## FISHWAY STATUS REPORT

**Date:** 6/29/2014

Inspection Period: 6/22 thru 6/28/2014

## US Army Corps of Engineers Portland District

### JOHN DAY DAM

JD/WC Project-Fisheries P.O. Box 823

Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected twice per day during fish season, March. 1 - Nov. 31 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

| John Day Dam                        | Inspections     | Criteria       | Total Number of Inspections:          | 14         | Temperature:       | <b>62</b> F              |
|-------------------------------------|-----------------|----------------|---------------------------------------|------------|--------------------|--------------------------|
| •                                   | Out of Criteria | Limit          |                                       |            | Secchi:            | <b>4.5</b> Ft.           |
| NORTH FISHWAY                       |                 |                | In regular service. Five AWS pumps    | s availab  | le since 4/11.     |                          |
| Exit differential                   | 0               | ≤ 0.5′         |                                       |            |                    |                          |
| Exit Control weirs                  | 0               | MID setting    | Temporary Mid setting for Sockeye     |            |                    |                          |
| Count station differential          | 0               | ≤ 0.3′         |                                       |            |                    |                          |
| Weir crest depth (DS gauge)         | 0               | 1.3' ± 0.1'    | Temporary 1.3' for shad passage sir   | nce 5/22.  | i                  |                          |
| Entrance differential               | 0               | 1.0' - 2.0'    | AVG 1.5                               |            |                    |                          |
| SOUTH FISHWAY                       |                 |                | In regular service with all three AWS | turbines   | 3.                 |                          |
| Exit differential                   | 0               | ≤ 0.5′         |                                       |            |                    |                          |
| Exit Control weirs                  | 0               | MID setting    | MID is normal for JDS                 |            |                    |                          |
| Count station differential          | 0               | ≤ 0.3′         |                                       |            |                    |                          |
| Weir crest depth (US gauge)         | 0               | 1.3' ± 0.1'    | Temporary 1.3' for shad passage sir   | nce 5/22.  | 1                  |                          |
| South entrance differential         | 0               | 1.0' - 2.0'    | AVG 1.4                               |            |                    |                          |
| Entrance weir SE1                   | 0               | depth (≥ 8')   | AVG 8.8                               |            |                    |                          |
| Collection channel velocity         | 0               | 1.5 - 4 fps    | AVG 3.01                              |            |                    |                          |
| Bay 1 differential                  | 0               | 1.0' - 2.0'    | AVG 1.7                               |            |                    |                          |
| N. Entrance PH(Bay 19)differential  | 0               | 1.0' - 2.0'    | AVG 1.7                               |            |                    |                          |
| Entrance weir NE1                   | 0               | depth (≥ 8')   |                                       |            |                    |                          |
| Entrance weir NE2                   | 0               | depth (≥ 8')   | AVG 8.8                               |            |                    |                          |
| JUVENILE PASSAGE                    |                 |                | JBS/SMF in regular service since 3/3  | 30.        |                    |                          |
| Forebay/bypass conduit differential | 0               | 4.0' - 5.0'    | AVG 4.5                               |            |                    |                          |
| Submersible traveling screens       | 0               | visual inspect | Camera STS inspection completed I     | oy 6/18; t | two bad screens re | eplaced with spares.     |
| Turbine trashrack drawdown          | 0               | <1.5', wkly    |                                       |            |                    |                          |
| Vert barrier screen drawdown        | 0               | <1.5', wkly    | JD Fisheries crew performs frequen    | t gate we  | ells' drawdowns de | pending on river debris. |
| Spill volume                        | 0               | 30/40 %        | Per the PNNL experimental block d     | esign, ch  | nanging every two  | days.                    |
| Spill pattern                       | 0               | per FPP        |                                       |            |                    |                          |
| Turbine Unit Priority               | 0               | per FPP        |                                       |            |                    |                          |
| Turbine 1% Efficiency               | 0               | per FPP        |                                       |            |                    |                          |

#### SMOLT MONITORING FACILITY

Operation: SMF is in sampling mode since 3/31 AM. Daily 24 hrs smolt sampling by PSMFC crew since 4/1.

JD Fisheries works regular 24/7 swing shift schedule as required by FPP; it will continue this until the end of sampling season on 9/15.

**Debris:** Moderate to light; primarily tumbleweeds with some sticks, branches, and wooden debris.

Maintenance: None

Research:

PNNL summer/ subyearling collection started on 6/9. They will be collecting/tagging at JD SMF 7 days a week until the study is completed in mid July.

Tribal trapping/collection of broodstock/adult lamprey started at JD on 6/12. It will last approximately one month, until the tribal 2014 quotas are caught.

Fallbacks: AVG: 126 MAX: 167 MIN: 70

#### OTHER ISSUES:

#### **JOHN DAY**

BIRDS: see the Avian Numbers tab. We report all species and locations, but in reality only gulls in the tailrace BRZ are relevant at JD.

USDA hazing from a boat started on 4/17; one 8 hrs shift, 7 days a week will continue through the end of July. A slight increase in numbers of gulls PM after hazing stops, but almost all are flying downstream of the avian tailrace BRZ grid. Gull predation at JD continues to be estimated as minimal. 124 out of 125 total primary lines are intact/ in place.

#### Operations:

JD North Fishway is in regular service and meeting the FPP criteria.

JD South Fishway in regular service and meeting the FPP criteria.

#### Maintenance:

JD North AWS pumps - five out of total six are available for service since 4/11. AWS pump # 4 continues in OOS status due to its lower bearing issues.

JD Engineering/contractor continue with its repairs.

Calibration: 6/27/2014 All sensors were within the criteria of 0.3'.

Gatewell Drawdown: No units measured greater then 1.1 ft of differential for this reporting week.

Condition of smolts sampled at SMF was normal for this time of year, with no signs of elevated descaling during the entire week.

#### Research:

JD Fisheries continues coordinating with research groups performing 2014 studies:

Tribal collection of adult lamprey at JD began on 6/12; low catches so far.

PSMFC/WDFW dam angling from the JD PH tailrace deck for pikeminnow underway with a great week of over 1, 000 fish caught; total YTD catch is well over 2,500.

U of I Testing of JD North LPS (Lamprey Passage System) preparing for their season's work starting in July 2014.

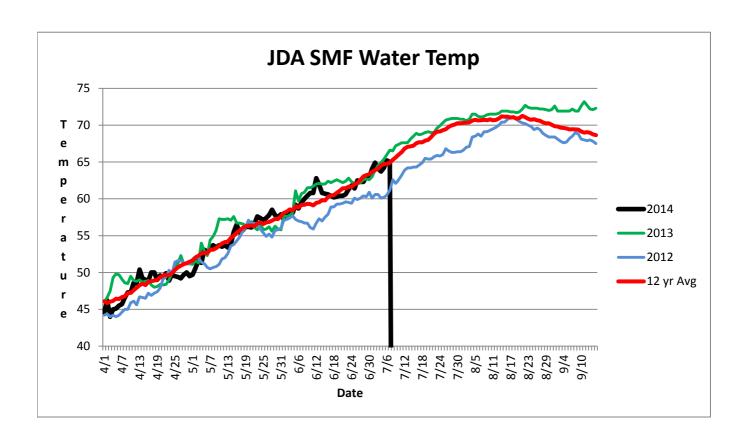
PNNL's Spring/ Yearling Component completed at JD SMF on 5/28 (last day of collecting juveniles for tagging.)

PNNL JD Summer /Subyearling passage survival study started on 6/9 (first day of collection.) Collection and tagging will occur at JD SMF 7 days a week until approximately mid July.

2014 Adult Salmonids counting by Normandeau Ass. continues through October 31 as required by FPP.

Adult Salmonids Radio telemetry evaluations are ongoing at both JD adult fishway. University of Idaho crew is in charge of detecting of all adult salmonids, which were tagged and released at Bonneville Dam.

Glen A. Smith PE Date:\_\_\_\_ 28-Jun-14



# John Day Dam Collection Channel Velocity

|         | Date    | 23-Jun-14 |           |
|---------|---------|-----------|-----------|
|         | Ву:     | pkr       |           |
|         |         |           |           |
| Bay(s)  | Time    | Sec.      | Vel (f/s) |
| 0-2     | 01:12.0 | 72        | 2.50      |
| 2 - 4   | 0:02:17 | 137       | 2.77      |
| 4 - 6   | 0:03:21 | 201       | 2.81      |
| 6 - 8   | 0:04:36 | 276       | 2.40      |
| 8 - 10  | 0:05:41 | 341       | 2.77      |
| 10 - 12 | 0:06:39 | 399       | 3.10      |
| 12 - 14 | 0:07:33 | 453       | 3.33      |
| 14 - 16 | 0:08:33 | 513       | 3.00      |
| 16 - 18 | 0:09:14 | 554       | 4.39      |
|         |         |           | 3.01      |

## **2014 JDA Piscivorous Bird Counts**

F=foraging, NF=non-foraging

|           |         | r=ioraging, Nr=non-ioraging |    |     |      |       |        |        |     |    |     |    |          |          |
|-----------|---------|-----------------------------|----|-----|------|-------|--------|--------|-----|----|-----|----|----------|----------|
|           | Time    |                             | Gı | 111 | Corm | orant | Caspia | n tern | AWI | E  | Gre | be | Total    |          |
| 5.4       |         | _                           | _  |     | _    |       | _      |        | _   |    | _   |    | birds in |          |
| Date      | (24 hr) | Zone                        | F  | NF  | F    | NF    | F      | NF     | F   | NF | F   | NF | zone     | Observer |
| 22-Jun-14 |         | PHFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 11  | 0  | 11       | EGG      |
| 22-Jun-14 |         | SWFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 |         | PH1                         | 3  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 3        | EGG      |
| 22-Jun-14 |         | PH2                         | -  | 0   | 0    | -     | 0      | -      | 0   | -  | -   | 0  | 0        | EGG      |
| 22-Jun-14 |         | PH3                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 |         | SW1                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 |         | SW2                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 |         | SW3                         | 2  | 0   | 0    | 0     | 0      | 0      | 6   | 0  | 0   | 0  | 8        | EGG      |
| 22-Jun-14 |         | PHFB                        | 4  | 0   | 0    | 0     | 0      | 0      | 1   | 0  | 15  | 0  | 20       | EGG      |
| 22-Jun-14 |         | SWFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 22-Jun-14 | 14:00   |                             | 6  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 6        | EGG      |
| 23-Jun-14 |         | PHFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 12  | 0  | 12       | EGG      |
| 23-Jun-14 |         | SWFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 |         | PH1                         | 1  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 1        | EGG      |
| 23-Jun-14 |         | PH2                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 |         | PH3                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 |         | SW1                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 |         | SW2                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 7:30    | SW3                         | 2  | 0   | 0    | 0     | 0      | 0      | 6   | 0  | 0   | 0  | 8        | EGG      |
| 23-Jun-14 | 14:00   | PHFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 11  | 0  | 11       | EGG      |
| 23-Jun-14 | 14:00   | SWFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 14:00   | PH1                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 14:00   | PH2                         | 4  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 4        | EGG      |
| 23-Jun-14 | 14:00   | PH3                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 14:00   | SW1                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 14:00   | SW2                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 23-Jun-14 | 14:00   | SW3                         | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |
| 24-Jun-14 | 7:30    | PHFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 15  | 0  | 15       | EGG      |
| 24-Jun-14 | 7:30    | SWFB                        | 0  | 0   | 0    | 0     | 0      | 0      | 0   | 0  | 0   | 0  | 0        | EGG      |

| 24-Jun-14 | 7:30  | PH1  | 2 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 2  | EGG |
|-----------|-------|------|---|---|---|---|---|---|----|---|----|----|----|-----|
| 24-Jun-14 | 7:30  | PH2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 7:30  | PH3  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0  | 0  | 1  | EGG |
| 24-Jun-14 | 7:30  | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 7:30  | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 7:30  | SW3  | 2 | 0 | 0 | 0 | 0 | 0 | 6  | 0 | 0  | 0  | 8  | EGG |
| 24-Jun-14 | 14:00 | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 14 | 0  | 14 | EGG |
| 24-Jun-14 | 14:00 | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 14:00 | PH1  | 3 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 3  | EGG |
| 24-Jun-14 | 14:00 | PH2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 14:00 | PH3  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0  | 0  | 1  | EGG |
| 24-Jun-14 | 14:00 | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 14:00 | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | EGG |
| 24-Jun-14 | 14:00 | SW3  | 3 | 0 | 0 | 0 | 0 | 0 | 7  | 0 | 0  | 0  | 10 | EGG |
| 25-Jun-14 | 7:30  | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 0 | 0  | 16 | 19 | DEK |
| 25-Jun-14 | 7:30  | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0  | 0  | 2  | DEK |
| 25-Jun-14 | 7:30  | PH1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 7:30  | PH2  | 1 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 1  | DEK |
| 25-Jun-14 | 7:30  | PH3  | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0  | 0  | 1  | DEK |
| 25-Jun-14 |       | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 |       | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 |       | SW3  | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0  | 0  | 15 | DEK |
| 25-Jun-14 |       | PHFB | 2 | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0  | 12 | 16 | DEK |
| 25-Jun-14 |       | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 25-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0  | 0  | 10 | DEK |
| 26-Jun-14 |       | PHFB | 0 | 1 | 0 | 0 | 0 | 0 | 0  | 4 | 0  | 12 | 17 | DEK |
| 26-Jun-14 |       | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 26-Jun-14 | 7:30  |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 26-Jun-14 |       | PH2  | 5 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 5  | DEK |
| 26-Jun-14 | 7:30  |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 26-Jun-14 |       | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 26-Jun-14 |       | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |
| 26-Jun-14 |       | SW3  | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0  | 0  | 18 | DEK |
| 26-Jun-14 |       | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0  | 14 | 16 | DEK |
| 26-Jun-14 | 14:00 | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0  | 0  | 0  | DEK |

| 26-Jun-14 | 14:00 | PH1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
|-----------|-------|------|---|---|---|---|---|---|----|---|---|----|----|-----|
| 26-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 26-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0 | 0  | 2  | DEK |
| 26-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 26-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 26-Jun-14 | 14:00 | SW3  | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0  | 11 | DEK |
| 27-Jun-14 | 7:30  | PHFB | 1 | 0 | 0 | 0 | 0 | 0 | 8  | 0 | 0 | 13 | 22 | DEK |
| 27-Jun-14 | 7:30  | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 2  | 2  | DEK |
| 27-Jun-14 | 7:30  | PH1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 7:30  | PH2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 |       | PH3  | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 0 | 0 | 0  | 3  | DEK |
| 27-Jun-14 |       | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 |       | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 |       | SW3  | 4 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0  | 14 | DEK |
| 27-Jun-14 |       | PHFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 15 | 15 | DEK |
| 27-Jun-14 |       | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0 | 0  | 2  | DEK |
| 27-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 27-Jun-14 | 14:00 |      | 2 | 0 | 0 | 0 | 0 | 0 | 8  | 0 | 0 | 0  | 10 | DEK |
| 28-Jun-14 |       | PHFB | 0 | 1 | 0 | 0 | 0 | 0 | 0  | 8 | 0 | 0  | 9  | DEK |
| 28-Jun-14 |       | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1 | 0 | 0  | 1  | DEK |
| 28-Jun-14 |       | PH1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 |       | PH2  | 3 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 3  | DEK |
| 28-Jun-14 |       | PH3  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 |       | SW1  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 |       | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 |       | SW3  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 3 | 0 | 0  | 3  | DEK |
| 28-Jun-14 |       | PHFB | 1 | 0 | 0 | 0 | 0 | 0 | 0  | 2 | 0 | 14 | 17 | DEK |
| 28-Jun-14 |       | SWFB | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 | 14:00 |      | 4 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 4  | DEK |
| 28-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 | 14:00 |      | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 |       | SW2  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |
| 28-Jun-14 | 14:00 | SW3  | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0  | 0  | DEK |



### John Day:

|      | Temp: | _ |
|------|-------|---|
| Sun  | 61    |   |
| Mon  | 62    |   |
| Tues | 61    |   |
| Wed  | 62    |   |
| Thur | 62    |   |
| Fri  | 62    |   |
| Sat  | 63    |   |
| AVG: | 62    |   |
|      |       | • |

|      | Secchi: |
|------|---------|
|      | 4.0     |
|      | 4.0     |
|      | 5.0     |
|      | 5.0     |
|      | 4.5     |
|      | 4.5     |
|      | 4.5     |
| AVG: | 4.5     |
| •    |         |

|     | Fallbacks |
|-----|-----------|
|     | 70        |
|     | 74        |
|     | 113       |
|     | 162       |
|     | 141       |
|     | 153       |
|     | 167       |
| AVG | 126       |
| MAX | 167       |
| MIN | 70        |
|     |           |

Sun Sun Mon Tues Tues Wed Wed Thur Thur Fri Fri Sat Sat AVG:

| Ī | NE1 | NE2 | S.Ent | SE1 | N.Ent | JBS Diff | Bay1 | Bay19 |
|---|-----|-----|-------|-----|-------|----------|------|-------|
|   | 8.9 | 8.9 | 1.4   | 9.8 | 1.4   | 4.5      | 1.5  | 1.6   |
|   | 8.3 | 8.4 | 1.4   | 8.2 | 1.5   | 4.5      | 1.8  | 2.0   |
|   | 8.8 | 8.8 | 1.4   | 8.6 | 1.4   | 4.5      | 1.8  | 1.8   |
|   | 8.2 | 8.2 | 1.4   | 8.1 | 1.5   | 4.5      | 1.7  | 1.8   |
|   | 9.1 | 9.1 | 1.5   | 8.8 | 1.4   | 4.6      | 1.8  | 1.8   |
|   | 9.3 | 9.3 | 1.4   | 8.7 | 1.5   | 4.5      | 1.8  | 1.6   |
|   | 8.1 | 8.1 | 1.5   | 8.1 | 1.5   | 4.6      | 1.8  | 1.9   |
|   | 8.9 | 8.9 | 1.3   | 9.0 | 1.4   | 4.6      | 1.6  | 1.8   |
|   | 8.1 | 8.1 | 1.5   | 8.1 | 1.6   | 4.5      | 1.8  | 1.9   |
|   | 9.0 | 9.0 | 1.3   | 9.0 | 1.5   | 4.5      | 1.6  | 1.8   |
|   | 9.2 | 9.2 | 1.3   | 9.1 | 1.5   | 4.6      | 1.6  | 1.7   |
|   | 9.1 | 9.1 | 1.5   | 9.1 | 1.5   | 4.6      | 1.8  | 1.9   |
|   | 9.4 | 9.5 | 1.6   | 8.8 | 1.5   | 4.6      | 1.7  | 1.2   |
|   | 9.2 | 9.2 | 1.3   | 9.1 | 1.3   | 4.5      | 1.6  | 1.6   |
|   | 8.8 | 8.8 | 1.4   | 8.8 | 1.5   | 4.5      | 1.7  | 1.7   |