

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #23-20

Report Period: 8/12 – 8/18, 2023

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### SECTION 1. River Flow and Sampling Results

|                   | Min   | Max   | Mean    |           |       |
|-------------------|-------|-------|---------|-----------|-------|
|                   |       |       | Current | Last Week | 2022  |
| A. River Flow     | 119.8 | 120.1 | 120.0   | 122.6     | 178.4 |
| B. Powerhouse 1   | 76.4  | 96.8  | 86.6    | 78.6      | 156.0 |
| C. Spill (kcfs)   | 21.1  | 42.1  | 31.6    | 43.1      | 21.4  |
| % of River Flow   | 17.6  | 35.1  | 26.3    | 35.1      | 12.1  |
| D. Water Temp *   | 72.5  | 72.6  | 72.6    | 72.1      | 71.6  |
| E. % Saturation * | 107.1 | 107.7 | 107.4   | 105.2     | 107.6 |

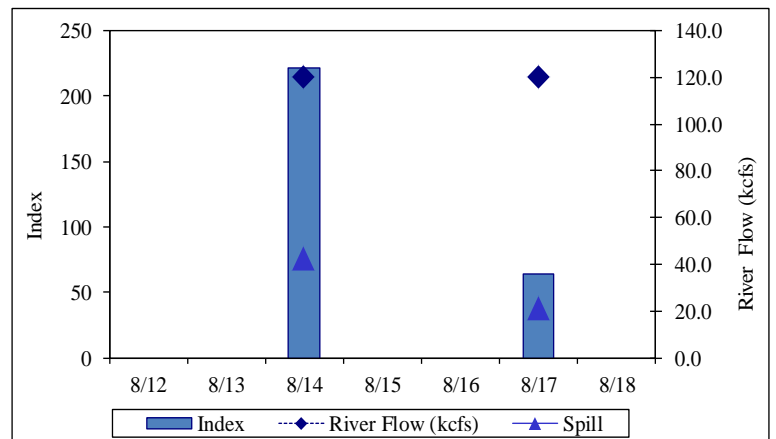
\* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

| % SAMPLE COMPOSITION | This Week Last Week |        |
|----------------------|---------------------|--------|
|                      |                     |        |
| YEARLING CHINOOK     | 0.6%                | 0.0%   |
| SUBYEARLING CHINOOK  | 98.7%               | 100.0% |
| 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              | 0.6%                | 0.0%   |

| YEARLING CHINOOK |             |         |        |        |        |       | SUBYEARLING CHINOOK |        |        |        |       | COHO    |        |        |        |       |
|------------------|-------------|---------|--------|--------|--------|-------|---------------------|--------|--------|--------|-------|---------|--------|--------|--------|-------|
| End Date         | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index | # Smpld             | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index |
| 8/12             | 71.3%       | 1       | 0.0    | 0.0    | 2      | 3     | 100                 | 2.0    | 0.0    | 139    | 216   | 0       | 0.0    | 0.0    | 0      | 0     |
| 8/13             |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 8/14             |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 8/15             | 100.0%      | 0       | 0.0    | 0.0    | 0      | 0     | 53                  | 2.0    | 3.8    | 53     | 65    | 0       | 0.0    | 0.0    | 0      | 0     |
| 8/16             |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 8/17             |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 8/18             | 100.0%      | 0       | 0.0    | 0.0    | 0      | 0     | 53                  | 2.0    | 3.8    | 53     | 65    | 0       | 0.0    | 0.0    | 0      | 0     |
| Weekly           |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| Season to date   |             |         |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |

| End Date       | Sample Rate | UNCLIPPED STEELHEAD |        |        |        |       | CLIPPED STEELHEAD |        |        |        |       | SOCKEYE |        |        |        |       |
|----------------|-------------|---------------------|--------|--------|--------|-------|-------------------|--------|--------|--------|-------|---------|--------|--------|--------|-------|
|                |             | # Smpld             | % Desc | % Mort | # Coll | Index | # Smpld           | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index |
| 8/12           | 71.3%       | 0                   | 0.0    | 0.0    | 0      | 0     | 0                 | 0.0    | 0.0    | 0      | 0     | 1       | 0.0    | 0.0    | 2      | 3     |
| 8/13           |             |                     |        |        |        |       |                   |        |        |        |       |         |        |        |        |       |
| 8/14           |             |                     |        |        |        |       |                   |        |        |        |       |         |        |        |        |       |
| 8/15           | 100.0%      | 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           | 100.0%      | 0                   | 0.0    | 0.0    | 0      | 0     | 0                 | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| Weekly         |             |                     |        |        |        |       |                   |        |        |        |       |         |        |        |        |       |
| Season to date |             |                     |        |        |        |       |                   |        |        |        |       |         |        |        |        |       |

| TOTAL          |             |         |        |        |        |       |
|----------------|-------------|---------|--------|--------|--------|-------|
| End Date       | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index |
| 8/12           | 71.3%       | 102     | 2.0    | 0.0    | 143    | 222   |
| 8/13           |             |         |        |        |        |       |
| 8/14           |             |         |        |        |        |       |
| 8/15           | 100.0%      | 53      | 2.0    | 3.8    | 53     | 65    |
| 8/16           |             |         |        |        |        |       |
| 8/17           |             |         |        |        |        |       |
| 8/18           | 100.0%      | 53      | 2.0    | 3.8    | 53     | 65    |
| Weekly         |             |         |        |        |        |       |
| Season to date |             |         |        |        |        |       |



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

## Western Brook

|                | Macrophthalmia |        |        | Ammocoetes |        |        | Ammocoetes |        |        |
|----------------|----------------|--------|--------|------------|--------|--------|------------|--------|--------|
| End Date       | # Smpld        | % Mort | # Coll | # Smpld    | % Mort | # Coll | # Smpld    | % Mort | # Coll |
| 8/12           |                |        |        |            |        |        |            |        |        |
| 8/13           |                |        |        |            |        |        |            |        |        |
| 8/14           | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| 8/15           |                |        |        |            |        |        |            |        |        |
| 8/16           |                |        |        |            |        |        |            |        |        |
| 8/17           | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| 8/18           |                |        |        |            |        |        |            |        |        |
| Weekly         | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| Season to date | 254            | 0.0    | 3,248  | 109        | 0.0    | 578    | 0          | 0      | 0      |

## **SECTION 2. Smolt and Lamprey Condition Monitoring Summary**

|                 |   | Yearling Chinook |           | Subyearling Chinook      |                              | Unclipped Steelhead |           | Clipped Steelhead |           | Coho      |           | Sockeye   |           |
|-----------------|---|------------------|-----------|--------------------------|------------------------------|---------------------|-----------|-------------------|-----------|-----------|-----------|-----------|-----------|
|                 |   | This Week        | Last Week | This Week                | Last Week                    | This Week           | Last Week | This Week         | Last Week | This Week | Last Week | This Week | Last Week |
| SAMPLE #        |   | 1                | 0         | 151                      | 167                          | 0                   | 0         | 0                 | 0         | 0         | 0         | 1         | 0         |
| DESCALING       | 3-19%<br>>20%<br>Pred. Desc.                                      |                  |           | 3.3%<br>2.0%             | 4.8%<br>0.6%                 |                     |           |                   |           |           |           |           |           |
| INJURY          | BODY<br>EYE<br>HEAD<br>OPERC.<br>FIN<br>POPEYE                    |                  |           | 0.7%<br><br><br><br>2.6% | 0.6%<br><br><br>0.6%<br>2.4% |                     |           |                   |           |           |           |           |           |
| OTHER CONDITION | PINK FIN<br>Fin Discolor.<br>FIN HEM.                             |                  |           | <br><br>2.0%             | <br><br>3.6%                 |                     |           |                   |           |           |           |           |           |
| DISEASE         | Columnaris<br>FUNGUS<br>BKD<br>PARASITES<br>DEFORMITY<br>EYE HEM. |                  |           | 0.7%<br>1.3%<br><br>6.6% | <br>0.6%<br>0.6%<br>8.4%     |                     |           |                   |           |           |           |           |           |
| PREDATION       | BIRD<br>FISH<br>LAMPREY<br>OTHER                                  |                  |           | 2.6%                     | 1.2%                         |                     |           |                   |           |           |           |           |           |

|           |      |      |
|-----------|------|------|
| end dates | 8/18 | 8/11 |
|-----------|------|------|

|   |                     |                 | INJURY |     |      |     |        | DISEASE and OTHER CONDITIONS |            |        |           |          | PREDATION |      |
|---|---------------------|-----------------|--------|-----|------|-----|--------|------------------------------|------------|--------|-----------|----------|-----------|------|
| <b>MP-<br/>Macrophthalmia</b><br>This Week<br>Last Week | <b>End<br/>Date</b> | <b>SAMPLE #</b> | BODY   | EYE | HEAD | FIN | POPEYE | FIN HEM                      | Columnaris | FUNGUS | DEFORMITY | EYE HEM. | BIRD      | FISH |
|   | 8/18                | <b>0</b>        |        |     |      |     |        |                              |            |        |           |          |           |      |
|   | 8/11                | <b>0</b>        |        |     |      |     |        |                              |            |        |           |          |           |      |
| <b>AP - Ammocoetes</b><br>This Week<br>Last Week        |                     | <b>SAMPLE #</b> |        |     |      |     |        |                              |            |        |           |          |           |      |
|   | 8/18                | <b>0</b>        |        |     |      |     |        |                              |            |        |           |          |           |      |
|   | 8/11                | <b>1</b>        |        |     |      |     |        |                              |            |        |           |          |           |      |

### **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                  | 1                  | 0                           | 0        | 0    | 0                   | 0           | 0                  |
| Season to Date | 0                  | 33                 | 6                           | 0        | 4    | 1                   | 0           | 7                  |

|                | Dace -<br>Longnose | Dace -<br>Speckled | Chinook Jack | Kokanee | Lamprey<br>Adult | Northern<br>Pikeminnow | Peamouth | Perch Yellow |
|----------------|--------------------|--------------------|--------------|---------|------------------|------------------------|----------|--------------|
| This Week      | 0                  | 0                  | 0            | 0       | 0                | 0                      | 0        | 5            |
| Season to Date | 0                  | 0                  | 0            | 0       | 2                | 1                      | 0        | 81           |

|                | Redside<br>Shiner | Sand Roller | Sculpin<br>species | Stickleback<br>3 spine | Sucker<br>species | Shad Adult | Shad<br>Juvenile | Sturgeon<br>White |
|----------------|-------------------|-------------|--------------------|------------------------|-------------------|------------|------------------|-------------------|
| This Week      | 0                 | 0           | 7                  | 0                      | 0                 | 2          | 43,598           | 0                 |
| Season to Date | 0                 | 0           | 37                 | 4                      | 2                 | 5          | 123,483          | 0                 |

|                | Trout 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                | 29      | 0                     | 1                 | 0              | 0                   |
| Season to Date | 0          | 0                  | 0                | 134     | 4                     | 185               | 0              | 4                   |

### **SECTION 4. Facility Operations**

Condition Monitoring at John Day Dam was scheduled to sample Monday, Wednesday, and Friday until the Columbia River water temperature averages 70 degrees F., which occurred on July 6. We will now sample Mondays and Thursdays until the Columbia River water temperature averages 69.5 degrees F, at which point we will go back to Monday, Wednesday, and Friday sampling. Samples will be taken from the Juvenile Bypass System between 0700 and 1300 hrs. and the Condition Exams will target approximately 100 of the predominant species of out-migrant, which is currently Subyearling Fall Chinook which were 98.7% of the sample this week. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars continued to be very low for the week and consisted of a few sticks, soft debris such as aquatic macrophytes and bryozoans, and adult American shad.

### **SECTION 5. Research**

No juvenile Pacific Lamprey ammocoetes or macrophthalmia were sampled during this report period.

## SECTION 6. Pictures



This is a female Siberian prawn (*Exopalaemon modestus*), approximately 55 mm total length, carrying a few hundred yellowish eggs, sampled at the John Day Smolt Facility on August 17, 2023.



This picture illustrates some natural variability in the color and size of some juvenile Pacific Lamprey macrophthalmia and ammocoetes (*Entosphenus tridentatus*). These were sampled at the John Day Dam Smolt Facility on April 17, 2008.