

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/16/2021

Inspection Period: 10/10/2021 thru 10/16/2021



**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<br>OOC | Criteria<br>Limit | Total Number of Inspections: 14  |      |       | Temperature: | 62.4 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.)                        | 1.6  |       |              |         |
| <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.)                        | 1.7  |       |              |         |
| Entrance weir SE1                   | 0                 | depth (≥ 8')      | AVG (Ft.)                        | 9.0  |       |              |         |
| Collection channel velocity         | 0                 | 1.5 - 4 fps       | AVG (Ft.)                        | 2.76 |       |              |         |
| N. Entrance PH(Bay 19)differential  | 1                 | 1.0' - 2.0'       | AVG (Ft.)                        | 1.9  |       |              |         |
| Entrance weir NE1                   | 0                 | depth (≥ 8')      | AVG (Ft.)                        | 9.1  |       |              |         |
| Entrance weir NE2                   | 0                 | depth (≥ 8')      | AVG (Ft.)                        | 9.1  |       |              |         |
| <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 9/27-9/30 |      |       |              |         |
| Turbine trashrack drawdown          | 0                 | <1.5', wkly       |                                  |      |       |              |         |
| Vert barrier screen drawdown        | 0                 | <1.5', wkly       |                                  |      |       |              |         |
| Spill volume                        | 0                 | per FPP           | Avg (kcfs)                       | 1.6  | Avg % | 2.0          |         |
| Spill pattern                       | 0                 | per FPP           |                                  |      |       |              |         |
| Turbine Unit Priority               | 0                 | per FPP           |                                  |      |       |              |         |
| Turbine 1% Efficiency               | 0                 | per FPP           |                                  |      |       |              |         |

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15.

### **Adult Ladder Operations:**

North and South fish ladders are operating within criteria.

### **Project Operations:**

Current outages: MU7, MU8, MU12, MU13-16, MU14, MU15, MU16. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcf/s) during daylight hours through November 30th

### **Maintenance:**

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined).

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

Steady number of cormorants mainly roosting on PHFB towers, or rocks in SW2 and SW3. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH3 in the morning. Pelican numbers decreasing, mostly seen resting on Preacher's Island. Steady number of grebes in PHFB. (see 'Bird Count' tab for details).

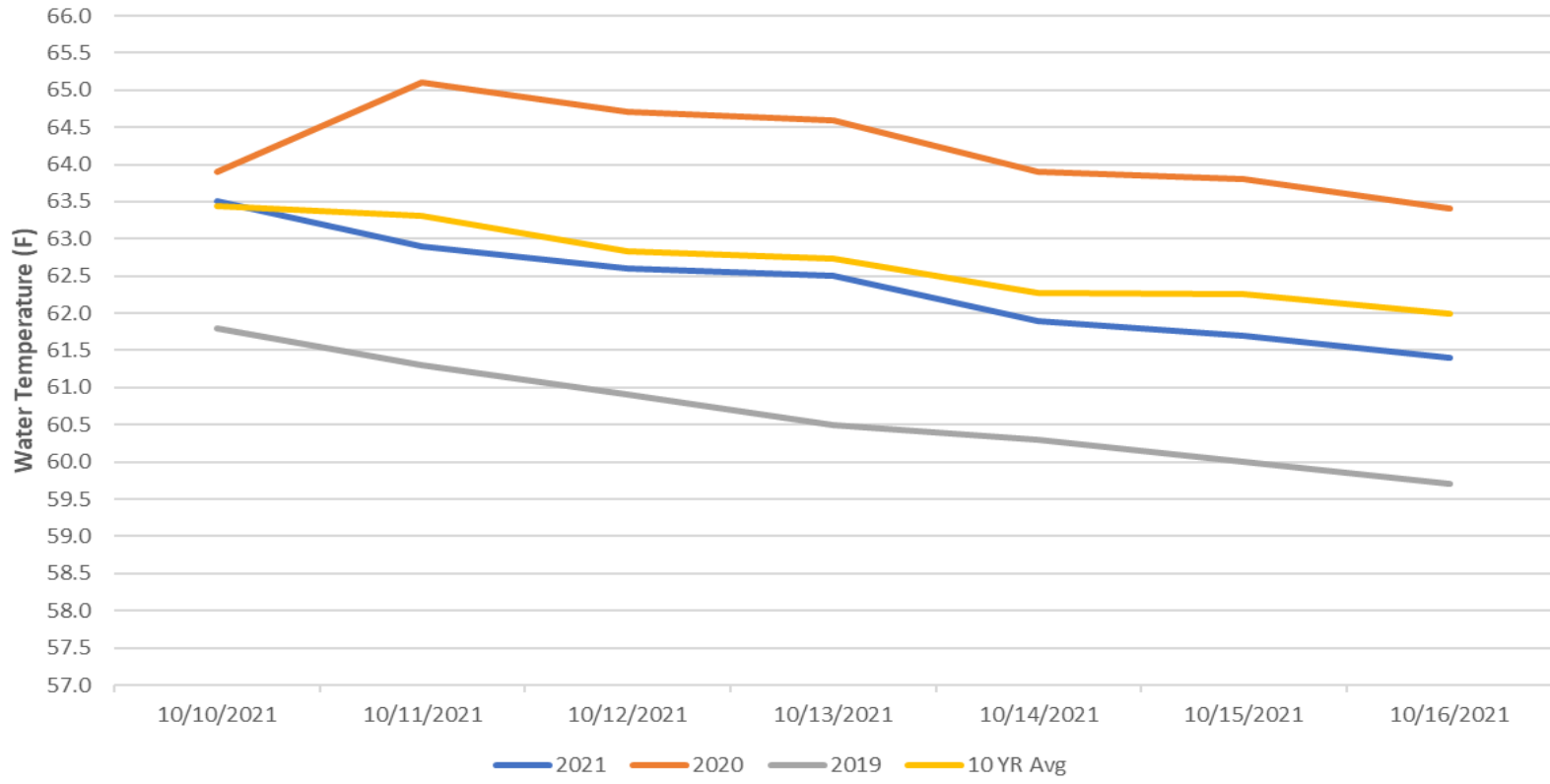
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 6 per day

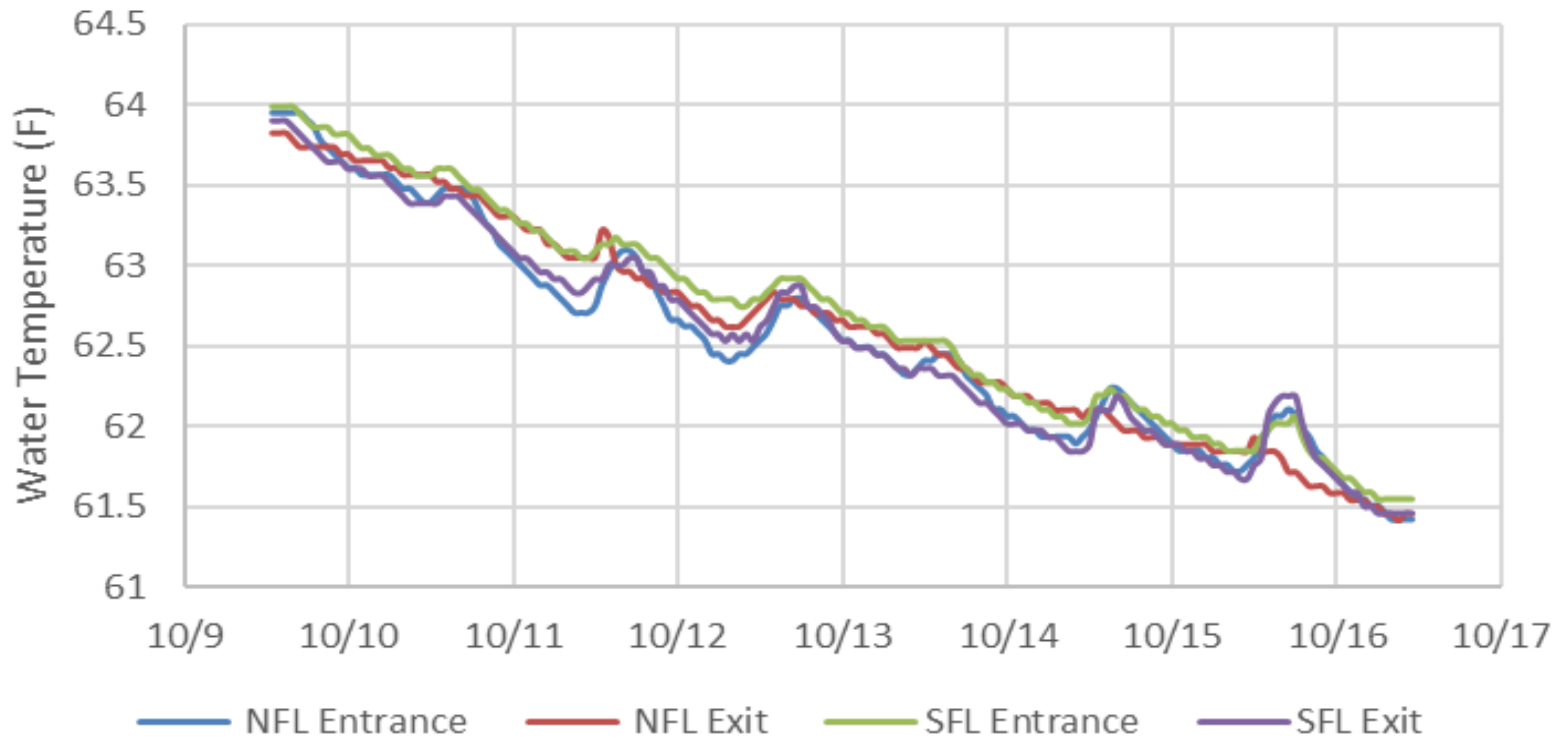
### **Research:**

None

### John Day Dam Water Temperatures (F)



### JDA Ladder Temperatures (10/10 - 10/16)



# 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) |
|------------|----------------------|----------------|--------------------------|----------------|
| 10/11/2021 | Unit 4               | 2.71           | 0,68,68                  | 159.6          |
| 10/11/2021 | Unit 12              | 2.85           | 0,68,68                  | 159.6          |
| 10/14/2021 | Unit 4               | 2.71           | 0,68,68                  | 159.6          |
| 10/14/2021 | Unit 12              | 2.76           | 0,68,68                  | 159.6          |
| 10/15/2021 | Unit 4               | 2.70           | 0,68,68                  | 159.5          |
| 10/15/2021 | Unit 12              | 2.82           | 0,68,68                  | 159.5          |

|                                  |      |
|----------------------------------|------|
| Average Weekly Velocity (ft/sec) | 2.76 |
|----------------------------------|------|

## 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      | 9.4        | 9.3        | 1.6        | 9.2        | 1.4        | 4.9           | 2.0        | 1.6               | 2.4        | 1           |
| Sunday      | 9.1        | 9.1        | 1.7        | 9.0        | 1.4        | 4.6           | 2.0        | 1.6               | 2.4        | 1           |
| Monday      | 9.3        | 9.2        | 1.6        | 9.1        | 1.5        | 4.5           | 2.0        | 1.6               | 2.3        | 1           |
| Monday      | 9.2        | 9.2        | 1.5        | 9.1        | 1.6        | 4.6           | 2.0        | 1.6               | 2.3        | 1           |
| Tuesday     | 9.7        | 9.6        | 1.4        | 9.4        | 1.4        | 4.7           | 2.0        | 1.6               | 1.4        | 1           |
| Tuesday     | 8.9        | 8.9        | 1.8        | 8.6        | 1.7        | 4.6           | 1.6        | 1.6               | 2.0        | 1           |
| Wednesday   | 8.8        | 8.7        | 1.8        | 8.6        | 1.7        | 4.6           | 1.9        | 1.6               | 1.7        | 1           |
| Wednesday   | 9.1        | 9.1        | 1.6        | 9.0        | 1.7        | 4.5           | 1.9        | 1.6               | 1.8        | 1           |
| Thursday    | 9.0        | 9.0        | 1.8        | 8.7        | 1.6        | 4.5           | 1.8        | 1.6               | 1.7        | 1           |
| Thursday    | 8.8        | 8.7        | 1.8        | 8.6        | 1.6        | 4.6           | 2.1        | 1.6               | 2.3        | 1           |
| Friday      | 9.1        | 9.0        | 1.6        | 8.9        | 1.5        | 4.6           | 2.0        | 1.6               | 1.7        | 1           |
| Friday      | 8.7        | 8.7        | 1.7        | 8.6        | 1.6        | 4.6           | 1.9        | 1.6               | 2.3        | 1           |
| Saturday    | 9.1        | 9.0        | 1.6        | 9.1        | 1.5        | 4.5           | 2.0        | 1.6               | 1.9        | 1           |
| Saturday    | 9.4        | 9.4        | 1.6        | 9.5        | 1.5        | 4.6           | 1.9        | 1.6               | 1.9        | 1           |
| <b>AVG:</b> | <b>9.1</b> | <b>9.1</b> | <b>1.7</b> | <b>9.0</b> | <b>1.6</b> | <b>4.6</b>    | <b>1.9</b> | <b>1.6</b>        | <b>2.0</b> | <b>1.0</b>  |

|            | Temp (F)    | Secchi (Ft) | Fallbacks  | Average # of Pelicans on Island Per Day |
|------------|-------------|-------------|------------|---|
| Sunday     | 63.5        | 6.0         | N/A        | 8                                       |
| Monday     | 62.9        | 6.0         | N/A        | 7                                       |
| Tuesday    | 62.6        | 6.0         | N/A        | 10                                      |
| Wednesday  | 62.5        | 6.0         | N/A        | 0                                       |
| Thursday   | 61.9        | 6.0         | N/A        | 7                                       |
| Friday     | 61.7        | 6.0         | N/A        | 8                                       |
| Saturday   | 61.4        | 6.0         | N/A        | 5                                       |
| <b>AVG</b> | <b>62.4</b> | <b>6.0</b>  | <b>N/A</b> | <b>6</b>                                |

John Day Dam  
Avian Zones



**JDA Bird Counts: 10/10/21 to 10/16/21**

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     |      |          |       | 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) |            |
| 10-Oct            | PHFB | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 53        | 49   | 0        | 0     | 102        |
| 10-Oct            | SWFB | 0          | 0    | 388        | 411   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 799        |
| 10-Oct            | PH1  | 14         | 16   | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 30         |
| 10-Oct            | PH2  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 10-Oct            | PH3  | 7          | 5    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 12         |
| 10-Oct            | SW1  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 10-Oct            | SW2  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 10-Oct            | SW3  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| <b>Avg/Survey</b> |      | <b>21</b>  |      | <b>400</b> |       | <b>0</b>  |      | <b>0</b>  |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>51</b> |      | <b>0</b> |       | <b>472</b> |
| 11-Oct            | PHFB | 0          | 0    | 0          | 0     | 0         | 0    | 1         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 43        | 46   | 0        | 0     | 90         |
| 11-Oct            | SWFB | 0          | 0    | 487        | 481   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 968        |
| 11-Oct            | PH1  | 2          | 3    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 5          |
| 11-Oct            | PH2  | 0          | 6    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 6          |
| 11-Oct            | PH3  | 33         | 22   | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 55         |
| 11-Oct            | SW1  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 11-Oct            | SW2  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 11-Oct            | SW3  | 3          | 0    | 0          | 0     | 0         | 0    | 0         | 26    | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 29         |
| <b>Avg/Survey</b> |      | <b>35</b>  |      | <b>484</b> |       | <b>0</b>  |      | <b>14</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>45</b> |      | <b>0</b> |       | <b>577</b> |
| 12-Oct            | PHFB | 0          | 0    | 0          | 212   | 0         | 0    | 6         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 52        | 52   | 0        | 0     | 322        |
| 12-Oct            | SWFB | 6          | 0    | 630        | 323   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 959        |
| 12-Oct            | PH1  | 5          | 0    | 0          | 0     | 2         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 7          |
| 12-Oct            | PH2  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 12-Oct            | PH3  | 7          | 135  | 0          | 33    | 0         | 0    | 0         | 63    | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 238        |
| 12-Oct            | SW1  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 12-Oct            | SW2  | 0          | 0    | 7          | 0     | 0         | 0    | 14        | 8     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 29         |
| 12-Oct            | SW3  | 0          | 57   | 0          | 0     | 0         | 0    | 9         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 66         |
| <b>Avg/Survey</b> |      | <b>105</b> |      | <b>603</b> |       | <b>1</b>  |      | <b>50</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>52</b> |      | <b>0</b> |       | <b>811</b> |
| 13-Oct            | PHFB | 0          | 0    | 0          | 0     | 0         | 0    | 10        | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 71        | 59   | 0        | 0     | 140        |
| 13-Oct            | SWFB | 0          | 0    | 483        | 293   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 776        |
| 13-Oct            | PH1  | 45         | 9    | 0          | 0     | 1         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 55         |
| 13-Oct            | PH2  | 16         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 16         |
| 13-Oct            | PH3  | 10         | 10   | 0          | 0     | 0         | 0    | 32        | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 52         |
| 13-Oct            | SW1  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 13-Oct            | SW2  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 13-Oct            | SW3  | 0          | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| <b>Avg/Survey</b> |      | <b>45</b>  |      | <b>388</b> |       | <b>1</b>  |      | <b>21</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>65</b> |      | <b>0</b> |       | <b>520</b> |



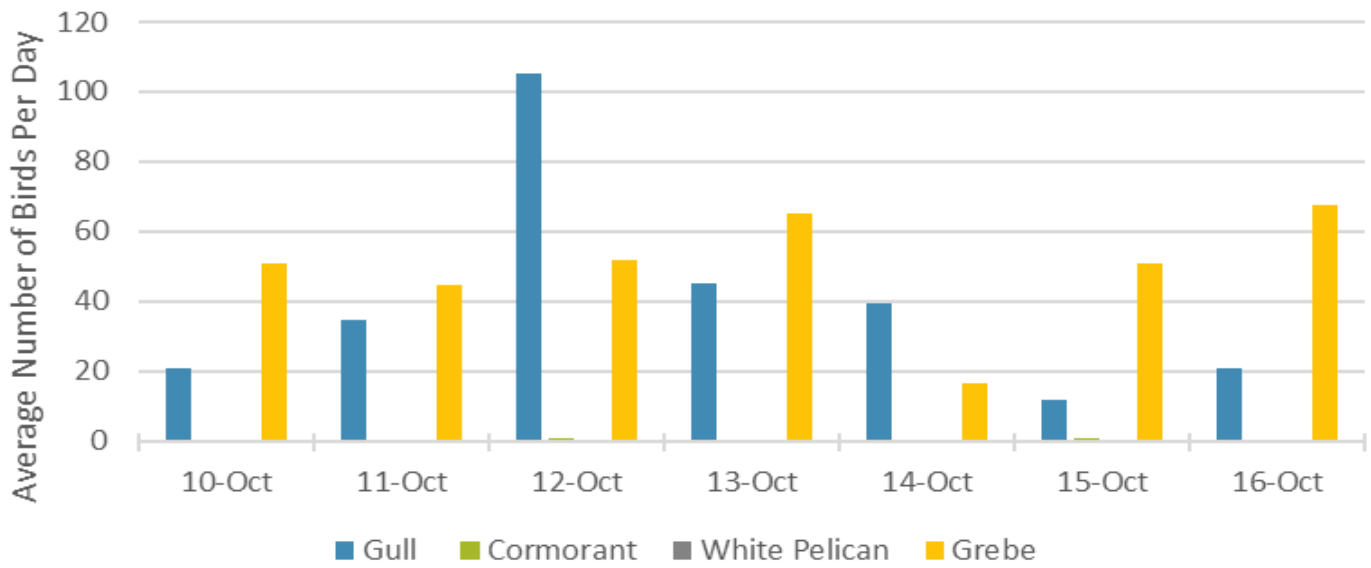
**JDA Bird Counts: 10/10/21 to 10/16/21**

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

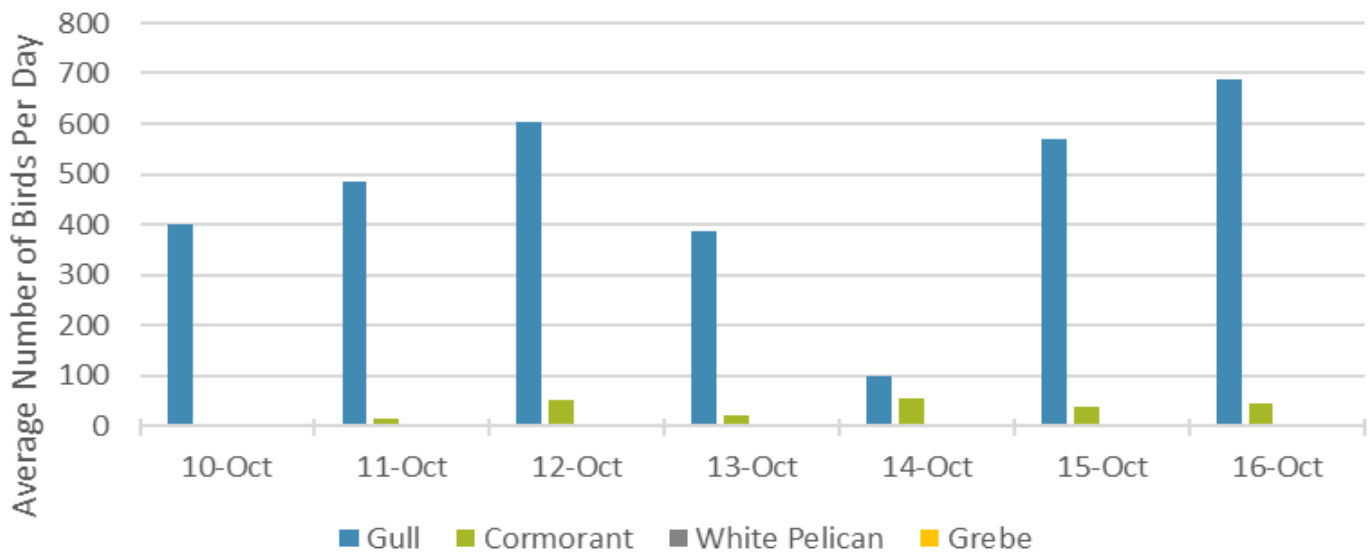
| Date              | Zone | Gulls     |      |            |       | Cormorant |      |           |       | Caspian tern |      |          |       | White Pelican |      |          |       | Grebe     |      |          |       | Total      |
|-------------------|------|-----------|------|------------|-------|-----------|------|-----------|-------|--------------|------|----------|-------|---------------|------|----------|-------|-----------|------|----------|-------|------------|
|                   |      | 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) |            |
| 14-Oct            | PHFB | 0         | 0    | 115        | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 33        | 0    | 0        | 0     | 148        |
| 14-Oct            | SWFB | 0         | 0    | 83         | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 83         |
| 14-Oct            | PH1  | 0         | 32   | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 32         |
| 14-Oct            | PH2  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 14-Oct            | PH3  | 0         | 47   | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 47         |
| 14-Oct            | SW1  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 14-Oct            | SW2  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 14-Oct            | SW3  | 0         | 0    | 0          | 0     | 0         | 0    | 53        | 56    | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 109        |
| <b>Avg/Survey</b> |      | <b>40</b> |      | <b>99</b>  |       | <b>0</b>  |      | <b>55</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>17</b> |      | <b>0</b> |       | <b>210</b> |
| 15-Oct            | PHFB | 0         | 0    | 0          | 245   | 0         | 0    | 2         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 59        | 43   | 0        | 0     | 349        |
| 15-Oct            | SWFB | 0         | 0    | 529        | 334   | 2         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 865        |
| 15-Oct            | PH1  | 4         | 3    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 7          |
| 15-Oct            | PH2  | 1         | 3    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 4          |
| 15-Oct            | PH3  | 4         | 9    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 13         |
| 15-Oct            | SW1  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 15-Oct            | SW2  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 15-Oct            | SW3  | 0         | 0    | 11         | 18    | 0         | 0    | 33        | 37    | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 99         |
| <b>Avg/Survey</b> |      | <b>12</b> |      | <b>569</b> |       | <b>1</b>  |      | <b>36</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>51</b> |      | <b>0</b> |       | <b>669</b> |
| 16-Oct            | PHFB | 0         | 0    | 132        | 133   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 81        | 54   | 0        | 0     | 400        |
| 16-Oct            | SWFB | 0         | 0    | 629        | 467   | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 1096       |
| 16-Oct            | PH1  | 6         | 14   | 0          | 0     | 0         | 1    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 21         |
| 16-Oct            | PH2  | 0         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 0          |
| 16-Oct            | PH3  | 12        | 9    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 21         |
| 16-Oct            | SW1  | 1         | 0    | 0          | 0     | 0         | 0    | 0         | 0     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 1          |
| 16-Oct            | SW2  | 0         | 0    | 0          | 1     | 0         | 0    | 0         | 37    | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 38         |
| 16-Oct            | SW3  | 0         | 0    | 16         | 0     | 0         | 0    | 41        | 9     | 0            | 0    | 0        | 0     | 0             | 0    | 0        | 0     | 0         | 0    | 0        | 0     | 66         |
| <b>Avg/Survey</b> |      | <b>21</b> |      | <b>689</b> |       | <b>1</b>  |      | <b>44</b> |       | <b>0</b>     |      | <b>0</b> |       | <b>0</b>      |      | <b>0</b> |       | <b>68</b> |      | <b>0</b> |       | <b>822</b> |

| Totals              | Gulls      |             | Cormorant |            | Caspian tern |          | White Pelican |          | Grebe      |          | Total       |
|---------------------|------------|-------------|-----------|------------|--------------|----------|---------------|----------|------------|----------|-------------|
|                     | F          | NF          | F         | NF         | F            | NF       | F             | NF       | F          | NF       |             |
| <b>Weekly Total</b> | <b>556</b> | <b>6461</b> | <b>6</b>  | <b>437</b> | <b>0</b>     | <b>0</b> | <b>0</b>      | <b>0</b> | <b>695</b> | <b>0</b> | <b>4078</b> |
| <b>Avg/Survey</b>   | <b>40</b>  | <b>462</b>  | <b>0</b>  | <b>31</b>  | <b>0</b>     | <b>0</b> | <b>0</b>      | <b>0</b> | <b>50</b>  | <b>0</b> | <b>583</b>  |

### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds





Gulls on the navigation wall in the forebay