FISHWAY STATUS REPORT

| Date: | 1/13/2018 | | |
|--------------------|-----------|------|-----------|
| Inspection Period: | 1/7/2018 | thru | 1/13/2018 |

JOHN DAY DAM

US Army Corps of Engineers Portland District

ΪĦ

JD/WC Project-Fisheries P.O. Box 823 Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected once per day during the winter maintenance season, Dec. 1 - Feb. 28.

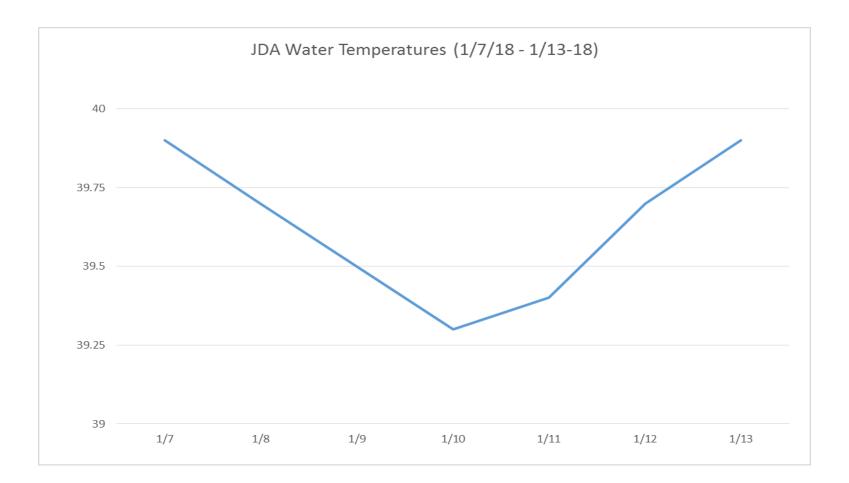
Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

| John Day Dam | Inspections | Criteria | Total Number of Inspections: 7 Temperature: 40 F |
|-------------------------------------|-----------------|----------------|---|
| | Out of Criteria | Limit | Secchi: 5.9 Ft. |
| NORTH FISHWAY | | | In service since 12/22/17, with all 6 AWS pumps available. |
| Exit differential | 0 | ≤ 0.5' | |
| Exit Control weirs | 0 | High setting | High setting is normal for JDN |
| Count station differential | 0 | ≤ 0.3' | |
| Weir crest depth (DS gauge) | 0 | 1.0' ± 0.1' | |
| Entrance differential | 0 | 1.0' - 2.0' | AVG 1.5 |
| SOUTH FISHWAY | OOS | | OOS since dewatered on 1/08. RTS is the week of 2/20/18. |
| Exit differential | OOS | ≤ 0.5' | |
| Exit Control weirs | OOS | Mid setting | Mid setting is normal for JDS |
| Count station differential | OOS | ≤ 0.3' | |
| Weir crest depth (US gauge) | OOS | 1.0' ± 0.1' | |
| South entrance differential | OOS | 1.0' - 2.0' | AVG #DIV/0! |
| Entrance weir SE1 | OOS | depth (≥ 8') | AVG #DIV/0! |
| Collection channel velocity | OOS | 1.5 - 4 fps | AVG 2.64 |
| N. Entrance PH(Bay 19)differential | OOS | 1.0' - 2.0' | AVG #DIV/0! |
| Entrance weir NE1 | OOS | depth (≥ 8') | AVG #DIV/0! |
| Entrance weir NE2 | OOS | depth (≥ 8') | AVG #DIV/0! |
| JUVENILE PASSAGE | OOS | | JBS season completed on 12/15/17. JBS dewatering scheduled for 1/23. |
| Forebay/bypass conduit differential | OOS | 4.0' - 5.0' | AVG 4.6 |
| Submersible traveling screens | OOS | visual inspect | All STSs removed from PH gatewells by 12/21/17, PMs and repairs underway. |
| Turbine trashrack drawdown | OOS | <1.5', wkly | |
| Vert barrier screen drawdown | OOS | <1.5', wkly | |
| Spill volume | NA | per FPP | Spillway on seal since 8/01/17 |
| Spill pattern | NA | per FPP | |
| Turbine Unit Priority | 0 | per FPP | |
| Turbine 1% Efficiency | 0 | per FPP | |

SMOLT MONITORING FACILITY

Operation: SMF OOS since 11/30/17. It will return to service on2/27/2018 which is one month earlier than the normal starting date, per FPOM request. Maintenance: Planning for the Switch Gate's Lower Seals replacement/ improvements to reduce water leakage and risk to passing juvenile lamprey. SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Research: None Birds : Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details. 6 Tower-to-Tower, 6 Spillway, 6 Navlock (2 failed on 11/02) and 7 PH lines are missing out of 125 grid's total. The avian lines' contractor is making fantastic progress due to mild and non-windy winter and is expected to complete all work early, by 3/1/18. **Operations:** JD South Fishway OOS/ dewatered since 1/08. Dewatering went well with hardly any fish encountered upstream of the CS due to flushing 3X. Only a handful of adult shad and 4 steelhead juveniles were bagged and released into tailrace in excellent condition. Additionally, 180 adult lamprey were found hiding inside of the Lamprey Trap. They were netted, loaded into transport tank and released into Forebay, a few miles upstream of the dam, in excellent condition. JD North Ladder in service since 12/21/17. All 6 AWS pumps are available. MU Gatewell Drawdowns: none due to winter maintenance season. Will commence in early March 2018. Maintenance: JD North Ladder - minor drainage issues on AWS pumps being handled by the JD Maintenance cleaning their drains. JD South Fishway OOS/ dewatered since 1/08. Expansion joints and AWS turbine 3 oil leak's repairs will be accomplished by JD Maintenance before the return to service the week of 2/20/18. Planning for the ROV inspection of CC gratings for the same week. Calibration: All gauges/ sensors are within the criteria of 0.3'. **Research:** Adult PIT Support contract ran into minor issues and has been delayed since November. However, the contract is to be accepted by 2/1 and then PSMFC's crew will complete their hardware installation in February. Both ladders should be ready to detect Adult PITs by 1 March 2018.

MOYNAHAN, KEvin Patrick, 1393959157 MOYNAHAN, KEvin Patrick, 1393959157 MOYNAHAN, KEvin authenticity, with Approved PICK, 1393959157



JDA Collection Channel Velocity

| Date | 13-Dec-17 |
|------|-----------|
| By: | MDL |

| Bay(s) | Time | Sec. | Velocity (f/s) |
|---------|-------|------|----------------|
| 0-2 | 1:04 | 64 | 2.81 |
| 2 - 4 | 2:11 | 131 | 2.69 |
| 4 - 6 | 3:19 | 199 | 2.65 |
| 6 - 8 | 4:28 | 268 | 2.61 |
| 8 - 10 | 5:39 | 339 | 2.54 |
| 10 - 12 | 6:50 | 410 | 2.54 |
| 12 - 14 | 8:03 | 483 | 2.47 |
| 14 - 16 | 9:08 | 548 | 2.77 |
| 16 - 18 | 10:14 | 614 | 2.73 |
| | | | 2.64 |

TW Bay19 =

161.2

RPMs:

68/68 (2&3) (1 @ 0)

FPP Criteria:

1.5–4.0 feet per second (2 fps optimum)



| | | John Day | Weekly | Averages | |
|------|-------|----------|---------|----------|-----------|
| | Temp: | | Secchi: | | Fallbacks |
| Sun | 40 | | 6.0 | | NA |
| Mon | 40 | | 6.0 | | NA |
| Tue | 40 | | 6.0 | | NA |
| Wed | 39 | | 6.0 | | NA |
| Thur | 40 | | 5.0 | | NA |
| Fri | 40 | | 6.0 | | NA |
| Sat | 40 | | 6.0 | | NA |
| AVG: | 40 | AVG: | 5.9 | AVG | NA |
| | 40 | | 515 | MAX | NA |

NA

MIN

| | NE1 | NE2 | S.Ent | SE1 | N.Ent | JBS Diff | Bay19 |
|------|---------|---------|---------|---------|-------|----------|---------|
| Sun | 005 | oos | 005 | OOS | 1.4 | 4.6 | 00S |
| Sun | | | | | | | |
| Mon | 005 | oos | 005 | OOS | 1.5 | 4.6 | 00S |
| Mon | | | | | | | |
| Tues | 005 | OOS | 00S | 00S | 1.6 | 4.6 | 00S |
| Tues | | | | | | | |
| Wed | 005 | OOS | 00S | 00S | 1.5 | 4.5 | 00S |
| Wed | | | | | | | |
| Thur | 005 | OOS | 00S | 00S | 1.4 | 4.6 | 00S |
| Thur | | | | | | | |
| Fri | 005 | OOS | 00S | 00S | 1.4 | 4.6 | 00S |
| Fri | | | | | | | |
| Sat | 005 | oos | 005 | OOS | 1.5 | 4.6 | 00S |
| Sat | | | | | | | |
| | | - | | | | | |
| AVG: | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 1.5 | 4.6 | #DIV/0! |

JDA Bird Counts: <u>1/7/18</u> to <u>1/13/18</u>

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

| Date | Zone | | Ģ | Gulls | | | Cori | morant | | | Caspia | n tern | | | White | e Pelica | in | | G | rebe | | 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) | |
| 7-Jan | PHFB | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7-Jan | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7-Jan | PH1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7-Jan | PH2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-Jan | PH3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-Jan | SW1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7-Jan | SW2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | | 2 | | 1 | | 1 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 10 |
| | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Jan | | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 8-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Jan | PH3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Jan | SW1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SW2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 1 | 4 |
| | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-Jan | | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | - | 1 | - | 0 | | 1 | | 2 | | 0 | - | 0 | | 0 | | 0 | | 0 | | 0 | | 8 |
| 10-Jan | | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 10-Jan | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-Jan | | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 10-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | urvey | 1 | | 0 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 5 |

JDA Bird Counts: <u>1/7/18</u> <u>to</u> <u>1/13/18</u>

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

| Date | Zone | | Ģ | Gulls | | | Cor | morant | : | | Caspia | n tern | | | White | e Pelica | n | | G | rebe | | 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) | |
| 11-Jan | PHFB | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 11-Jan | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Jan | PH1 | 1 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 11-Jan | PH2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Jan | PH3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Jan | SW1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Jan | SW2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | urvey | 1 | | 4 | - | 3 | | 1 | - | 0 | | 0 | - | 0 | | 0 | | 0 | | 0 | _ | 15 |
| 12-Jan | PHFB | 0 | 0 | 0 | 0 | 9 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 12-Jan | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-Jan | PH1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-Jan | PH2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-Jan | PH3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-Jan | SW1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 12-Jan | SW2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12-Jan | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | urvey | 0 | | 0 | | 6 | | 7 | | 0 | | 0 | | 0 | | 0 | | 0 | - | 0 | | 25 |
| 13-Jan | PHFB | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 13-Jan | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13-Jan | PH1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13-Jan | PH2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13-Jan | PH3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13-Jan | - | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 13-Jan | SW2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13-Jan | SW3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg/Su | urvey | 0 | | 1 | | 5 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 14 |

| Totals | Gulls | | Со | ormorant Caspian tern | | | | | | White Pelican | | | | | | Grebe | | | | | |
|-------------|-------|------|----|-----------------------|----|------|--|---|------|---------------|----|---|---|---|----|-------|--|---|--|----|--|
| | F | NF F | | | NF | NF F | | | NF F | | NF | | F | | NF | | | | | | |
| eekly Total | 13 | 10 | | 33 | | 25 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 81 | |
| vg/Survey | 1 | 1 | | 2 | | 2 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 6 | |