

# Pacific States Marine Fisheries Commission

## John Day Dam Condition Monitoring Weekly Report, #23-2

Report Period: 4/8 – 4/14, 2023

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### SECTION 1. River Flow and Sampling Results

|                   | Mean  |       |         |           |       |
|-------------------|-------|-------|---------|-----------|-------|
|                   | Min   | Max   | Current | Last Week | 2022  |
| A. River Flow     | 111.8 | 168.0 | 143.7   | 110.2     | 161.1 |
| B. Powerhouse 1   | 59.6  | 99.8  | 78.6    | 108.9     | 105.3 |
| C. Spill (kcfs)   | 47.6  | 79.6  | 64.0    | 0.0       | 54.7  |
| % of River Flow   | 32.2  | 50.3  | 44.6    | 0.0       | 33.8  |
| D. Water Temp *   | 46.7  | 47.5  | 47.1    | 45.0      | 47.7  |
| E. % Saturation * | 103.9 | 104.8 | 104.3   | 103.6     | 102.7 |

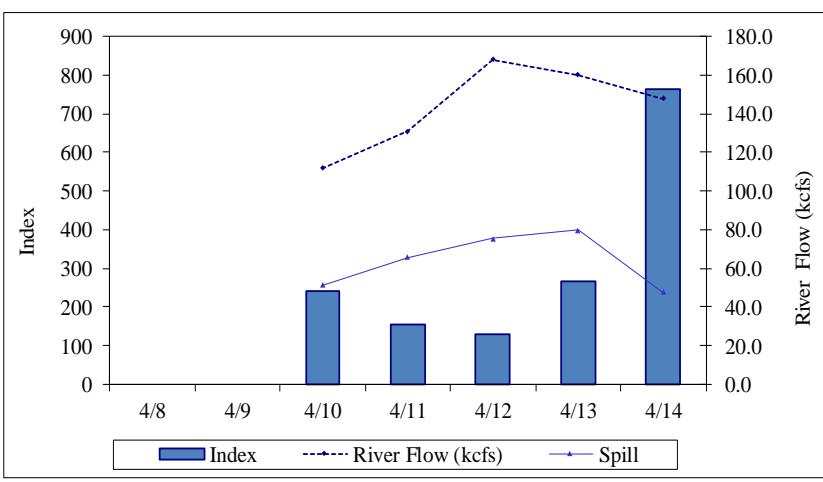
\* In sampling facility.

| % SAMPLE COMPOSITION | This Week | Last Week |
|----------------------|-----------|-----------|
| YEARLING CHINOOK     | 94.4%     | 99.5%     |
| SUBYEARLING CHINOOK  | 0.0%      | 0.0%      |
| CHINOOK FRY          | 2.3%      | 0.0%      |
| UNCLIPPED STEELHEAD  | 3.0%      | 0.2%      |
| CLIPPED STEELHEAD    | 0.0%      | 0.0%      |
| COHO                 | 0.2%      | 0.2%      |
| COHO FRY             | 0.0%      | 0.0%      |
| SOCKEYE              | 0.0%      | 0.0%      |

| End Date       | Sample Rate | YEARLING CHINOOK |        |        |        |       | SUBYEARLING CHINOOK |        |        |        |       | COHO    |        |        |        |       |
|----------------|-------------|------------------|--------|--------|--------|-------|---------------------|--------|--------|--------|-------|---------|--------|--------|--------|-------|
|                |             | # Smpld          | % Desc | % Mort | # Coll | Index | # Smpld             | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index |
| 4/8            |             |                  |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 4/9            |             |                  |        |        |        |       |                     |        |        |        |       |         |        |        |        |       |
| 4/10           | 81.5%       | 106              | 1.9    | 0.0    | 130    | 242   | 0                   | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/11           | 100.0%      | 73               | 0.0    | 0.0    | 73     | 149   | 2                   | 0.0    | 0.0    | 2      | 4     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/12           | 100.0%      | 68               | 1.5    | 0.0    | 68     | 124   | 1                   | 0.0    | 0.0    | 1      | 2     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/13           | 50.0%       | 56               | 0.0    | 0.0    | 112    | 225   | 5                   | 0.0    | 0.0    | 10     | 20    | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/14           | 20.8%       | 100              | 1.0    | 0.0    | 478    | 706   | 2                   | 0.0    | 0.0    | 9      | 13    | 1       | 0.0    | 0.0    | 5      | 7     |
| Weekly         |             | 403              | 1.0    | 0.0    | 861    | 1,446 | 10                  | 0.0    | 0.0    | 22     | 39    | 1       | 0.0    | 0.0    | 5      | 7     |
| Season to date |             | 842              | 1.7    | 0.1    | 1,563  | 2,148 | 10                  | 0.0    | 0.0    | 22     | 39    | 2       | 0.0    | 0.0    | 7      | 9     |

| 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 |
| 4/8            |             |           |        |        |        |       |           |        |        |        |       |         |        |        |        |       |         |        |        |        |       |
| 4/9            |             |           |        |        |        |       |           |        |        |        |       |         |        |        |        |       |         |        |        |        |       |
| 4/10           | 81.5%       | 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     |
| 4/11           | 100.0%      | 1         | 0.0    | 0.0    | 1      | 2     | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/12           | 100.0%      | 2         | 0.0    | 0.0    | 2      | 4     | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/13           | 50.0%       | 5         | 1.0    | 0.0    | 10     | 20    | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| 4/14           | 20.8%       | 5         | 0.0    | 0.0    | 25     | 37    | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| Weekly         |             | 13        | 7.7    | 0.0    | 38     | 63    | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |
| Season to date |             | 14        | 7.1    | 0.0    | 39     | 64    | 0         | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     | 0       | 0.0    | 0.0    | 0      | 0     |

| End Date       | Sample Rate | TOTAL   |        |        |        |       |
|----------------|-------------|---------|--------|--------|--------|-------|
|                |             | # Smpld | % Desc | % Mort | # Coll | Index |
| 4/8            |             |         |        |        |        |       |
| 4/9            |             |         |        |        |        |       |
| 4/10           | 81.5%       | 106     | 1.9    | 0.0    | 130    | 242   |
| 4/11           | 100.0%      | 76      | 0.0    | 0.0    | 76     | 155   |
| 4/12           | 100.0%      | 71      | 1.4    | 0.0    | 71     | 130   |
| 4/13           | 50.0%       | 66      | 1.5    | 0.0    | 132    | 265   |
| 4/14           | 20.8%       | 108     | 0.9    | 0.0    | 517    | 764   |
| Weekly         |             | 427     | 1.2    | 0.0    | 926    | 1,555 |
| Season to date |             | 868     | 1.7    | 0.1    | 1,631  | 2,261 |



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

| Pacific Lamprey |         |        |            |         |        | Western Brook Ammocoetes |         |        |        |
|-----------------|---------|--------|------------|---------|--------|--------------------------|---------|--------|--------|
| Macrophthalmia  |         |        | Ammocoetes |         |        | Ammocoetes               |         |        |        |
| End Date        | # Smpld | % Mort | # Coll     | # Smpld | % Mort | # Coll                   | # Smpld | % Mort | # Coll |
| 4/8             |         |        |            |         |        |                          |         |        |        |
| 4/9             |         |        |            |         |        |                          |         |        |        |
| 4/10            | 0       | 0.0    | 0          | 0       | 0.0    | 0                        | 0       | 0      | 0      |
| 4/11            | 4       | 0.0    | 4          | 0       | 0.0    | 0                        | 0       | 0      | 0      |
| 4/12            | 68      | 0.0    | 68         | 0       | 0.0    | 0                        | 0       | 0      | 0      |
| 4/13            | 38      | 0.0    | 76         | 17      | 0.0    | 34                       | 0       | 0      | 0      |
| 4/14            | 54      | 0.0    | 258        | 71      | 0.0    | 343                      | 0       | 0      | 0      |
| Weekly          | 164     | 0.0    | 406        | 88      | 0.0    | 377                      | 0       | 0      | 0      |
| Season to date  | 165     | 0.0    | 407        | 88      | 0.0    | 377                      | 0       | 0      | 0      |

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

|                       |           |          | 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      |          | 4/14   | 164  | 0.6% 0.6% |     |        |                              | 0.6%       |        |           |          | 9.8%      |      |
|                       | This Week |          | 4/7    | 1    |           |     |        |                              |            |        |           |          |           |      |
|                       | Last Week |          |        |      |           |     |        |                              |            |        |           |          |           |      |
| AP - Ammocoetes       |           | SAMPLE # |        |      |           |     |        |                              |            |        |           |          |           |      |
| This Week             | 4/14      | 88       | 5.7%   | 1.1% |           |     |        |                              |            |        |           |          |           |      |
| Last Week             | 4/7       | 0        |        |      |           |     |        |                              |            |        |           |          |           |      |

### 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                  | 2                  | 1                           | 0        | 1    | 0                   | 0           | 1                  |
| Season to Date | 0                  | 2                  | 1                           | 0        | 1    | 0                   | 0           | 6                  |

|                | 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        | 24           |
| Season to Date | 0                  | 0                  | 0            | 0       | 0                | 0                      | 0        | 46           |

|                | 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           | 2                  | 2                      | 0                 | 0             | 0                | 0                 |
| Season to Date | 0                 | 0           | 4                  | 3                      | 0                 | 0             | 0                | 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                | 7       | 0                     | 44                | 0              | 0                   |
| Season to Date | 0          | 0                  | 0                | 9       | 0                     | 59                | 0              | 0                   |

### SECTION 4. Facility Operations

Condition Monitoring at John Day Dam is scheduled to sample Monday through Friday until early June. 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. Collection, Index, and River flow estimates and averages are for the sample period only. Debris at the separator bars was low for the week. Debris consisted of sticks, plastic, and pieces of terrestrial vegetation.

### SECTION 5. Research

Genetic fin clip samples were taken from 164 Pacific Lamprey macrophthalmia and 88 Pacific Lamprey ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

## SECTION 6. Pictures



Yearling Spring Chinook smolt (*Oncorhynchus tshawytscha*), approximately 162 mm fork length, showing popeye and eye hemorrhaging, sampled at the John Day Dam Smolt Facility on 10 April, 2023.