

The Dalles Dam Fishway Status Report

7/10/22

Inspection Period 7/3-7/9 2022

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

The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: 14		Temperature: 63.5 °F
			Comments: W155 failure RCC restricted FB		Weekly Ave. Secchi: 5.0

NORTH FISHWAY

Exit differential	0	≤ 0.5'			
Count station differential	0	≤ 0.3'			
Weir crest depth	0	1.0' ± 0.1'			
Entrance weir N1	0	depth (≥ 8')		11.1	
Entrance Differential	0	1.0' - 2.0'		1.3	
N2	0	Closed			
PUD Intake differential	0	≤ 0.5'			

EAST FISHWAY

Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay	Note; 155 weir hoist failed. Forebay restriction minimum 157' applied.		
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'	Count station pickets plugging up with weeds requiring frequent raking to restore differential.		
153 Weir crest depth	0	1.3' ± 0.1'	Some fluctuations in weir 153 height due to significant weed debris buildup on east pickets.		
Junction pool weir JP6	0	> 7.0'	Weekly average	14.5	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	6.6	Requires regular manual corrections due to high tailwater.
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.9	Requires regular manual corrections due to high tailwater.
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.9	Requires regular manual corrections due to high tailwater.
Collection channel velocity	0	1.5 - 4 fps	1.92 fps 7/9		
Transportation channel velocity	0	1.5 - 4 fps	3.7 fps 7/9		
North channel velocity	0	1.5 - 4 fps	2.6 fps 7/9		
South channel velocity	0	1.5 - 4 fps	4.2 fps 7/9		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir W1	0	depth (≥ 8')	Weekly average	9.8	
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.2	
Entrance weir W3	0	No criteria	Weekly average	1.2	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	0	depth (≥ 8')	Weekly average	11.1	
Entrance weir S2	0	depth (≥ 8')	Weekly average	9.3	

JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18			
Turbine trashrack drawdown	0	<1.5', biwklly	7/9/22 All MUs in criteria somewhat higher than normal Diff. FUs being flushed as needed.		
Spill volume/pattern	0	1 to 22	Pattern per FPP according to volume.		
Turbine Unit Priority	0	per FPP	Fish Unit flow may be below 2500cfs due hydraulics in flow and screen plugging with weeds.		
Gatewells	0	Weekly	7/9/22, small numbers of subyearlings observed. No mortality.		

Current Outages

T10 (MU19 & 20) FOOS through 10/27/2022 due to acetylene levels

MU12 OOS 0001 4/12/2021 – 1700 10/27/2022 fr 7/10/2022

Inspection Period 7/3-7/9 2022

Spillgate 14 forced out of service due to operational issues. RTS after spill season. Nine of 15 gates south of spillwall now OOS.

Maintenance

East fishladder wier 155 hoist failed. Weir in down position. Return to service Jan 2023, depending on funding. Forebay restriction 157.

Permanent oil boom reinstall planned for April was postponed until this winter.

Calibrations on east fishway entrances. E-2 ~6" out of calibration, All in criteria.

Spillway assessment (MRER); Spillgates 1- 9 rehab 2034. Includes spillbay 9 trunnion pin repair. Spillway crane first priority

Fish unit rehab Phase 1A awaiting funding.

AWS intake trashrack debris management - restart meeting july 13.

Fish units being watched closely for weed buildup showing as differential in gatewells 7/9 FU2 1.5' differential.

Predators

Falconry continues for pushing gulls from count zones. Continuing to track gull/cormorant numbers.

USDA hazing by shore and boat continues. Falconers daily operations focused on no boat days and concludes July13.

Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit. Fish Passage Plan 2022 approved.

Large numbers of pelicans around project. Chasng sockeye in culdesac area, but no observed takes..Two pelicans in east fishladder.

Research/Construction/Contractors

USGS river temperatures link [June°F](#)

4 peaks visual counting resumed April 1

Planned improvements to tribal lamprey trapping equipment. Reduced to bare minimum due to funding constraints

Pikeminnow removal program reporting period 5/30-6/26 40/YTD

Fish Accords Lamprey Passage plan ongoing at 60% DDR junction pool LPS. Investigating mods for entrance and exit wiers.

PTAGIS fishladder data collection at count stations continues.

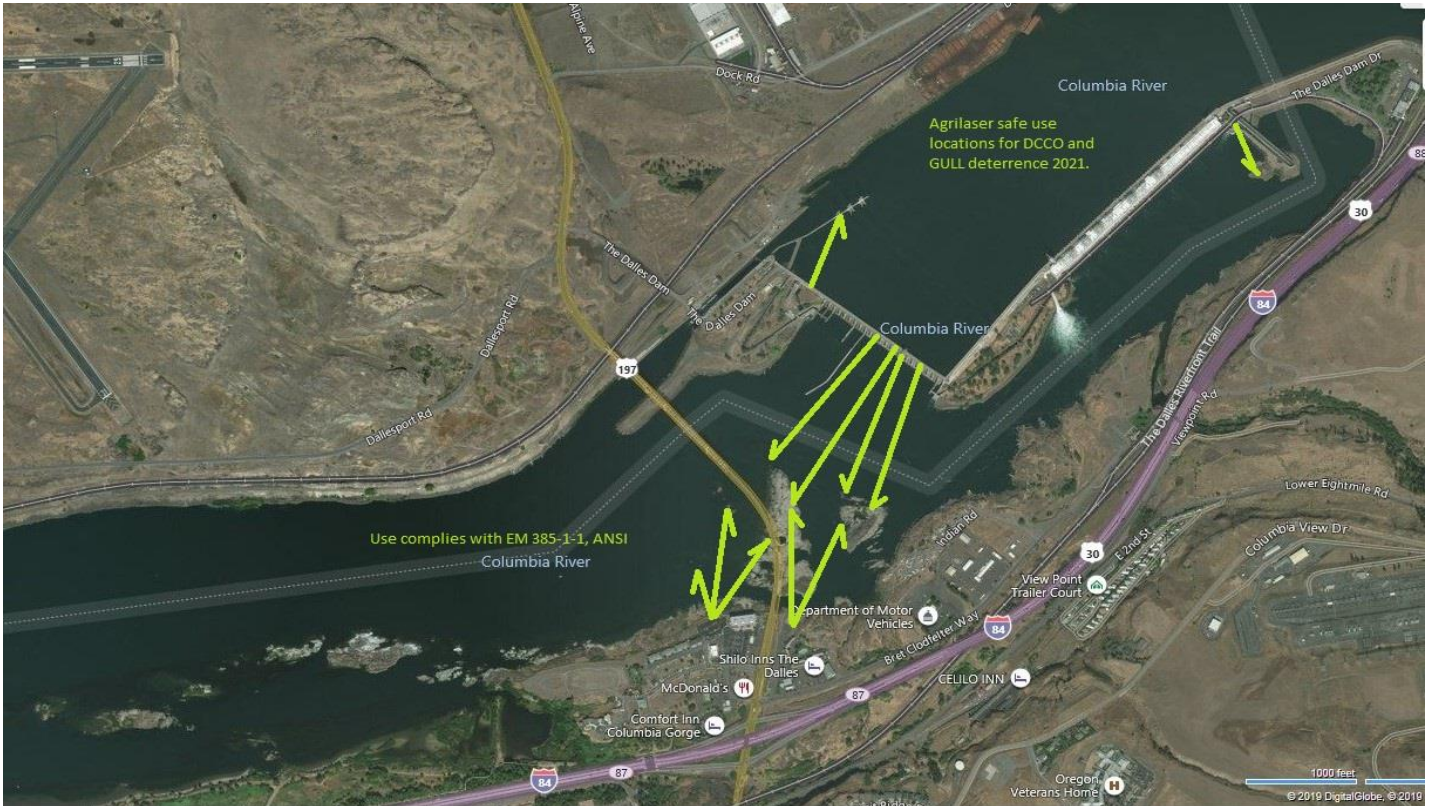
Operations

Ice Trash sluiceway endgate open. Sluiceways 1,8,18 open per FPP.

East and North fishways in full service

Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam

Bird Count Zones, Avian Lines and Laser Deterrent Sites



2022 Piscivorous Birds

F=foraging, NF=non-foraging

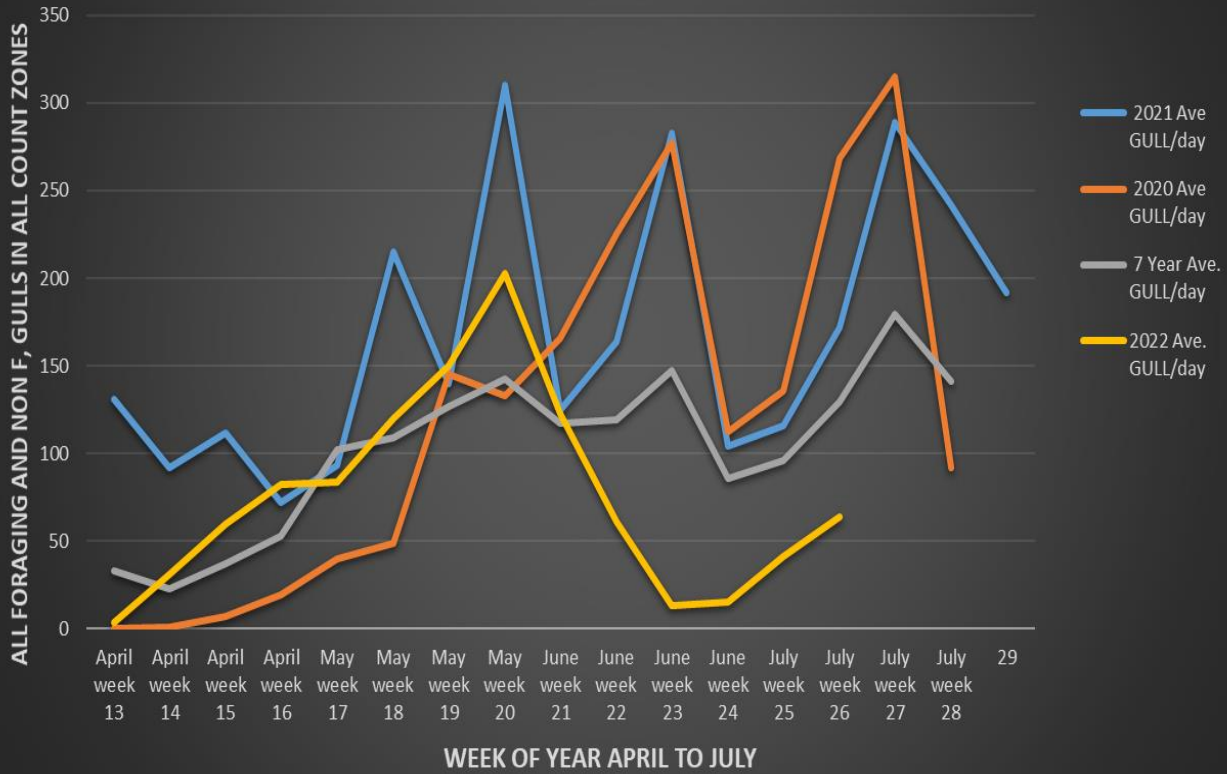
Date	Observer	Time	ZONE	GULL F	GULL NF	DCCO F	DCCO NF	TERN F	TERN NF
7/3	JWR	AM	FB	0	0	2	80	0	0
7/3			PH1	0	0	1	0	0	0
7/3			PH2	0	0	1	0	0	0
7/3			SW1	0	0	0	0	0	0
7/3			SW2	0	0	4	0	0	0
7/3			SW3	20	34	5	11	0	0
7/3			SW4	55	0	0	0	0	0
7/4	JWR	PM	FB	0	0	4	80	0	0
7/4			PH1	0	0	0	0	0	0
7/4			PH2	3	0	1	0	0	0
7/4			SW1	0	0	0	0	0	0
7/4			SW2	0	0	3	0	0	0
7/4			SW3	14	35	1	27	0	0
7/4			SW4	33	0	0	0	0	0
7/5	JWR	AM	FB	0	0	2	80	0	0
7/5			PH1	0	0	3	0	0	0
7/5			PH2	0	0	0	0	0	0
7/5			SW1	0	0	0	0	0	0
7/5			SW2	0	0	0	0	0	0
7/5			SW3	15	30	0	0	0	0
7/5			SW4	40	0	0	0	0	0
7/6	JED	PM	FB	0	0	3	70	0	0
7/6			PH1	0	0	0	5	0	0
7/6			PH2	0	0	0	0	0	0
7/6			SW1	0	0	0	0	0	0
7/6			SW2	0	0	2	0	0	0
7/6			SW3	10	30	2	22	0	0
7/6			SW4	2	0	0	0	0	0
7/7	JWR	AM	FB	0	0	0	80	0	0
7/7			PH1	0	0	0	0	0	0
7/7			PH2	0	0	0	0	0	0
7/7			SW1	0	0	0	0	0	0
7/7			SW2	0	0	1	0	0	0
7/7			SW3	5	20	8	24	0	0
7/7			SW4	30	12	0	0	0	0
7/8	MM	PM	FB	0	0	2	75	0	0
7/8			PH1	0	0	0	3	0	0
7/8			PH2	0	0	0	0	0	0
7/8			SW1	0	0	0	0	0	0
7/8			SW2	0	0	0	0	0	0
7/8			SW3	0	0	0	9	0	0
7/8			SW4	0	0	0	0	0	0
7/9	MM	AM	FB	0	0	0	50	0	0
7/9			PH1	0	0	0	0	0	0
7/9			PH2	0	0	0	0	0	0
7/9			SW1	0	0	0	0	0	0
7/9			SW2	0	0	0	0	0	0
7/9			SW3	0	16	0	11	0	0
7/9			SW4	0	20	0	0	0	0

Counts

Bringing

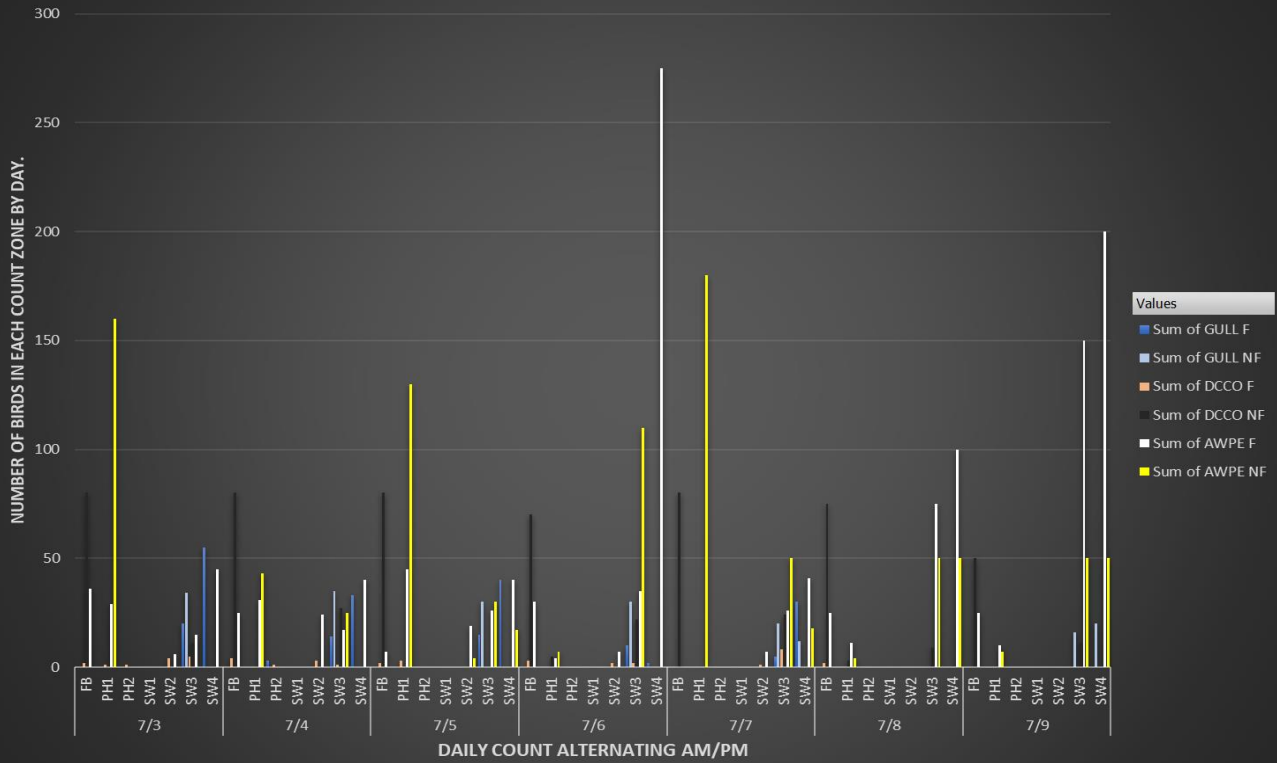
Grebe F	Grebe NF	AWPE F	AWPE NF	OtherF	OtherNF	Total
0	0	36	0	0	0	118
0	0	29	160	0	0	190
0	0	0	0	0	0	1
0	0	0	0	0	0	0
0	0	6	0	0	0	10
0	0	15	0	0	0	85
0	0	45	0	0	0	100
0	0	25	0	0	0	109
0	0	31	43	0	0	74
0	0	0	0	0	0	4
0	0	0	0	0	0	0
0	0	24	0	0	0	27
0	0	17	25	0	0	119
0	0	40	0	0	0	73
0	0	7	0	0	0	89
0	0	45	130	0	0	178
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	19	4	0	0	23
0	0	26	30	0	0	101
0	0	40	17	0	0	97
0	0	30	0	0	0	103
0	0	4	7	0	0	16
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	7	0	0	0	9
0	0	35	110	0	0	209
0	0	275	0	0	0	277
0	0	0	0	0	0	80
0	0	0	180	0	0	180
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	7	0	0	0	8
0	0	26	50	0	0	133
0	0	41	18	0	0	101
0	0	25	0	0	0	102
0	0	11	4	0	0	18
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	75	50	0	0	134
0	0	100	50	0	0	150
0	0	25	0	0	0	75
0	0	10	7	0	0	17
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	150	50	0	0	227
0	0	200	50	0	0	270

TDA Daily Mean # of GULLS by Week, April to July 2020 and 2021, 2022 Compared to Previous 7 years Daily Mean.



Substantial drop in gulls. Possible causes; high flows, many pelicans, faclonry or combination of these.

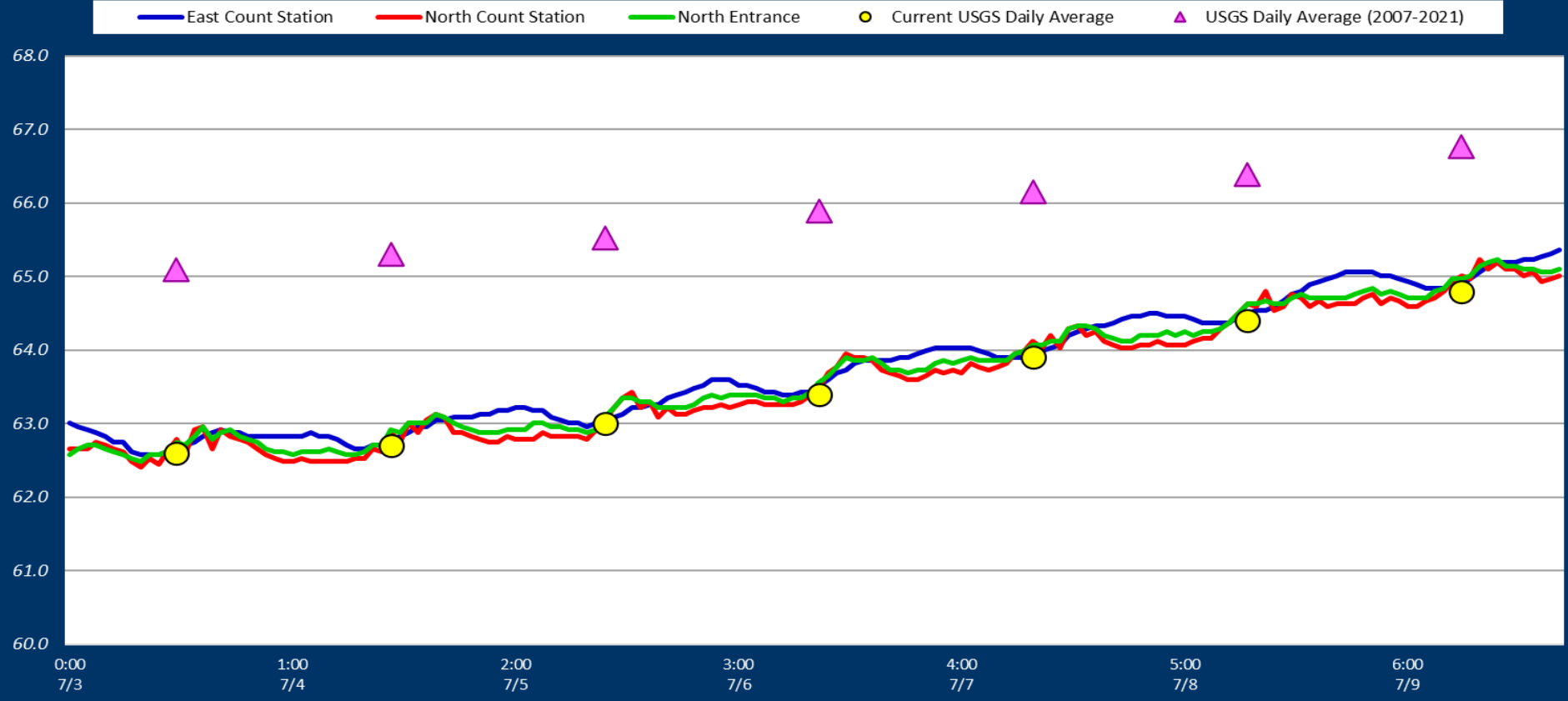
TDA Avian Predators Daily Count 7/3- 7/9/2022



Date ZONE

+ -

Adult Fish Ladders-River Temperatures



Secchi:		USGS°F
5.0	Sun	62.6
5.0	Mon	62.7
5.0	Tue	63.0
5.0	Wed	63.4
5.0	Thurs	63.9
5.0	Fri	64.4
5.0	Sat	64.8
5.0	AVG	63.5

Reporting week data

Date:	North Ladder		East Ladder											
			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
7/3	1.3	11.3	1.6	5.2	11.6	12.7	16.1	1.6	9.3	9.6	2.6	1.5	11.8	8.9
	1.3	11.2	1.6	4.4	11.8	13.0	15.2	1.6	8.9	9.3	1.7	1.5	11.5	8.6
7/4	1.2	11.2	1.5	3.1	12.5	13.9	14.0	1.5	9.6	10.1	0.4	1.4	11.5	8.3
	1.2	11.4	1.6	2.9	12.3	13.7	13.8	1.6	9.4	9.9	0.2	1.4	11.6	8.3
7/5	1.3	11.3	1.6	3.0	12.2	13.5	13.8	1.5	9.6	10.0	0.4	1.5	11.4	8.2
	1.4	10.9	1.6	3.1	12.3	3.7	14.0	1.2	10.7	11.1	2.6	1.1	11.6	11.5
7/6	1.3	11.1	1.7	5.8	11.8	13.4	13.8	1.6	9.1	9.6	0.5	1.3	10.2	10.0
	1.4	11.0	1.5	8.7	12.7	12.7	14.7	1.3	10.1	10.5	1.4	1.1	11.6	11.5
7/7	1.3	10.9	1.6	7.4	12.0	12.1	13.4	1.6	9.1	9.6	0.0	1.4	10.2	9.3
	1.3	10.9	1.4	8.3	12.9	12.9	14.3	1.4	9.9	10.4	0.8	1.4	10.0	9.1
7/8	1.4	10.8	1.5	8.2	11.5	11.6	14.2	1.4	10.0	10.5	0.6	1.5	10.8	9.3
	1.6	10.6	1.4	9.9	11.0	10.9	15.9	1.3	10.6	11.1	2.1	1.4	11.1	9.5
7/9	1.3	10.9	1.6	9.8	11.8	12.1	13.9	1.4	9.8	10.2	1.3	1.4	11.0	8.9
	1.3	10.9	1.3	12.0	9.8	9.9	16.1	1.3	10.7	11.1	2.4	1.4	11.5	9.3
AVG:	1.3	11.0	1.5	6.6	11.9	11.9	14.5	1.4	9.8	10.2	1.2	1.4	11.1	9.3

Fishways are inspected twice daily.

found out of criteria



Scanning PIT tags at rock in PH1 near east entrance 7/9. No new tags found after 2 week Pelican party



Pelicans in east fishladder just upstream count station. High risk of predation on sockeye.