

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #22-20

Report Period: 8/13 – 8/19, 2022

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### SECTION 1. River Flow and Sampling Results

|                   | Min   | Max   | Mean    |           |       |
|-------------------|-------|-------|---------|-----------|-------|
|                   |       |       | Current | Last Week | 2021  |
| A. River Flow     | 154.5 | 191.9 | 178.4   | 160.4     | 121.9 |
| B. Powerhouse 1   | 132.5 | 169.2 | 156.0   | 102.9     | 99.8  |
| C. Spill (kcfs)   | 21.2  | 21.6  | 21.4    | 56.2      | 21.2  |
| % of River Flow   | 11.0  | 13.7  | 12.1    | 35.0      | 17.9  |
| D. Water Temp *   | 70.8  | 72.4  | 71.6    | 71.3      | 72.6  |
| E. % Saturation * | 106.0 | 109.1 | 107.6   | 107.0     | 104.8 |

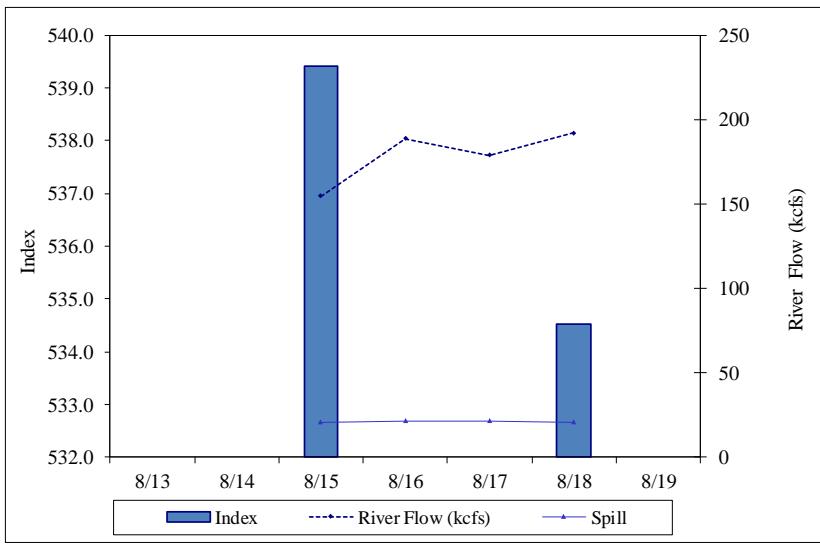
\* TDG and water temp data from USGS forebay sensors.

| % SAMPLE COMPOSITION | This Week | Last Week |
|----------------------|-----------|-----------|
| YEARLING CHINOOK     | 0.0%      | 0.0%      |
| SUBYEARLING CHINOOK  | 100.0%    | 99.5%     |
| CHINOOK FRY          | 0.0%      | 0.0%      |
| UNCLIPPED STEELHEAD  | 0.0%      | 0.0%      |
| CLIPPED STEELHEAD    | 0.0%      | 0.0%      |
| COHO                 | 0.0%      | 0.0%      |
| COHO FRY             | 0.0%      | 0.0%      |
| SOCKEYE              | 0.0%      | 0.5%      |

| YEARLING CHINOOK |             |         |        |        |        | SUBYEARLING CHINOOK |         |        |        |        |         | COHO    |        |        |        |        |   |
|------------------|-------------|---------|--------|--------|--------|---------------------|---------|--------|--------|--------|---------|---------|--------|--------|--------|--------|---|
| End Date         | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index               | # Smpld | % Desc | % Mort | # Coll | Index   | # Smpld | % Desc | % Mort | # Coll | Index  |   |
| 8/13             |             |         |        |        |        |                     |         |        |        |        |         |         |        |        |        |        |   |
| 8/14             |             |         |        |        |        |                     |         |        |        |        |         |         |        |        |        |        |   |
| 8/15             | 20.0%       | 0       | 0.0    | 0.0    | 0      | 0                   | 93      | 0.0    | 0.0    | 465    | 539     | 0       | 0.0    | 0.0    | 0      | 0      | 0 |
| 8/16             |             |         |        |        |        |                     |         |        |        |        |         |         |        |        |        |        |   |
| 8/17             |             |         |        |        |        |                     |         |        |        |        |         |         |        |        |        |        |   |
| 8/18             | 20.0%       | 0       | 0.0    | 0.0    | 0      | 0                   | 95      | 2.1    | 0.0    | 475    | 535     | 0       | 0.0    | 0.0    | 0      | 0      | 0 |
| 8/19             |             |         |        |        |        |                     |         |        |        |        |         |         |        |        |        |        |   |
| Weekly           |             | 0       | 0.0    | 0.0    | 0      | 0                   | 188     | 1.1    | 0.0    | 940    | 1,074   | 0       | 0.0    | 0.0    | 0      | 0      | 0 |
| Season to date   |             | 4,676   | 2.3    | 0.1    | 47,784 | 114,702             | 3,920   | 1.5    | 0.1    | 95,550 | 168,249 | 484     | 1.9    | 0.2    | 5,780  | 13,654 |   |

| UNCLIPPED      |             |         |        |        |        | STEELHEAD |         |        |        |        |        | CLIPPED |        |        |        |        |         | SOCKEYE |        |        |       |   |  |
|----------------|-------------|---------|--------|--------|--------|-----------|---------|--------|--------|--------|--------|---------|--------|--------|--------|--------|---------|---------|--------|--------|-------|---|--|
| End Date       | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index     | # Smpld | % Desc | % Mort | # Coll | Index  | # Smpld | % Desc | % Mort | # Coll | Index  | # Smpld | % Desc  | % Mort | # Coll | Index |   |  |
| 8/13           |             |         |        |        |        |           |         |        |        |        |        |         |        |        |        |        |         |         |        |        |       |   |  |
| 8/14           |             |         |        |        |        |           |         |        |        |        |        |         |        |        |        |        |         |         |        |        |       |   |  |
| 8/15           | 20.0%       | 0       | 0.0    | 0.0    | 0      | 0         | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0     | 0.0    | 0      | 0     | 0 |  |
| 8/16           |             |         |        |        |        |           |         |        |        |        |        |         |        |        |        |        |         |         |        |        |       |   |  |
| 8/17           |             |         |        |        |        |           |         |        |        |        |        |         |        |        |        |        |         |         |        |        |       |   |  |
| 8/18           | 20.0%       | 0       | 0.0    | 0.0    | 0      | 0         | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0     | 0.0    | 0      | 0     | 0 |  |
| 8/19           |             |         |        |        |        |           |         |        |        |        |        |         |        |        |        |        |         |         |        |        |       |   |  |
| Weekly         |             | 0       | 0.0    | 0.0    | 0      | 0         | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 0       | 0.0     | 0.0    | 0      | 0     | 0 |  |
| Season to date |             | 333     | 2.1    | 0.0    | 4,386  | 11,063    | 1,123   | 6.5    | 0.2    | 12,088 | 29,055 | 1,142   | 3.2    | 0.2    | 24,151 | 60,007 |         |         |        |        |       |   |  |

| TOTAL          |             |         |        |        |         |         |
|----------------|-------------|---------|--------|--------|---------|---------|
| End Date       | Sample Rate | # Smpld | % Desc | % Mort | # Coll  | Index   |
| 8/13           |             |         |        |        |         |         |
| 8/14           |             |         |        |        |         |         |
| 8/15           | 20.0%       | 93      | 0.0    | 0.0    | 465     | 539     |
| 8/16           |             |         |        |        |         |         |
| 8/17           |             |         |        |        |         |         |
| 8/18           | 20.0%       | 95      | 2.1    | 0.0    | 475     | 535     |
| 8/19           |             |         |        |        |         |         |
| Weekly         |             | 188     | 1.1    | 0.0    | 940     | 1,074   |
| Season to date |             | 11,678  | 2.5    | 0.1    | 189,739 | 396,729 |



Notes: Condition percentages are calculated from sample numbers.  
Subyearling chinook and coho include fry.

| Pacific Lamprey |         |        | Western Brook |         |        |            |         |        |        |
|-----------------|---------|--------|---------------|---------|--------|------------|---------|--------|--------|
| Macrophthalmia  |         |        | Ammocoetes    |         |        | Ammocoetes |         |        |        |
| End Date        | # Smpld | % Mort | # Coll        | # Smpld | % Mort | # Coll     | # Smpld | % Mort | # Coll |
| 8/13            |         |        |               |         |        |            |         |        |        |
| 8/14            |         |        |               |         |        |            |         |        |        |
| 8/15            | 0       | 0.0    | 0             | 0       | 0.0    | 0          | 0       | 0      | 0      |
| 8/16            |         |        |               |         |        |            |         |        |        |
| 8/17            |         |        |               |         |        |            |         |        |        |
| 8/18            | 0       | 0.0    | 0             | 1       | 0.0    | 5          | 0       | 0      | 0      |
| 8/19            |         |        |               |         |        |            |         |        |        |
| Weekly          | 0       | 0.0    | 0             | 1       | 0.0    | 5          | 0       | 0      | 0      |
| Season to date  | 320     | 0.3    | 4,161         | 43      | 0.0    | 522        | 0       | 0      | 0      |

## SECTION 2. Smolt and Lamprey Condition Monitoring Summary

| Subyearling | DESCALING |          |       |      | INJURY     |      |      |      |    | Other Conditions |        |          |               |         |
|-------------|-----------|----------|-------|------|------------|------|------|------|----|------------------|--------|----------|---------------|---------|
|             | Chinook   | SAMPLE # | 3-19% | >20% | Pred. Desc | BODY | EYE  | HEAD | OP | FIN              | POPEYE | PINK FIN | Fin Discolor. | FIN HEM |
| This Week   |           | 188      | 3.7%  | 0.5% | 0.5%       | 1.6% |      |      |    | 4.8%             |        |          |               | 11.2%   |
| Last Week   |           | 206      | 3.4%  |      | 1.0%       | 0.5% | 0.5% |      |    | 3.4%             |        |          |               | 8.7%    |

|           | SAMPLE # | DISEASE    |        |      |           |           |         | PREDATION |      |         |     |
|-----------|----------|------------|--------|------|-----------|-----------|---------|-----------|------|---------|-----|
|           |          | Columnaris | FUNGUS | BKD  | PARASITES | DEFORMITY | EYE HEM | BIRD      | FISH | LAMPREY | OTH |
|           |          | This Week  | 188    | 0.5% | 1.6%      | 3.7%      |         | 0.5%      | 3.2% |         |     |
| Last Week | 206      |            |        |      |           | 20.9%     |         | 1.9%      | 2.4% |         |     |

|                       |           |          | INJURY |     |      |     |        |         | DISEASE and OTHER CONDITIONS |        |           |          |      | PREDATION |  |
|-----------------------|-----------|----------|--------|-----|------|-----|--------|---------|------------------------------|--------|-----------|----------|------|-----------|--|
| MP-<br>Macrophthalmia | End       | SAMPLE # | BODY   | EYE | HEAD | FIN | POPEYE | FIN HEM | Columnaris                   | FUNGUS | DEFORMITY | EYE HEM. | BIRD | FISH      |  |
|                       | Date      |          | 8/19   | 0   |      |     |        |         |                              |        |           |          |      |           |  |
|                       | This Week |          | 8/12   | 0   |      |     |        |         |                              |        |           |          |      |           |  |
| AP - Ammocoetes       | End       | SAMPLE # |        |     |      |     |        |         |                              |        |           |          |      |           |  |
|                       | Date      |          | 8/19   | 1   |      |     |        |         |                              |        |           |          |      |           |  |
|                       | Last Week |          | 8/12   | 1   |      |     |        |         |                              |        |           |          |      |           |  |

### SECTION 3. Incidental Summary

|                | Bass<br>Largemouth | Bass<br>Smallmouth | Bluegill and<br>Pumpkinseed | Bullhead | Carp | Catfish,<br>Channel | Chiselmouth | Crappie<br>species |
|----------------|--------------------|--------------------|-----------------------------|----------|------|---------------------|-------------|--------------------|
| This Week      | 0                  | 4                  | 0                           | 0        | 0    | 0                   | 0           | 0                  |
| Season to Date | 1                  | 32                 | 11                          | 1        | 2    | 1                   | 0           | 6                  |

|                | Dace -<br>Longnose | Dace -<br>Speckled | Chinook Jack | Goldfish | Lamprey<br>Adult | Northern<br>Pikeminnow | Peamouth | Perch Yellow |
|----------------|--------------------|--------------------|--------------|----------|------------------|------------------------|----------|--------------|
| This Week      | 0                  | 0                  | 0            | 0        | 0                | 0                      | 0        | 0            |
| Season to Date | 0                  | 0                  | 1            | 1        | 1                | 1                      | 0        | 362          |

|                | Redside<br>Shiner | Sand Roller | Sculpin<br>species | Stickleback<br>3 spine | Sucker<br>species | Shad<br>Adult | Shad<br>Juvenile | Sturgeon<br>White |
|----------------|-------------------|-------------|--------------------|------------------------|-------------------|---------------|------------------|-------------------|
| This Week      | 0                 | 0           | 0                  | 0                      | 0                 | 1             | 12,464           | 0                 |
| Season to Date | 0                 | 0           | 9                  | 6                      | 1                 | 5             | 14,666           | 0                 |

|                | Trout<br>Bull | Trout<br>Cutthroat | Trout<br>Rainbow | Walleye | Whitefish<br>Mountain | Siberian<br>Prawn | Chum<br>Salmon | Banded<br>Killifish |
|----------------|---------------|--------------------|------------------|---------|-----------------------|-------------------|----------------|---------------------|
| This Week      | 0             | 0                  | 0                | 0       | 0                     | 0                 | 0              | 0                   |
| Season to Date | 0             | 0                  | 0                | 31      | 6                     | 122               | 0              | 5                   |

### SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is adhering to the warm river water temperature sampling mode. Samples will continue to target 100 of the predominant out-migrant smolt, currently Subyearling Fall Chinook (100% composition), on Mondays and Thursdays until daily average river water temperatures fall below 69.5 deg. F. Samples are taken from the Juvenile Bypass System between approximately 0700 and 1300 hrs and the Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars and in the sample holding tank was high for the week and consisted mostly of aquatic vegetation, along with a few sticks, plastic, and some terrestrial vegetation.

### SECTION 5. Research

A genetic fin clip sample was collected from one Pacific Lamprey ammocoete during this report period.

## SECTION 6. Pictures



Subyearling fall Chinook smolt (*Oncorhynchus tshawytscha*), approximately 127mm fork length, with fungal growth on its damaged caudal fin and caudal peduncle. Sampled on 18 August, 2022 at the John Day Dam Smolt Facility.



Detail of fungal growth on the damaged tail and fin from specimen above.