NWW Juvenile Fish Passage Status Report (March 1 – June 21, 2024) Prepared by Tiffany Stoeckig-Dixon

Bypass systems were watered up on 7 March at Little Goose Dam, 13 March at Lower Granite and McNary dams, and 21 March at Ice Harbor and Lower Monumental dams. Condition sampling began 25 March at Lower Monumental, Little Goose, and Lower Granite. Condition sampling was every day at Lower Granite and every other day at Little Goose. Sampling occurred every third day at Lower Monumnetal until 16 April when every other day sampling began. Condition sampling began 1 April at Ice Harbor Dam and 3 April at McNary Dam. Sampling occurs bi-weekly at Ice Harbor and every other day at McNary.

Fish collection for daily barge transport began 23 April at Lower Granite, Little Goose, and Lower Monumental dams with the first barge departing on 24 April. Every other day barge transport began after the barge trip on 16 May. Barging at Lower Monumental was discontinued on 5 May and resumed 18 May. The halt came from a request by regional fisheries due to indications of adult fish passage delay caused by the need to stop spill at Lower Monumental Dam when the fish barge transits the tailrace. These changes in spill caused flow fluctuations and the need for raised MOP at Ice Harbor Dam. Every other day barge transport changed to every four days at Lower Monumental on 1 June due to a ruling by RIOG over adult fish passage delay between Ice Harbor and Lower Monumental. The last barge trips were on 17 June for Lower Monumental Dam and 19 June for Little Goose and Lower Granite. The attached spreadsheet provides daily collection, bypass, and transport numbers passing through the bypass systems for 1 April – 21 June for Lower Granite, Little Goose, and Lower Monumental dams.

Springtime collection numbers at Snake River transport projects have been 17% of the 10-year average (2014-2023) for this year from April 1 – 21 June (Table 1). Collection numbers in 2024 have been similar to those in 2021 (Figure 1). The overall number of smolts transported this year was 16% of the 10-year average (Table 2). The total number of smolts collected at McNary Dam was 437,646 through 21 June and 437,538 of those smolts were bypassed. At Ice Harbor Dam, 2,324 fish have been sampled through 21 June, and 2,316 of those smolts were bypassed.

Table 1. Total fish collected from 1 April – 21 June for 2021-2024 and the 10-year average (2014-2023) at Lower Granite Dam, Little Goose Dam, Lower Monumental Dam and overall.

Collected	2021	2022	2023	2024	10y Avg.
Lower Granite Dam	574,973	2,396,093	3,305,643	616,306	4,118,302
Little Goose Dam	285,321	1,374,677	2,399,634	687,568	2,619,130
Lower Monumental	247,597	1,526,486	2,094,752	133,408	1,887,007
Overall	1,107,891	5,297,256	7,800,029	1,437,282	8,624,439

^{*}Every other day collection began at LMN on May 7 due to the halt in transportation.

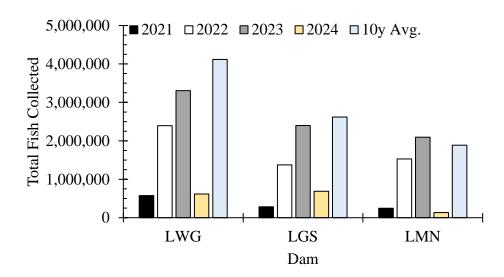


Figure 1. Total fish collected from 2021-2024 and the 10-year average (2014-2013) at Lower Granite (LWG), Little Goose (LGS) and Lower Monumental (LMN) from 1 April-21 June.

Table 2. Total fish transported from 1 April 1 - 19 June for 2021-2024 and the 10-year average (2014-2023) at Lower Granite Dam, Little Goose Dam, Lower Monumental Dam and overall.

Transported	2021	2022	2023	2024	10y Avg.
Lower Granite	366,654	2,159,088	3,041,835	271,814	2,563,765
Little Goose	256,026	1,355,206	1,573,072	616,246	1,689,050
Lower Monumental	135,887	517,208	962,705	84,238	1,414,225
Overall	758,567	4,031,502	5,577,612	972,298	5,667,041

^{*}Transportation for LMN was put to a temporary halt from 5 May to 18 May. Every four day transport at LMN began on 1 June to 17 June.

A total of 136,446 PIT-tagged juvenile salmon and steelhead have been detected passing Lower Granite Dam from April 1 – June 21. Of those, 113,881 (82%) were detected moving through the removable spillway weir (RSW) and 25,388 (18%) were detected in the juvenile bypass system (JBS). During the same timeframe in 2023, a total of 197,381 juvenile salmon and steelhead were detected, of which 125,703 (64%) were detected at the RSW and 21,403 detected in the JBS (Table 3).

Table 3. Proportional spillway PIT tag detection (%) for juvenile salmon and steelhead for 1 April – 21 June 20 at Lower <u>Granite Dam</u>, for 2023 & 2024.

Species	2023	2024
Chinook *	62%	87%
Steelhead	58%	77%
Coho	71%	91%
Sockeye	91%	98%
Combined	64%	82%

^{*}Before 2018 barge transport operations did not begin until May 1st, from 2021-2024 collection for barge transport began April 23 or 24.

Spill operations for spring fish passage in 2024 occurred from 3 April through 20 June on the Snake River and 10 April through June 15 on the Columbia River. Average river flow in the Snake River was 95% of the 10-year average from 1 April – 21 June (Table 3). Average river flow in the Columbia River at McNary Dam was 72% of the 10-year average. Percent spill levels in 2024 during the spring have averaged 166% of the 10-yr average at the three upper Snake River projects, 127% at Ice Harbor Dam and 109% of the 10-yr average at McNary Dam to date.

Table 3. Average flow, spill, and percent spill 2021-2024 and the 10-year average (2014-2023) from 1 April – 21 June at Walla Walla projects on the Snake and Columbia rivers.

	Flow (kcfs)				Spill (kcfs)				%Spill						
	2021	2022	2023	2024	10- yr.	2021	2022	2023	2024	10- yr.	2021	2022	2023	2024	10- yr.
LWG	52	81	80	77	81	31	39	41	61	37	56%	51%	53%	77%	43%
LGS	48	77	76	74	78	27	40	36	46	32	52%	51%	45%	62%	40%
LMN	52	79	77	74	78	34	42	40	58	36	63%	54%	53%	77%	47%
IHR	54	80	78	76	81	31	55	56	60	52	54%	64%	65%	77%	61%
MCN	190	259	205	177	246	111	165	134	109	139	56%	61%	60%	59%	54%