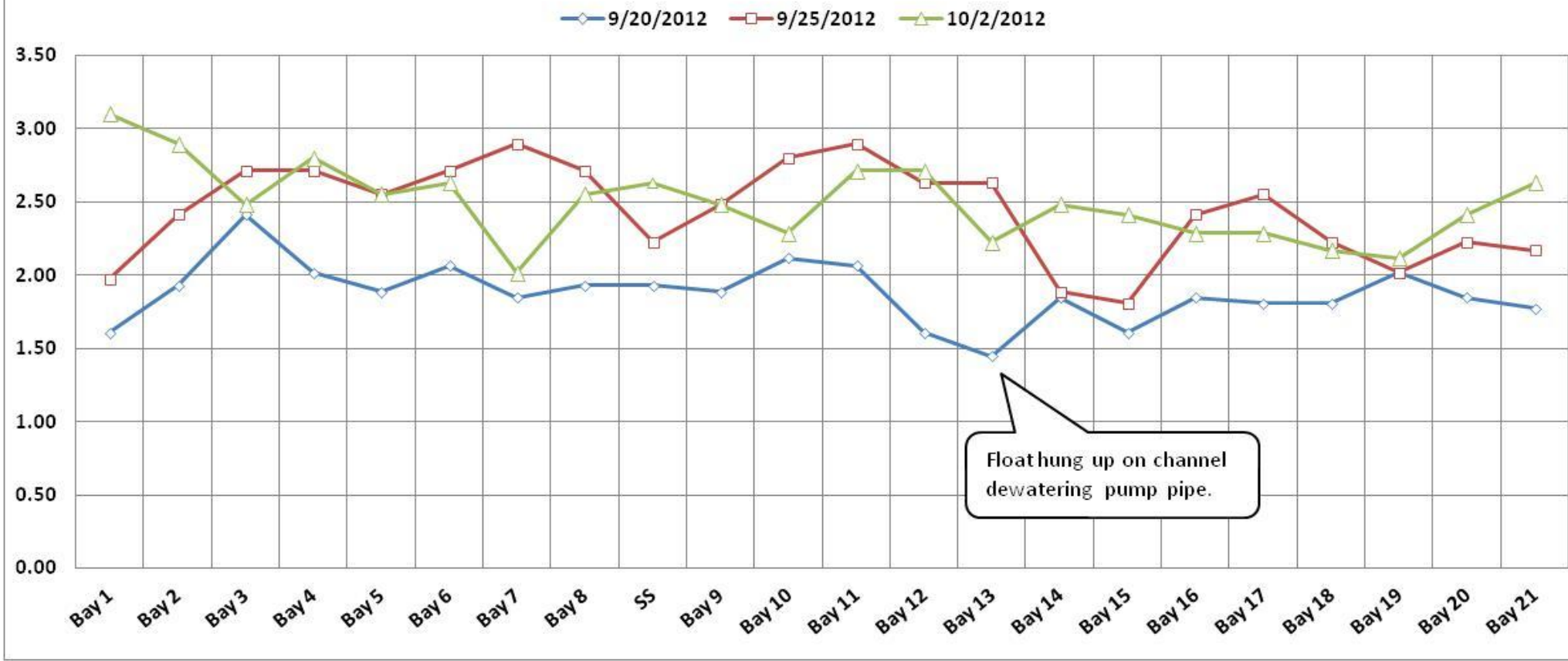
Date	East	North	East	North	Total	Total	East	North					East	North			
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	Spill
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Volume
30-Sep	2056	156	1788	168	1305	176	371	42	0	0	115	19	7	1	2	2	o n s e a l
1-Oct	1298	67	1412	119	1047	124	307	40	0	0	104	12	22	2	7	1	
2-Oct	1364	41	811	72	1144	71	323	22	0	0	115	1	7	0	-2	0	
3-Oct	1325	37	1390	74	914	53	278	16	0	0	114	8	10	2	4	5	
4-Oct	1220	17	913	72	843	71	260	24	0	0	88	5	11	1	0	0	
5-Oct	1488	72	1079	124	893	126	257	36	0	0	76	18	6	1	1	1	
6-Sep	1074	106	756	95	777	173	242	41	0	0	89	18	6	4	1	1	
Wkly Tot	9825	496	8149	724	6923	794	2038	221	0	0	701	81	69	11	13	10	
% Split	95.2%	4.8%	91.8%	8.2%	89.7%	10.3%	90.2%	9.8%	0.0%	0.0%	89.6%	10.4%	86.3%	13.8%	56.5%	43.5%	

Data Provided by USACE DART

### The Dalles Adult Fish Ladder River/Water Temperatures



### The Dalles Dam Collection Channel Velocities (fps)



# The Dalles Dam Daily Bird Observations

Washington Shore

**SW-T1:**  
0-2 Cormorant forage,  
0-1 rest, 0-1 flyby.

**FB1:**  
0-68 Grebe rest.  
0-36 Cormorant rest,  
0-1 forage, 0-1 flyby.  
0-1 Gull forage,  
0-1 rest, 0-1 flyby.  
0-1 GB Heron rest.

**PH-T1:**  
0-23 Cormorant rest, 0-1 forage.  
0-15 Merganser rest.  
0-1 GB Heron forage, 0-1 rest.  
0-1 Gull rest.

**SW-T3:**  
0-43 Cormorant rest,  
0-1 forage, 0-1 flyby.  
0-7 Gull forage,  
0-16 rest, 0-18 flyby.

**PH-T2:**  
0-1 Cormorant forage,  
0-1 rest, 0-1 flyby.  
0-4 Merganser forage,  
0-3 rest, 0-2 flyby.

**SW-T4:**  
0-2 Gull forage, 0-7 rest.  
0-1 Cormorant forage,  
0-14 rest, 0-1 flyby.

**PH-T3:**  
0-1 Cormorant flyby.  
0-1 Gull forage, 0-1 flyby.  
0-1 GB Heron forage.

**SW-T2:**  
0-4 Cormorant forage, 0-1 rest.  
0-26 Gull forage, 0-1 rest.  
0-1 Osprey flyby.

Oregon Shore

Temp:		Secchi:	
	65.7	SUN	6.0
	65.7	MON	6.0
	65.5	TUES	6.0
	65.0	WED	6.0
	64.4	THUR	6.0
	64.3	FRI	6.0
	64.0	SAT	6.0
AVG:	64.9	AVG:	6.0

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

North Fish Ladder			East Fish Ladder												% Spill
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	
9/30/12	1.3	9.3	1.5	10.1	10.5	10.6	9.2	1.5	9.1	9.1	Closed	1.3	8.6	8.6	
9/30/12	1.3	9.3	1.5	10.0	9.4	9.4	9.1	1.5	9.0	9.0		1.3	8.6	8.6	
9/30/12			1.5	10.0	10.4	10.5	9.1	1.5	9.0	9.0		1.3	8.5	8.5	
10/1/12	1.2	9.3	1.3	10.0	10.5	10.5	8.7	1.3	9.0	9.0		1.4	8.5	8.5	
10/1/12	1.1	10.4	1.3	10.0	10.5	10.6	8.6	1.4	8.9	8.9		1.1	9.4	9.3	
10/1/12			1.2	9.9	10.4	10.4	8.4	1.4	8.9	9.1		1.2	8.5	8.6	
10/2/12	1.2	9.2	1.4	9.9	9.9	10.0	8.5	1.5	8.7	8.6		1.4	8.3	8.2	
10/2/12	1.2	9.3	1.6	9.9	10.0	9.9	8.4	1.6	8.7	8.7		1.3	8.4	8.3	
10/2/12			1.5	9.9	10.1	10.1	8.5	1.5	8.8	8.7		1.2	9.0	9.0	
10/3/12	1.2	9.2	1.5	9.0	10.1	10.0	9.0	1.4	9.5	9.5		1.4	8.4	8.3	
10/3/12	1.3	9.3	1.6	9.0	10.0	10.1	9.3	1.5	9.5	9.6		1.5	8.2	8.3	
10/3/12			1.5	10.1	10.0	9.9	8.0	1.6	8.6	8.6		1.4	8.3	8.2	
10/4/12	1.2	9.3	1.5	9.0	9.9	10.1	8.5	1.4	9.0	9.1		1.3	8.4	8.4	
10/4/12	1.3	9.3	1.4	9.0	10.1	10.1	8.9	1.5	9.0	9.2		1.5	8.3	8.2	
10/4/12			1.5	9.0	9.0	10.1	8.3	1.4	9.1	9.0		1.4	8.3	8.4	
10/5/12	1.2	9.3	1.4	10.0	9.9	10.1	8.0	1.4	9.0	8.9		1.2	8.3	8.3	
10/5/12	1.2	9.2	1.5	8.9	10.0	10.0	8.3	1.5	8.6	8.5		1.4	8.3	8.3	
10/5/12			1.6	8.9	10.0	9.9	8.4	1.5	8.9	9.0		1.4	8.2	8.2	
9/6/12	1.2	9.3	1.5	9.0	10.1	10.1	8.3	1.5	8.9	9.0		1.4	8.2	8.2	
9/6/12	1.2	9.2	1.4	9.1	9.9	10.0	8.2	1.4	9.0	9.0		1.3	8.4	8.4	
9/6/12			1.6	8.0	9.9	10.0	8.3	1.7	8.5	8.5	1.4	8.3	8.3		
<b>AVG:</b>	1.2	9.4	1.5	9.5	10.0	10.1	8.6	1.5	8.9	9.0	Closed	1.3	8.4	8.4	On seal

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

Spill gates closed