

Pacific States Marine Fisheries Commission

John Day Dam Condition Monitoring Weekly Report, #23-13

Report Period: 6/24 – 6/30, 2023

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SECTION 1. River Flow and Sampling Results

| | Min | Max | Mean | | |
|-------------------|-------|-------|---------|-----------|-------|
| | | | Current | Last Week | 2022 |
| A. River Flow | 134.8 | 150.7 | 144.1 | 165.9 | 385.5 |
| B. Powerhouse 1 | 86.5 | 97.1 | 92.7 | 106.9 | 213.4 |
| C. Spill (kcfs) | 46.9 | 52.4 | 50.1 | 58.0 | 171.0 |
| % of River Flow | 34.6 | 34.8 | 34.7 | 34.9 | 44.4 |
| D. Water Temp * | 65.6 | 67.4 | 66.4 | 65.0 | 61.3 |
| E. % Saturation * | 104.5 | 109.1 | 107.3 | 103.3 | 119.6 |

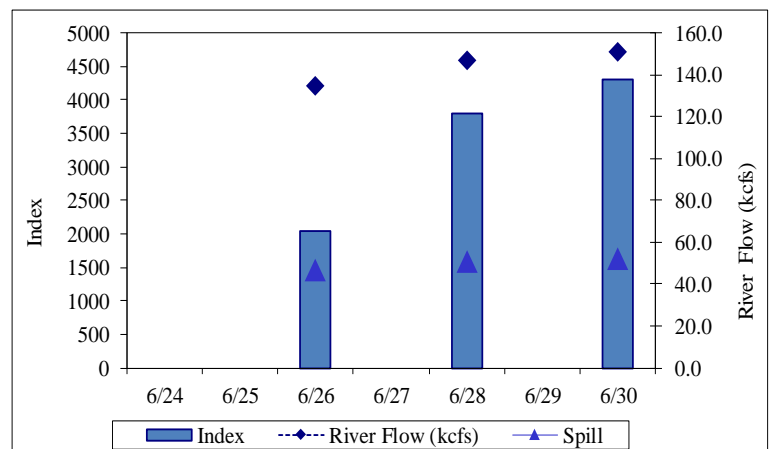
* TDG data from USGS forebay sensor, water temp from lab and USGS sensor.

| | | This Week | Last Week |
|----------------------|-------|-----------|-----------|
| % SAMPLE COMPOSITION | | | |
| YEARLING CHINOOK | 0.6% | 1.8% | |
| SUBYEARLING CHINOOK | 98.7% | 96.1% | |
| CHINOOK FRY | 0.0% | 0.0% | |
| UNCLIPPED STEELHEAD | 0.0% | 0.0% | |
| CLIPPED STEELHEAD | 0.0% | 0.3% | |
| COHO | 0.6% | 1.5% | |
| COHO FRY | 0.0% | 0.0% | |
| SOCKEYE | 0.0% | 0.3% | |

| YEARLING CHINOOK | | | | | | | SUBYEARLING CHINOOK | | | | | COHO | | | | |
|------------------|-------------|---------|--------|--------|--------|---------|---------------------|--------|--------|--------|---------|---------|--------|--------|--------|--------|
| End Date | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index |
| 6/24 | | | | | | | | | | | | | | | | |
| 6/25 | | | | | | | | | | | | | | | | |
| 6/26 | 8.0% | 1 | 0.0 | 0.0 | 10 | 15 | 106 | 1.9 | 0.0 | 1,320 | 2,036 | 0 | 0.0 | 0.0 | 0 | 0 |
| 6/27 | | | | | | | | | | | | | | | | |
| 6/28 | 3.9% | 0 | 0.0 | 0.0 | 0 | 0 | 96 | 2.1 | 0.0 | 2,475 | 3,807 | 0 | 0.0 | 0.0 | 0 | 0 |
| 6/29 | | | | | | | | | | | | | | | | |
| 6/30 | 4.0% | 1 | 0.0 | 0.0 | 25 | 38 | 109 | 2.8 | 0.9 | 2,725 | 4,196 | 2 | 0.0 | 0.0 | 50 | 77 |
| Weekly | | 2 | 0.0 | 0.0 | 35 | 54 | 311 | 2.3 | 0.3 | 6,520 | 10,038 | 2 | 0.0 | 0.0 | 50 | 77 |
| Season to date | | 3,886 | 2.2 | 0.2 | 84,154 | 213,974 | 2,353 | 1.1 | 0.1 | 40,679 | 122,727 | 282 | 5.0 | 0.0 | 8,094 | 21,961 |

| UNCLIPPED STEELHEAD | | | | | | | CLIPPED STEELHEAD | | | | | SOCKEYE | | | | |
|---------------------|-------------|---------|--------|--------|--------|--------|-------------------|--------|--------|--------|--------|---------|--------|--------|--------|--------|
| End Date | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index | # Smpld | % Desc | % Mort | # Coll | Index |
| 6/24 | | | | | | | | | | | | | | | | |
| 6/25 | | | | | | | | | | | | | | | | |
| 6/26 | 8.0% | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| 6/27 | | | | | | | | | | | | | | | | |
| 6/28 | 3.9% | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| 6/29 | | | | | | | | | | | | | | | | |
| 6/30 | 4.0% | 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 |
| Season to date | | 344 | 3.5 | 0.0 | 10,294 | 25,917 | 958 | 4.0 | 0.0 | 38,693 | 97,930 | 135 | 5.9 | 0.0 | 4,645 | 11,479 |

| TOTAL | | | | | | |
|----------------|-------------|---------|--------|--------|---------|---------|
| End Date | Sample Rate | # Smpld | % Desc | % Mort | # Coll | Index |
| 6/24 | | | | | | |
| 6/25 | | | | | | |
| 6/26 | 8.0% | 107 | 1.9 | 0.0 | 1,330 | 2,051 |
| 6/27 | | | | | | |
| 6/28 | 3.9% | 96 | 2.1 | 0.0 | 2,475 | 3,807 |
| 6/29 | | | | | | |
| 6/30 | 4.0% | 112 | 2.7 | 0.9 | 2,800 | 4,311 |
| Weekly | | 315 | 2.2 | 0.3 | 6,605 | 10,169 |
| Season to date | | 7,958 | 2.3 | 0.1 | 186,559 | 493,988 |



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 |
| 6/24 | | | | | | | | | |
| 6/25 | | | | | | | | | |
| 6/26 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 |
| 6/27 | | | | | | | | | |
| 6/28 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0 | 0 |
| 6/29 | | | | | | | | | |
| 6/30 | 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 | 253 | 0.0 | 3,247 | 107 | 0.0 | 575 | 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 # | | 2 | 6 | 310 | 320 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 1 |
| DESCALING | 3-19% | 33.3% | | 2.6% | 6.6% | | | | | 50.0% | | | |
| | >20% | | | 1.0% | 0.6% | | | | | | | | |
| | Pred. Desc. | | | 1.3% | | | | | | | | | |
| INJURY | BODY | | | 0.3% | 1.6% | | | | | | | | |
| | EYE | | | 0.3% | | | | | | | | | |
| | HEAD | | | | | | | | | | | | |
| | OPERC. | | | | 0.3% | | | | | 25.0% | | | |
| | FIN | | | 1.0% | 1.9% | | | | | | | | |
| | POPEYE | | | | | | | | | | | | |
| OTHER CONDITIONS | PINK FIN | | | | | | | | | | | | |
| | Fin Discolor. | | | | | | | | | | | | |
| | FIN HEM. | 16.7% | | 3.2% | 5.0% | | | | | | | | |
| DISEASE | Columnaris | | | | 0.3% | | | | | | | | |
| | FUNGUS | 0.0% | | 0.3% | | | | | | | | | |
| | BKD | | | 0.6% | 0.3% | | | | | | | | |
| | PARASITES | | | 9.7% | 2.5% | | | | | | | | |
| | DEFORMITY | | | 0.6% | 0.9% | | | | | | | | |
| | EYE HEM. | | | 0.3% | | | | | | | | | |
| PREDATION | BIRD | | | | 0.6% | | | | | | | | |
| | FISH | | | 1.6% | 1.3% | | | | | 50.0% | | | |
| | LAMPREY | | | 0.3% | 0.6% | | | | | | | | |
| | OTHER | | | | | | | | | | | | |
| end dates | | 6/30 | 6/23 | | | | | | | | | | |

| | | | INJURY | | | | | DISEASE and OTHER CONDITIONS | | | | | PREDATION | |
|--------------------|----------|----------|--------|-----|------|-----|--------|------------------------------|------------|--------|-----------|----------|-----------|------|
| MP- Macrophthalmia | End Date | SAMPLE # | BODY | EYE | HEAD | FIN | POPEYE | FIN HEM | Columnaris | FUNGUS | DEFORMITY | EYE HEM. | BIRD | FISH |
| This Week | 6/30 | 0 | | | | | | | | | | | | |
| Last Week | 6/23 | 3 | | | | | | | | | | | 66.7% | |
| AP - Ammocoetes | | SAMPLE # | | | | | | | | | | | | |
| This Week | 6/30 | 0 | | | | | | | | | | | | |
| Last Week | 6/23 | 0 | | | | | | | | | | | | |

SECTION 3. Incidental Summary

| | Bass Largemouth | Bass Smallmouth | Bluegill and Pumpkinseed | Bullhead | Carp | Catfish, Channel | Chiselmouth | Crappie species |
|----------------|--------------------|--------------------|-----------------------------|----------|------|---------------------|-------------|--------------------|
| This Week | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Season to Date | 0 | 14 | 6 | 0 | 2 | 1 | 0 | 7 |

| | Dace - Longnose | Dace - Speckled | Chinook Jack | Kokanee | Lamprey Adult | Northern Pikeminnow | Peamouth | Perch Yellow |
|----------------|--------------------|--------------------|--------------|---------|------------------|------------------------|----------|--------------|
| This Week | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Season to Date | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 68 |

| | Redside Shiner | Sand Roller | Sculpin species | Stickleback 3 spine | Sucker species | Shad Adult | Shad Juvenile | Sturgeon White |
|----------------|----------------|-------------|-----------------|------------------------|-------------------|------------|---------------|-------------------|
| This Week | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Season to Date | 0 | 0 | 11 | 4 | 2 | 0 | 0 | 0 |

| | Trout Bull | Trout Cutthroat | Trout Rainbow | Walleye | Whitefish Mountain | Siberian Prawn | Chum Salmon | Banded Killifish |
|----------------|------------|--------------------|---------------|---------|-----------------------|----------------|-------------|---------------------|
| This Week | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Season to Date | 0 | 0 | 0 | 21 | 4 | 184 | 0 | 2 |

SECTION 4. Facility Operations

Condition Monitoring at John Day Dam was scheduled to sample Monday through Friday until 15 June and will now sample three times a week (Mon., Wed., Fri.) until the Columbia River water temperature averages 70 degrees F., at which time we will sample Mondays and Thursdays. 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 was very low for the week and consisted of a few sticks, tumbleweeds, pieces of terrestrial vegetation, and plastic.

SECTION 5. Research

No genetic fin clip samples were taken from Pacific Lamprey macrophthalmia or ammocoetes for the Columbia River Inter-Tribal Fish Commission during this report period.

SECTION 6. Pictures



Juvenile Mountain Whitefish (*Prosopium williamsoni*), approximately 90 mm fork length, sampled at the John Day Dam Smolt Facility on June 30, 2023.



Juvenile Prickly Sculpin (*Cottus asper*), approximately 35 mm fork length, sampled at the John Day Dam Smolt Facility on June 30, 2023.