

United States Army Corps of Engineers  
John Day Dam Smolt and Juvenile Lamprey Condition Monitoring  
Weekly Report, #24-15      Report Period: 7/6 – 7/12, 2024  
Prepared By: Gregory Kovalchuk



SECTION 1. River Flow and Sampling Results

|                   | Min   | Max   | Mean    |           |       |
|-------------------|-------|-------|---------|-----------|-------|
|                   |       |       | Current | Last Week | 2023  |
| A. River Flow     | 116.1 | 159.9 | 144.7   | 165.4     | 127.9 |
| B. Powerhouse     | 73.5  | 102.7 | 92.8    | 106.7     | 81.9  |
|                   |       |       |         |           |       |
| C. Spill (kcfs)   | 41.0  | 56.0  | 50.7    | 57.7      | 44.4  |
| % of River Flow   | 34.9  | 35.3  | 35.1    | 34.9      | 34.7% |
| D. Water Temp *   | 68.4  | 69.5  | 69.0    | 65.8      | 70.4  |
| E. % Saturation * | 111.4 | 111.4 | 113.6   | 106.2     | 105.9 |

Note: Data is for the sample period only (0700 - 1300 hrs).

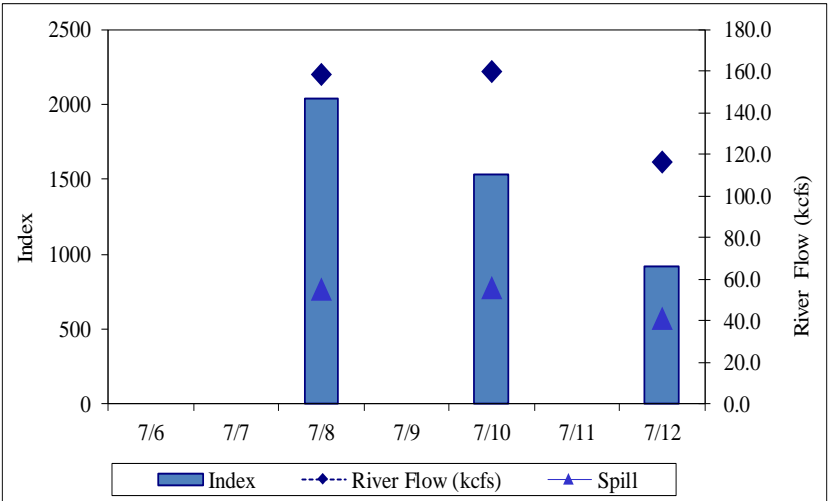
| % SAMPLE COMPOSITION |       |       | This Week | Last Week |
|----------------------|-------|-------|-----------|-----------|
| YEARLING CHINOOK     | 0.0%  | 0.0%  |           |           |
| SUBYEARLING CHINOOK  | 99.1% | 97.5% |           |           |
| CHINOOK FRY          | 0.0%  | 0.0%  |           |           |
| UNCLIPPED STEELHEAD  | 0.0%  | 0.3%  |           |           |
| CLIPPED STEELHEAD    | 0.0%  | 0.0%  |           |           |
| COHO                 | 0.0%  | 0.0%  |           |           |
| COHO FRY             | 0.0%  | 0.0%  |           |           |
| SOCKEYE              | 0.9%  | 2.2%  |           |           |

| YEARLING CHINOOK |             |         |        |        |        |        | SUBYEARLING CHINOOK |        |        |        |         | COHO    |        |        |        |        |
|------------------|-------------|---------|--------|--------|--------|--------|---------------------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| End Date         | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index  | # Smpld             | % Desc | % Mort | # Coll | Index   | # Smpld | % Desc | % Mort | # Coll | Index  |
| 7/6              |             |         |        |        |        |        |                     |        |        |        |         |         |        |        |        |        |
| 7/7              |             |         |        |        |        |        |                     |        |        |        |         |         |        |        |        |        |
| 7/8              | 7.9%        | 0       | 0.0    | 0.0    | 0      | 0      | 104                 | 1.0    | 0.0    | 1,304  | 2,008   | 0       | 0.0    | 0.0    | 0      | 0      |
| 7/9              |             |         |        |        |        |        |                     |        |        |        |         |         |        |        |        |        |
| 7/10             | 10.9%       | 0       | 0.0    | 0.0    | 0      | 0      | 106                 | 5.7    | 0.0    | 977    | 1,510   | 0       | 0.0    | 0.0    | 0      | 0      |
| 7/11             |             |         |        |        |        |        |                     |        |        |        |         |         |        |        |        |        |
| 7/12             | 18.2%       | 0       | 0.0    | 0.0    | 0      | 0      | 108                 | 3.7    | 0.0    | 592    | 922     | 0       | 0.0    | 0.0    | 0      | 0      |
| Weekly           |             | 0       | 0.0    | 0.0    | 0      | 0      | 318                 | 3.5    | 0.0    | 2,873  | 4,440   | 0       | 0.0    | 0.0    | 0      | 0      |
| Season to date   |             | 4,127   | 2.3    | 0.0    | 56,351 | 93,291 | 3,022               | 2.4    | 0.0    | 80,588 | 127,964 | 578     | 4.3    | 0.0    | 9,543  | 15,900 |

| End Date       | Sample Rate | UNCLIPPED |        |        |        |       | STEELHEAD |        |        |        |        | CLIPPED |        |        |        |        | SOCKEYE |        |        |        |       |
|----------------|-------------|-----------|--------|--------|--------|-------|-----------|--------|--------|--------|--------|---------|--------|--------|--------|--------|---------|--------|--------|--------|-------|
|                |             | # Smpld   | % Desc | % Mort | # Coll | Index | # Smpld   | % Desc | % Mort | # Coll | Index  | # Smpld | % Desc | % Mort | # Coll | Index  | # Smpld | % Desc | % Mort | # Coll | Index |
| 7/6            |             |           |        |        |        |       |           |        |        |        |        |         |        |        |        |        |         |        |        |        |       |
| 7/7            |             |           |        |        |        |       |           |        |        |        |        |         |        |        |        |        |         |        |        |        |       |
| 7/8            | 7.9%        | 0         | 0.0    | 0.0    | 0      | 0     | 0         | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 1       | 0.0    | 0.0    | 20     | 31    |
| 7/9            |             |           |        |        |        |       |           |        |        |        |        |         |        |        |        |        |         |        |        |        |       |
| 7/10           | 10.9%       | 0         | 0.0    | 0.0    | 0      | 0     | 0         | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 2       | 0.0    | 0.0    | 14     | 22    |
| 7/11           |             |           |        |        |        |       |           |        |        |        |        |         |        |        |        |        |         |        |        |        |       |
| 7/12           | 18.2%       | 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     |
| Weekly         |             | 0         | 0.0    | 0.0    | 0      | 0     | 0         | 0.0    | 0.0    | 0      | 0      | 0       | 0.0    | 0.0    | 0      | 0      | 3       | 0.0    | 0.0    | 34     | 52    |
| Season to date |             | 286       | 5.2    | 0.0    | 4,323  | 7,164 | 911       | 7.4    | 0.0    | 16,018 | 26,729 | 613     | 3.8    | 0.0    | 8,063  | 13,359 |         |        |        |        |       |

| TOTAL          |             |         |        |        |         |         |
|----------------|-------------|---------|--------|--------|---------|---------|
| End Date       | Sample Rate | # Smpld | % Desc | % Mort | # Coll  | Index   |
| 7/6            |             |         |        |        |         |         |
| 7/7            |             |         |        |        |         |         |
| 7/8            | 7.9%        | 105     | 1.0    | 0.0    | 1,324   | 2,039   |
| 7/9            |             |         |        |        |         |         |
| 7/10           | 10.9%       | 108     | 5.6    | 0.0    | 991     | 1,531   |
| 7/11           |             |         |        |        |         |         |
| 7/12           | 18.2%       | 108     | 3.7    | 0.0    | 592     | 922     |
| Weekly         |             | 321     | 3.4    | 0.0    | 2,907   | 4,492   |
| Season to date |             | 9,537   | 3.1    | 0.0    | 174,886 | 284,408 |

Notes: Condition percentages are calculated using sample numbers.  
Subyearling Chinook and Coho include fry. All river flow, powerhouse, spill and index estimates are for the sample period only.



## Western Brook

|                | Macrophthalmia |        |        | Ammocoetes |        |        | Ammocoetes |        |        |
|----------------|----------------|--------|--------|------------|--------|--------|------------|--------|--------|
| End Date       | # Smpld        | % Mort | # Coll | # Smpld    | % Mort | # Coll | # Smpld    | % Mort | # Coll |
| 7/6            |                |        |        |            |        |        |            |        |        |
| 7/7            |                |        |        |            |        |        |            |        |        |
| 7/8            | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| 7/9            |                |        |        |            |        |        |            |        |        |
| 7/10           | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| 7/11           |                |        |        |            |        |        |            |        |        |
| 7/12           | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| Weekly         | 0              | 0.0    | 0      | 0          | 0.0    | 0      | 0          | 0      | 0      |
| Season to date | 7              | 0.0    | 68     | 0          | 0.0    | 0      | 0          | 0      | 0      |

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

|                 |              | Yearling Chinook |           | Subyearling Chinook |           | Unclipped Steelhead |           | Clipped Steelhead |           | Coho      |           | Sockeye   |           | Total All Species Combined | Percent All Species Combined |
|-----------------|--------------|------------------|-----------|---------------------|-----------|---------------------|-----------|-------------------|-----------|-----------|-----------|-----------|-----------|----------------------------|------------------------------|
|                 |              | This Week        | Last Week | This Week           | Last Week | This Week           | Last Week | This Week         | Last Week | This Week | Last Week | This Week | This Week |                            |                              |
|                 |              |                  |           |                     |           |                     |           |                   |           |           |           |           |           |                            |                              |
| SAMPLE #        |              | 0                | 0         | 318                 | 311       | 0                   | 1         | 0                 | 0         | 0         | 0         | 3         | 7         | 321                        | 100%                         |
| DESCALING       | 3-19%        |                  |           | 3.1%                | 2.3%      |                     |           |                   |           |           |           | 14.3%     |           | 10                         | 3.1%                         |
|                 | >20%         |                  |           | 0.9%                | 0.3%      |                     |           |                   |           |           |           |           |           | 3                          | 0.9%                         |
|                 | Pred. Desc.  |                  |           | 2.5%                | 1.6%      |                     |           |                   |           |           |           | 14.3%     |           | 8                          | 2.5%                         |
| INJURY          | BODY         |                  |           | 0.9%                | 1.0%      |                     |           |                   |           |           |           |           |           | 3                          | 0.9%                         |
|                 | EYE          |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | HEAD         |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | OPERC.       |                  |           |                     | 0.3%      |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | FIN          |                  |           | 1.6%                | 1.0%      |                     |           |                   |           |           |           |           |           | 5                          | 1.6%                         |
|                 | POPEYE       |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
| OTHER CONDITION | PINK FIN     |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | Fin Discolor |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | FIN HEM      |                  |           | 2.8%                | 2.9%      |                     |           |                   |           |           |           |           |           | 9                          | 2.8%                         |
| DISEASE         | Columnaris   |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | FUNGUS       |                  |           | 0.3%                | 0.6%      |                     |           |                   |           |           |           |           |           | 1                          | 0.3%                         |
|                 | BKD          |                  |           | 0.6%                | 0.6%      |                     |           |                   |           |           |           |           |           | 2                          | 0.6%                         |
|                 | PARASITES    |                  |           | 34.0%               | 19.9%     |                     |           |                   |           |           |           |           |           | 108                        | 33.6%                        |
|                 | DEFORMITY    |                  |           | 0.6%                | 0.3%      |                     |           |                   |           |           |           |           |           | 2                          | 0.6%                         |
|                 | EYE HEM      |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
| PREDATION       | BIRD         |                  |           | 0.3%                | 0.6%      |                     |           |                   |           |           |           |           |           | 1                          | 0.3%                         |
|                 | FISH         |                  |           | 3.1%                | 1.6%      |                     |           |                   |           |           |           | 14.3%     |           | 10                         | 3.1%                         |
|                 | LAMPREY      |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
|                 | OTHER        |                  |           |                     |           |                     |           |                   |           |           |           |           |           | 0                          | 0.0%                         |
| end dates       |              | 7/12             | 7/5       |                     |           |                     |           |                   |           |           |           |           |           |                            |                              |

[illegible]

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

|                | 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        | 1            |
| Season to Date | 0                  | 0                  | 0            | 0       | 1                | 0                      | 0        | 118          |

|                | Redside<br>Shiner | Sand Roller | Sculpin<br>species | Stickleback 3<br>spine | Sucker<br>species | Shad Adult | Shad Juvenile | Sturgeon<br>White |
|----------------|-------------------|-------------|--------------------|------------------------|-------------------|------------|---------------|-------------------|
| This Week      | 0                 | 0           | 2                  | 0                      | 0                 | 0          | 1             | 0                 |
| Season to Date | 0                 | 0           | 6                  | 0                      | 1                 | 0          | 1             | 0                 |

|                | Trout Bull | Trout<br>Cutthroat | Trout<br>Rainbow | Walleye | Whitefish<br>Mountain | Siberian<br>Prawn | Chum Salmon | Banded<br>Killifish |
|----------------|------------|--------------------|------------------|---------|-----------------------|-------------------|-------------|---------------------|
| This Week      | 0          | 0                  | 0                | 1       | 0                     | 0                 | 0           | 0                   |
| Season to Date | 0          | 0                  | 0                | 30      | 0                     | 95                | 0           | 1                   |

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

Condition Monitoring at John Day Dam is currently sampling Mondays, Wednesdays, and Fridays until daily average river water temperatures reach 70 degrees F. 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. All river flow, powerhouse, spill, and index estimates are based on the sample period only. Debris at the separator bars was very low for the week and consisted of bryozoans and some aquatic vegetation.

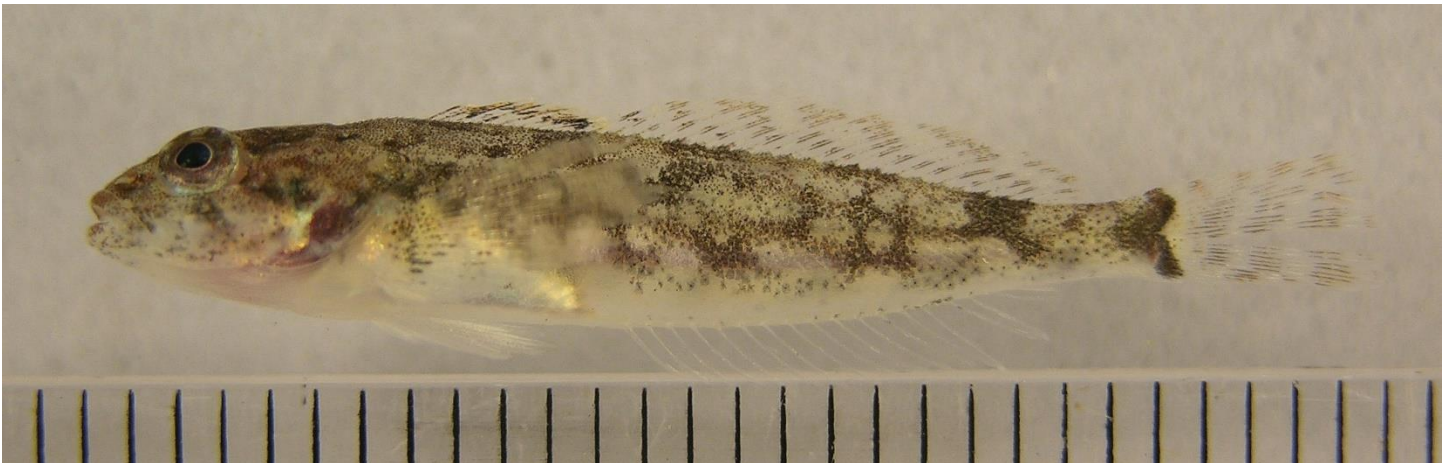
### **SECTION 5. Research**

No Pacific Lamprey macrophthalmia or ammocoetes were sampled at the Smolt Facility during this report period.

## SECTION 6. Pictures



Juvenile American Shad larvae (*Alosa sapidissima*), approximately 15 mm fork length, similar to one sampled at the John Day Dam Smolt Facility on 12 July, 2024.



Juvenile sculpin (*Cottus sp.*), approximately 17 mm total length, similar to one sampled at the John Day Dam Smolt Facility on 12 July, 2024.