

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 5/15/2021

Inspection Period: 5/9/2021 thru 5/15/2021



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.  
Additional and frequent monitoring, of the PLC displays in SMF Fisheries Office, as necessary.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 14			Temperature:	55.8 F
						Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting	High setting is normal				
Count station differential	0	≤ 0.3'					
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
<b>SOUTH FISHWAY</b>							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting	Mid setting is normal				
Count station differential	0	≤ 0.3'					
Weir crest depth (US gauge)	0	1.0' ± 0.1'					
South entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.2			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.47			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.6			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.8			
<b>JUVENILE PASSAGE</b>							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 5/24-5/27				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	126.0	Avg %	55.1	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

Smolt Monitoring Facility is currently conducting condition sampling every-other-day.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria.

### **Project Operations:**

Current outages: MU5-8 (Line 2 BPA MOD work), MU7, MU8, MU10, MU12, MU16. Spring spill started on April 10 with TSW's installed.

Tailwater Average Weekly TDG: 119.6

### **Maintenance:**

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillbay #10 will be operated manually until further notice.

Calibration - All gauges within the 0.3' criteria.

### **Bird Data:**

Cormorants have dispersed, no sightings this week. Gull numbers increasing and mainly seen foraging below spillway. Pelican numbers increasing on Preacher's Island. Steady number of Grebes in PHFB. (see 'Bird Graph' tab for details). USDA Hazing started

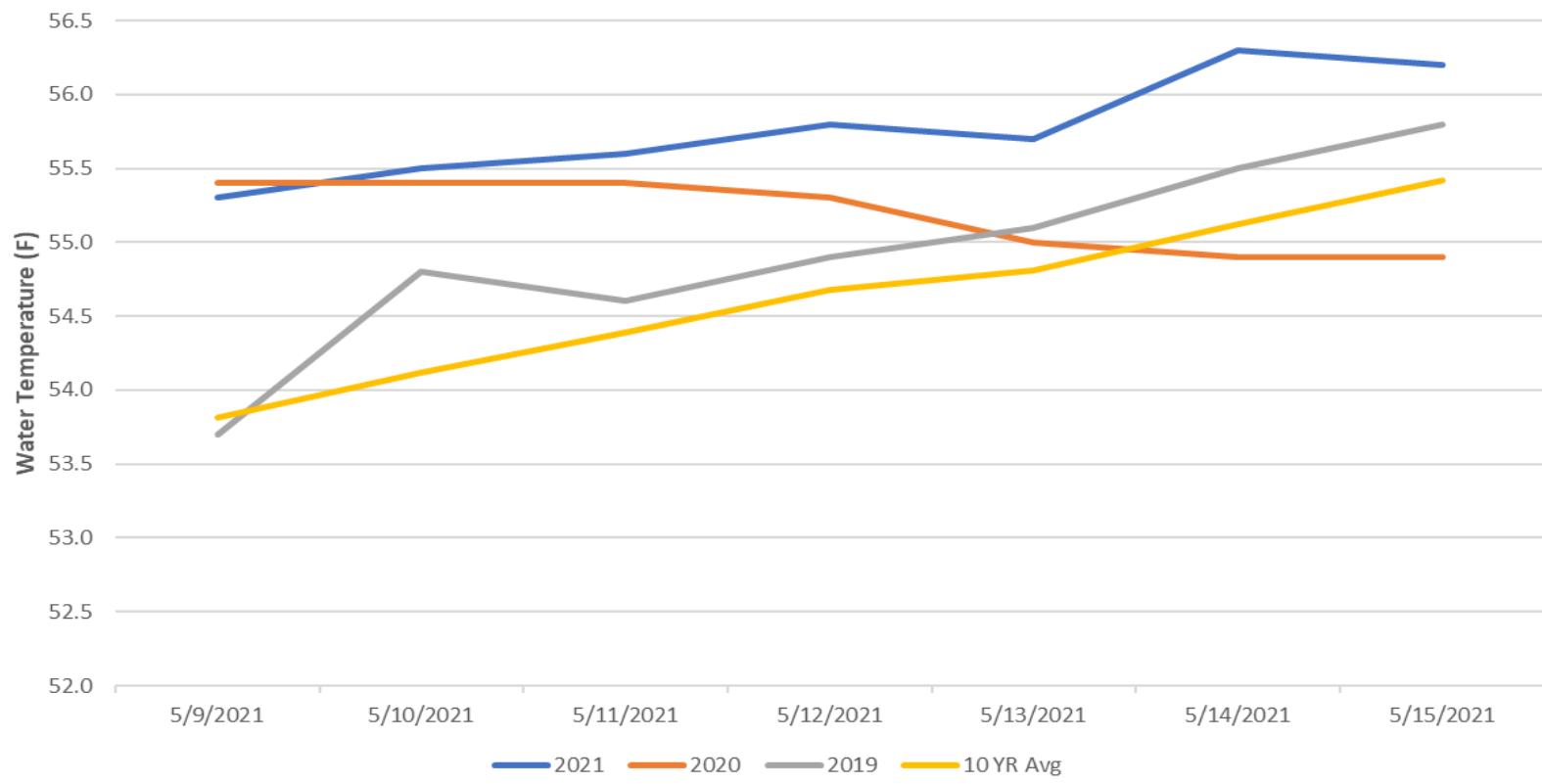
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 25 per day

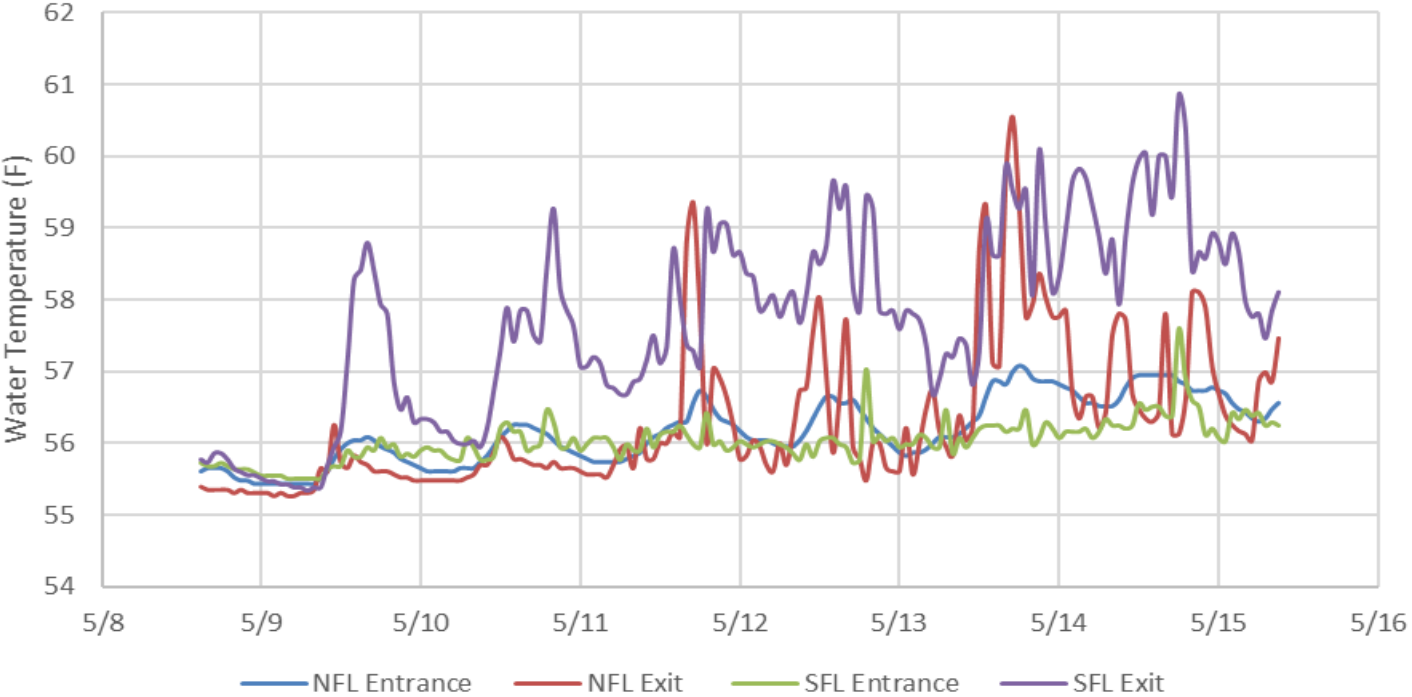
### **Research:**

PSMFC Juvenile lamprey genetic work continues.

### John Day Dam Water Temperatures (F)



Water Temperatures of JDA Fish Ladders (5/9 - 5/15)



# JDA Collection Channel Velocity

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

Date	Measurement Location	Speed (ft/sec)	SFL Turbine RPMs (1,2,3)	Bay 19 TW (ft)
5/11/2021	Unit 4	2.25	0,68,68	161.4
5/11/2021	Unit 12	2.42	0,68,68	161.4
5/12/2021	Unit 4	2.58	0,68,68	160.5
5/12/2021	Unit 12	2.66	0,68,68	160.5
5/15/2021	Unit 4	2.39	0,68,68	160.3
5/15/2021	Unit 12	2.53	0,68,68	160.3

Average Weekly Velocity (ft/sec)	2.47
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## JOHN DAY WEEKLY AVERAGES

	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	10.5	10.7	1.2	10.0	1.5	4.5	1.6	172.1	74.1	19
Sunday	10.0	10.2	1.2	9.4	1.6	4.5	1.7	172.0	74.7	19
Monday	10.9	11.1	1.2	10.4	1.5	4.6	1.4	75.0	31.9	19
Monday	10.3	10.5	1.2	11.0	1.6	4.6	1.5			19
Tuesday	11.4	11.6	1.0	11.0	1.4	4.6	1.5	78.2	32.1	19
Tuesday	8.4	8.4	1.3	8.8	1.4	4.6	1.6	172.0	73.1	19
Wednesday	9.5	9.7	1.5	8.2	1.8	4.3	1.7	73.9	32.0	19
Wednesday	8.9	9.2	1.4	8.0	1.6	4.5	1.8	172.1	74.3	19
Thursday	9.5	9.7	1.3	8.9	1.4	4.7	1.6	72.2	32.0	19
Thursday	9.2	9.4	1.3	8.1	1.6	4.5	1.7	169.0	75.7	19
Friday	9.9	10.0	1.3	8.8	1.4	4.6	1.3	67.1	32.0	19
Friday	8.7	9.0	1.4	8.0	1.5	4.6	1.9	169.9	76.4	19
Saturday	8.3	8.5	1.3	8.6	1.6	4.5	2.0	172.0	76.1	19
Saturday	9.4	9.7	1.1	10.0	1.4	4.7	1.8	72.1	32.0	19
<b>AVG:</b>	<b>9.6</b>	<b>9.8</b>	<b>1.3</b>	<b>9.2</b>	<b>1.5</b>	<b>4.6</b>	<b>1.7</b>	<b>126.0</b>	<b>55.1</b>	<b>19.0</b>

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	55.3	6.0	4	14
Monday	55.5	6.0	N/A	40
Tuesday	55.6	6.0	3	50
Wednesday	55.8	6.0	N/A	9
Thursday	55.7	6.0	4	
Friday	56.3	6.0	N/A	13
Saturday	56.2	6.0	0	23

<b>AVG</b>	<b>55.8</b>	<b>6.0</b>	<b>3</b>	<b>25</b>
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John Day Dam  
Avian Zones



**JDA Bird Counts: 5/9/21 to 5/15/21**

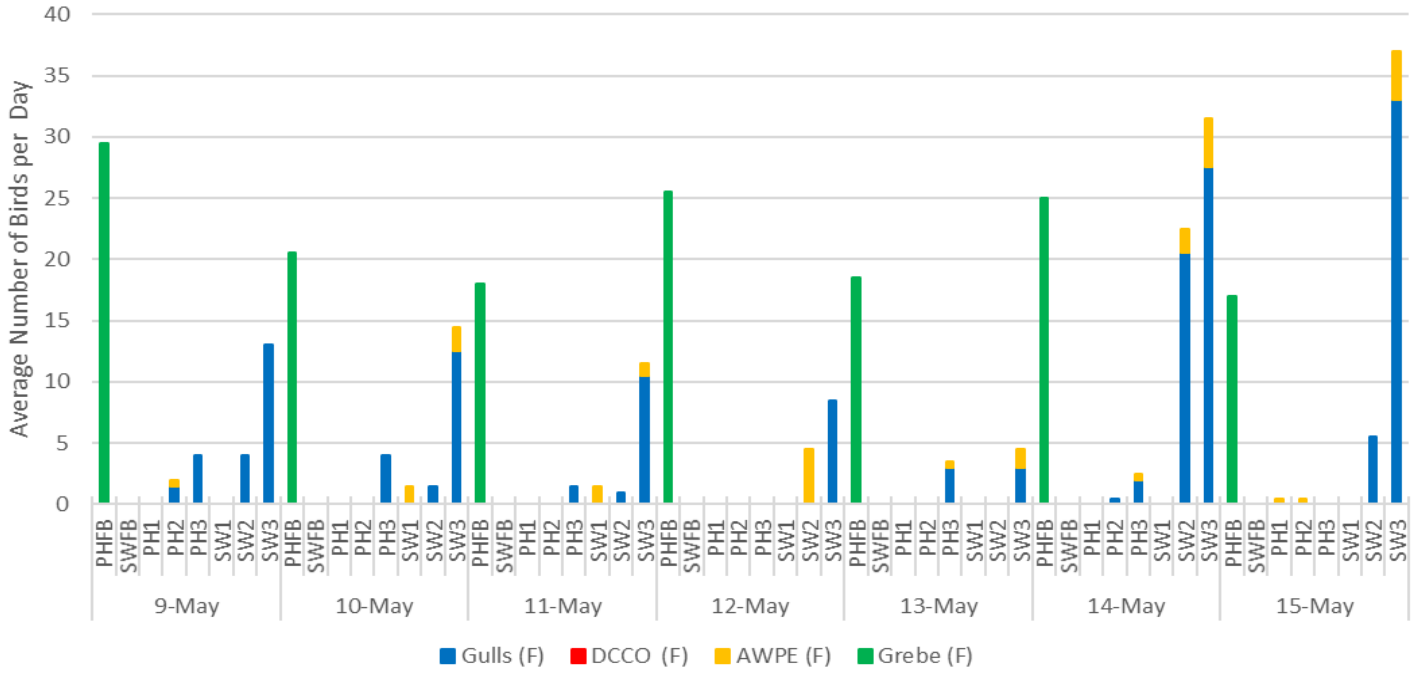
F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Bald Eagle				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
9-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	29	0	0	0	0	0	0	59
9-May	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	PH2	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
9-May	PH3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-May	SW2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9-May	SW3	5	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
<b>Avg/Survey</b>		<b>23</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>30</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>54</b>
10-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	20	0	0	0	0	0	0	41
10-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-May	PH3	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
10-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
10-May	SW2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10-May	SW3	14	11	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	29
<b>Avg/Survey</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>21</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>42</b>
11-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	11	0	0	0	0	0	0	36
11-May	SWFB	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
11-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-May	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
11-May	SW2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-May	SW3	16	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	23
<b>Avg/Survey</b>		<b>13</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>43</b>
12-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	18	0	0	0	0	0	0	51
12-May	SWFB	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
12-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0	9
12-May	SW3	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
<b>Avg/Survey</b>		<b>9</b>		<b>6</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>5</b>		<b>0</b>		<b>26</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>45</b>

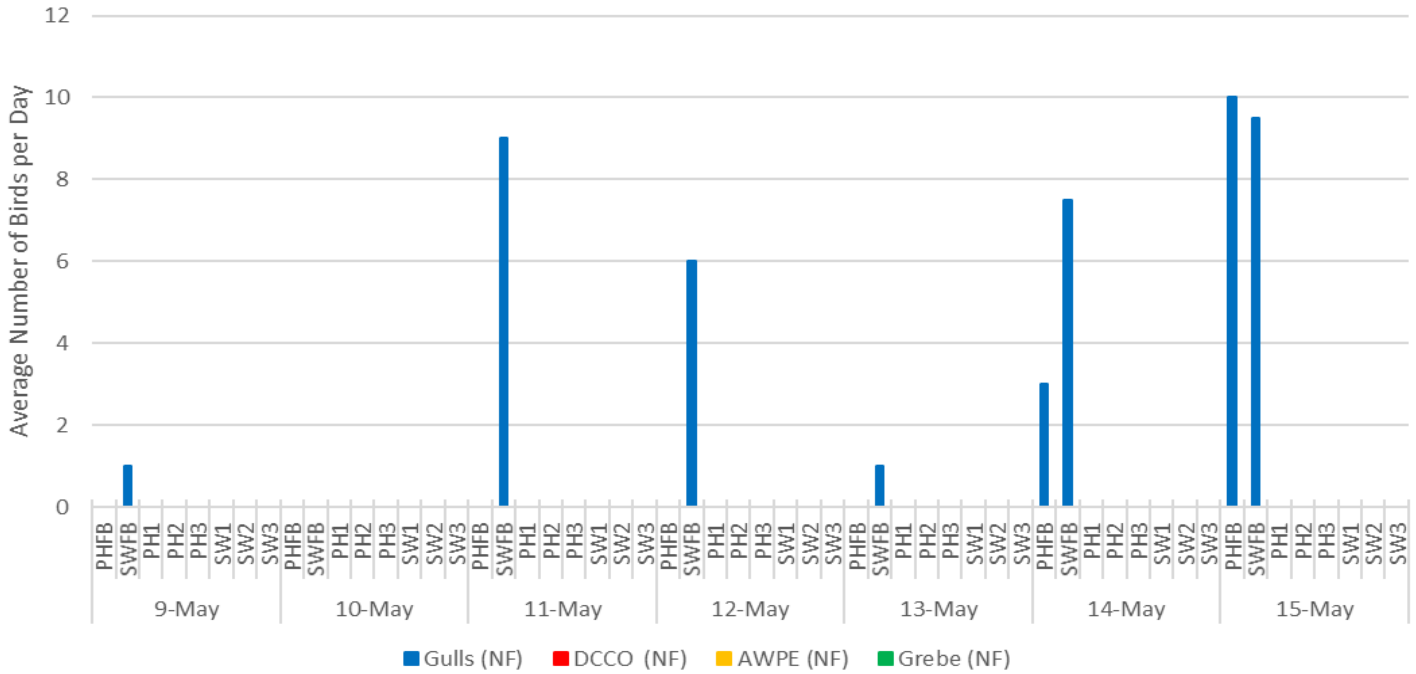




### Foraging Avian Observations



### Non-Foraging Avian Observations





May 11, 2021  
Outflow = 245.20 kcfs  
Spill = 172.0 kcfs  
Spill % = 70.2%  
Forebay Elevation = 265.13