

WILLAMETTE VALLEY FISH PASSAGE MONITORING – BULK MARKING & RESERVOIR DISTRIBUTION

Bi-Weekly Report: October 16, 2024 – October 31, 2024



Prepared for: United States Army Corps of Engineers

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BULK MARKING SCHEDULE

Table 1. Tentative release schedule for brood years 2022 and 2023. Green rows highlight the release groups that have been tagged and released. Orange rows highlight release groups that have been tagged but have not yet been released. Date estimate is a rough estimate of when fish should be released to meet the intended target.

2023					
MF Willamette					
Date Estimate	Release Location	Target	Lifestage	#	Tag
Spring 2023	Head of Fall Creek Dam reservoir	Prior to reaching target elevation of 728 feet	fry	10000	8 mm
Spring 2023	Head of Lookout Point Dam reservoir	30 day spill operations	fry	10000	8 mm
Spring 2023	Head of Hills Creek Dam reservoir	Observed fry migration and RO operations	fry	10000	8 mm
9/15/2023	Dexter Dam Tailrace	Fall deep drawdown	subyearling	2000	12 mm
9/15/2023	Head of Lookout Point Dam reservoir	Fall deep drawdown	subyearling	5000	12 mm
9/15/2023	Lookout Point Dam Forebay	Fall deep drawdown	subyearling	5000	12 mm
10/15/2023	Fall Creek Dam Head of Reservoir	2-3 weeks prior to drawdown	subyearling	5000	12 mm
10/15/2023	Fall Creek Dam tailrace	2-3 weeks prior to drawdown	subyearling	1000	12 mm
11/15/2023	Fall Creek Dam Head of Reservoir	Midway between start of drawdown and streambed elevation	subyearling	5000	12 mm
11/15/2023	Fall Creek Dam tailrace	Midway between start of drawdown and streambed elevation	subyearling	1000	12 mm
11/16/2023	Hills Creek Dam Head of Reservoir	Prior to start of fall/winter RO operations	subyearling	5000	12 mm
11/16/2023	Hills Creek Dam tailrace	Prior to start of fall/winter RO operations	subyearling	3000	12 mm
11/16/2023	Hills Creek forebay or mid-reservoir	Prior to start of fall/winter RO operations	subyearling	5000	12 mm
North Santiam					
Spring 2023	Breitenbush River	Prior to beginning of spill	fry	7500	8 mm
Spring 2023	North Santiam River	Prior to beginning of spill	fry	7500	8 mm
10/1/2023	Big Cliff Dam Tailrace	Prior to Detroit Reservoir reaching 1520 feet	subyearling	8000	12 mm
10/1/2023	Breitenbush River	Prior to Detroit Reservoir reaching 1520 feet	subyearling	5000	12 mm
10/1/2023	North Santiam River	Prior to Detroit Reservoir reaching 1520 feet	subyearling	5000	12 mm

11/15/2023	Big Cliff Dam Tailrace	When Detroit reaches 1465 feet	subyearling	6000	12 mm
SF McKenzie					
Spring 2023	Cougar Dam Head of Reservoir	Prior to start of spring drawdown	fry	5000	8 mm
Spring 2023	Cougar Dam Head of Reservoir	After start of drawdown but prior to reaching 1520 feet	fry	5000	8 mm
9/15/2023	Cougar Dam Head of Reservoir	Prior to start of drawdown	subyearling	3000	12 mm
10/15/2023	Cougar Dam Forebay	Prior to reaching target elevation of 1505 feet	subyearling	5000	12 mm
10/15/2023	Cougar Dam Tailrace	Prior to reaching target elevation of 1505 feet	subyearling	4000	12 mm
10/15/2023	Cougar Head of Reservoir	Prior to reaching target elevation of 1505 feet	subyearling	4000	12 mm
11/15/2023	Cougar Dam Forebay	At 1532 feet when RO is prioritized for day and night spill	subyearling	5000	12 mm
11/15/2023	Cougar Dam Tailrace	At 1532 feet when RO is prioritized for day and night spill	subyearling	4000	12 mm
11/15/2023	Cougar Head of Reservoir	At 1532 feet when RO is prioritized for day and night spill	subyearling	4000	12 mm
South Santiam					
Spring 2023	Green Peter Head of Reservoir in Middle Santiam River	Spill operation block	fry	5000	8 mm
Spring 2023	Green Peter Head of Reservoir in Quartzville Creek	Spill operation block	fry	5000	8 mm
8/30/2023	South Santiam River - Foster Dam Tailrace	Undefined - Late August	subyearling	1000	12 mm
8/30/2023	South Santiam River above Foster Dam	Undefined - Late August	subyearling	2000	12 mm
9/15/2023	Green Peter Reservoir - Head of Reservoir, Middle Santiam River	Fall Operations at Green Peter Dam	subyearling	2500	12 mm
9/15/2023	Green Peter Reservoir - Head of Reservoir, Quartzville Creek	Fall Operations at Green Peter Dam	subyearling	2500	12 mm
10/15/2023	Green Peter Dam Tailrace	Prior to Green Peter reaching 887 feet.	subyearling	4000	12 mm
10/15/2023	Green Peter Reservoir - Head of Reservoir, Middle Santiam River	Prior to Green Peter reaching 887 feet.	subyearling	2500	12 mm
10/15/2023	Green Peter Reservoir - Head of Reservoir, Quartzville Creek	Prior to Green Peter reaching 887 feet.	subyearling	2500	12 mm
10/15/2023	South Santiam River - Foster Dam Tailrace	Fall operations at Foster Dam	subyearling	4000	12 mm
10/15/2023	South Santiam River above Foster Dam	Fall operations at Foster Dam	subyearling	5000	12 mm

2024

MF Willamette

2/1/2024	Hills Creek Dam Head of Reservoir	Prior to end of fall/winter RO operations	yearling	5000	12 mm
2/1/2024	Hills Creek Dam tailrace	Prior to end of fall/winter RO operations	yearling	3000	12 mm
2/1/2024	Hills Creek forebay or mid-reservoir	Prior to end of fall/winter RO operations	yearling	5000	12 mm
2/28/2024	Fall Creek Dam Head of Reservoir	Prior to beginning of refill	yearling	5000	12 mm
2/28/2024	Fall Creek Dam Tailrace	Prior to beginning of refill	yearling	1000	12 mm
2/28/2024	Head of Lookout Point Dam reservoir	Prior to 30-day spill	yearling	5000	12 mm
2/28/2024	Dexter Dam Tailrace	Prior to 30-day spill	yearling	2000	12 mm
2/28/2024	Lookout Point Dam Forebay	Prior to 30-day spill	yearling	5000	12 mm
3/31/2024	Fall Creek Dam Head of Reservoir	After refill is completed	yearling	5000	12 mm
3/31/2024	Fall Creek Dam Tailrace	After refill is completed	yearling	1000	12 mm
4/1/2024	Head of Lookout Point Dam reservoir	After 30-day spill/beginning of nighttime spill	yearling	5000	12 mm
4/1/2024	Dexter Dam Tailrace	After 30-day spill/beginning of nighttime spill	yearling	2000	12 mm
4/1/2024	Lookout Point Dam Forebay	After 30-day spill/beginning of nighttime spill	yearling	5000	12 mm

North Santiam

2/1/2024	North Santiam River	Prior to start of Detroit refill	fry	3750	8 mm
2/1/2024	Breitenbush River	Prior to start of Detroit refill	fry	3750	8 mm
4/1/2024	Breitenbush River	Prior to start of Detroit spill	fry	3750	8 mm
4/1/2024	North Santiam River	Prior to start of Detroit spill	fry	3750	8 mm
4/1/2024	Big Cliff Dam Tailrace	Prior to Detroit reaching 1541 feet (spillway crest elevation)	yearling	2000	12 mm
4/1/2024	Breitenbush River	Prior to Detroit reaching 1541 feet (spillway crest elevation)	yearling	2000	12 mm
4/1/2024	North Santiam River	Prior to Detroit reaching 1541 feet (spillway crest elevation)	yearling	2000	12 mm
10/1/2024	Big Cliff Dam Tailrace	Prior to Detroit Reservoir reaching 1520 feet	subyearling	8000	12 mm
10/1/2024	Breitenbush River	Prior to Detroit Reservoir reaching 1520 feet	subyearling	5000	12 mm
10/1/2024	North Santiam River	Prior to Detroit Reservoir reaching 1520 feet	subyearling	5000	12 mm

11/15/2024	Big Cliff Dam Tailrace	When Detroit reaches 1465 feet	subyearling	6000	12 mm
SF McKenzie					
2/28/2024	Cougar Dam Forebay	Prior to beginning of spring drawdown	yearling	2000	12 mm
2/28/2024	Cougar Dam Tailrace	Prior to beginning of spring drawdown	yearling	1000	12 mm
2/28/2024	Cougar Head of Reservoir	Prior to beginning of spring drawdown	yearling	2000	12 mm
3/30/2024	Cougar Dam Forebay	After start of drawdown but prior to reaching 1520 feet	yearling	2000	12 mm
3/30/2024	Cougar Dam Tailrace	After start of drawdown but prior to reaching 1520 feet	yearling	1000	12 mm
3/30/2024	Cougar Head of Reservoir	After start of drawdown but prior to reaching 1520 feet	yearling	2000	12 mm
South Santiam					
4/1/2024	Green Peter Head of Reservoir in Middle Santiam River	At the start of the first spring spill block	fry	2500	8 mm
4/1/2024	Green Peter Head of Reservoir in Quartzville Creek	At the start of the first spring spill block	fry	2500	8 mm
4/1/2024	Green Peter Dam Tailrace	At the start of Green Peter spring spill	yearling	1000	12 mm
4/1/2024	Green Peter Reservoir - Forebay	At the start of Green Peter spring spill	yearling	2000	12 mm
4/1/2024	Green Peter Reservoir - Head of Reservoir, Middle Santiam River	At the start of Green Peter spring spill	yearling	1000	12 mm
4/1/2024	Green Peter Reservoir - Head of Reservoir, Quartzville Creek	At the start of Green Peter spring spill	yearling	1000	12 mm
4/1/2024	Green Peter Reservoir - mid reservoir	At the start of Green Peter spring spill	yearling	2000	12 mm
4/1/2024	South Santiam River - Foster Dam Tailrace	Prior to start of Foster refill	yearling	4000	12 mm
4/1/2024	South Santiam River above Foster Dam	Prior to start of Foster refill	yearling	5000	12 mm
4/20/2024	South Santiam River - Foster Dam Tailrace	Post refill operations	yearling	2000	12 mm
4/20/2024	South Santiam River above Foster Dam	Post refill operations	yearling	1000	12 mm
4/15/2024	Green Peter Head of Reservoir in Middle Santiam River	At the start of the second spring spill block	fry	2500	8 mm
4/15/2024	Green Peter Head of Reservoir in Quartzville Creek	At the start of the second spring spill block	fry	2500	8 mm
8/30/2024	South Santiam River - Foster Dam Tailrace	Undefined - Late August	subyearling	1000	12 mm
8/30/2024	South Santiam River above Foster Dam	Undefined - Late August	subyearling	2000	12 mm

9/15/2024	Green Peter Reservoir - Head of Reservoir, Middle Santiam River	Fall Operations at Green Peter Dam	subyearling	2500	12 mm
9/15/2024	Green Peter Reservoir - Head of Reservoir, Quartzville Creek	Fall Operations at Green Peter Dam	subyearling	2500	12 mm
10/15/2024	Green Peter Dam Tailrace	Prior to Green Peter reaching 887 feet.	subyearling	4000	12 mm
10/15/2024	Green Peter Reservoir - Head of Reservoir, Middle Santiam River	Prior to Green Peter reaching 887 feet.	subyearling	2500	12 mm
10/15/2024	Green Peter Reservoir - Head of Reservoir, Quartzville Creek	Prior to Green Peter reaching 887 feet.	subyearling	2500	12 mm
10/15/2024	South Santiam River - Foster Dam Tailrace	Fall operations at Foster Dam	subyearling	4000	12 mm
10/15/2024	South Santiam River above Foster Dam	Fall operations at Foster Dam	subyearling	5000	12 mm

BULK MARKING SUMMARY

All brood year 2023 South Santiam stock juvenile Chinook salmon have been PIT tagged and are currently rearing at Willamette Hatchery. Additionally, we have tagged 18,000 out of the 30,000 brood year 2023 North Santiam juvenile Chinook salmon. The remaining 12,000 North Santiam juvenile Chinook salmon will be PIT tagged in early November.

No fish were tagged or released during this reporting period.

Recaptures

A total of 34 PIT tagged fish from this project were redetected or uploaded to PTAGIS during the most recent reporting period. All redetections occurred downstream of Green Peter Dam with four at the tailrace rotary screw trap and 30 at the Lebanon Dam array. Since we began releasing fish in May 2023, we estimate that a total of 5,229 PIT tags from this project have been redetected (Table 4).

Table 2. Bulk marking summary statistics. Total number of fish marked (N), mean fork length (FL), mean weight, start date of marking, end date of marking, total mortalities from start of tagging to release, mortality percentage, total shed tags from start of tagging to release, and shed tag percentage.

Mark Group	N	Mean FL (mm)	Mean Weight (g)	Date Start	Date End	Mort	Mort. %	Sheds	Shed %
Green Peter Head of Reservoir - Middle Santiam	5,071	56.2	NA	5/15/2023	5/16/2023	74	1.46	32	0.63
Green Peter Head of Reservoir - Quartzville Creek	5,203	58.5	NA	5/17/2023	5/18/2023	18	0.35	19	0.37
Lookout Point Head of Reservoir	10,041	63.1	2.9	5/22/2023	5/24/2023	39	0.39	53	0.53
Hills Creek Head of Reservoir	10,117	64.7	2.9	5/30/2023	6/1/2023	22	0.22	9	0.09
Fall Creek Head of Reservoir	10,040	67.4	3.2	6/1/2023	6/7/2023	68	0.68	30	0.3
Detroit Head of Reservoir Breitenbush Arm	7,530	66.9	3.6	6/13/2023	6/14/2023	82	1.09	24	0.32
Detroit Head of Reservoir - North Santiam Arm	7,528	66.9	3.6	6/14/2023	6/15/2023	83	1.10	25	0.32
Cougar Head of Reservoir	5,626	67.7	3.5	6/20/2023	6/20/2023	475	8.40	44	0.78
North Santiam – Fall 23 & Spring 24 Bulk Group	30,680	67.3	3.5	6/26/2023	7/20/2023	3,437	10.6	99	0.32
M.F. Willamette – Fall 23 & Spring 24 Bulk Group	85,233	NA	NA	7/26/2023	12/7/2023	380	0.45	340	0.40
South Santiam – Fall 23 & Spring 2024 Bulk Group	43,407	NA	NA	8/14/2023	12/20/2023	128	0.29	101	0.23
McKenzie– Fall 23 & Spring 24 Bulk Group	45,210	NA	NA	8/30/2023	2/14/2024	987	2.18	60	0.13
M.F. Willamette – Additional 51,000 Group	51,000	145.1	35.9	1/1/2024	1/31/2021	NA	NA	NA	NA
Green Peter Head of Reservoir	5,006	50.1	1.4	3/1/2024	3/3/2024	17	0.33	13	0.25
Green Peter Head of Reservoir	5,000	54.9	1.7	3/18/2024	3/19/2024	12	0.23	20	0.39
Detroit Head of Reservoir North Santiam Arm	7,500	46.7	1.2	5/13/2024	5/15/2024	58	0.77	70	0.93
Detroit Head of Reservoir Breitenbush Arm	7,500	46.7	1.2	5/15/2024	5/17/2024	58	0.77	63	0.84
South Santiam – Fall 24 and Spring 25 Bulk Group	45,000	NA	NA	6/26/2024	7/11/2024	TBD	TBD	TBD	TBD
North Santiam – Fall 24 and Spring 25 Bulk Group	18,000	NA	NA	7/15/2024	7/19/2024	TBD	TBD	TBD	TBD

Table 3. PIT tagged juvenile Chinook salmon release group summary statistics.

Basin	Release Location	Release Date	N	Mean Length	Mean Weight	Lifestage
MFW	Hills Creek Head of Reservoir	5/18/2023 15:50	509	55.8	1.9	Fry

Basin	Release Location	Release Date	N	Mean Length	Mean Weight	Lifestage
MFW	LOP Head of Reservoir - Black Canyon	5/30/2023 10:30	9647	63.1	2.9	Fry
MFW	Hills Creek Head of Reservoir	6/5/2023 10:30	9784	64.7	2.8	Fry
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	6/12/2023 15:00	9638	67.4	3.2	Fry
MFW	LOP Head of Reservoir - Black Canyon	9/18/2023 8:15	4998	122.9	23.8	Subyearling
MFW	LOP Forebay - Signal Point	9/18/2023 17:00	5002	128.3	25.1	Subyearling
MFW	LOP Tailrace - Pengra	9/19/2023 11:30	2011	128.4	25.2	Subyearling
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	9/28/2023 14:45	5006	133.5	29.1	Subyearling
MFW	Fall Creek Tailrace	9/28/2023 19:15	1001	134.8	29.8	Subyearling
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	11/6/2023 15:40	4999	139.4	32.2	Subyearling
MFW	Fall Creek Tailrace	11/6/2023 19:00	1000	134.9	30.2	Subyearling
MFW	Hills Creek Head of Reservoir	11/7/2023 15:45	4997	135.2	28.6	Subyearling
MFW	Hills Creek Mid Reservoir - Packard Creek Boat Ramp	11/8/2023 15:15	4998	145.3	36.9	Subyearling
MFW	Hills Creek Dam Tailrace	11/9/2023 14:35	2969	129.6	27	Subyearling
MFW	LOP Head of Reservoir - Black Canyon	1/3/2024 16:45	4634	143.3	33.7	Yearling
MFW	LOP Head of Reservoir - Black Canyon	1/4/2024 16:30	4828	143.3	NA	Yearling
MFW	LOP Head of Reservoir - Black Canyon	1/8/2024 15:40	3789	143.3	NA	Yearling
MFW	LOP Head of Reservoir - Black Canyon	1/9/2024 16:15	5115	143.3	NA	Yearling
MFW	LOP Head of Reservoir - Black Canyon	1/25/2024 11:30	7617	143.6	34.3	Yearling
MFW	Hills Creek Dam Tailrace	1/31/2024 14:05	24861	141.6	34.7	Yearling
MFW	Hills Creek Head of Reservoir	2/6/2024 11:15	4963	153.8	40.9	Yearling
MFW	Hills Creek Mid Reservoir - Packard Creek Boat Ramp	2/7/2024 10:10	5000	155.9	41.7	Yearling
MFW	Hills Creek Dam Tailrace	2/7/2024 15:20	2998	151.3	42.8	Yearling
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	2/20/2024 12:45	4993	148.4	38.9	Yearling
MFW	Fall Creek Tailrace	2/20/2024 16:05	1002	150.5	39.9	Yearling
MFW	LOP Head of Reservoir - Black Canyon	2/28/2024 11:30	4994	141.5	34.2	Yearling
MFW	LOP Forebay - Signal Point	2/28/2024 16:30	4988	144.2	35.9	Yearling
MFW	LOP Tailrace - Pengra	2/29/2024 11:00	1998	149.7	39.2	Yearling
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	4/2/2024 11:00	2500	146	37.1	Yearling
MFW	Fall Creek Head of Reservoir - Old Boat Ramp	4/3/2024 10:55	2497	154.6	43.2	Yearling

Basin	Release Location	Release Date	N	Mean Length	Mean Weight	Lifestage
MFW	Fall Creek Tailrace	4/3/2024 14:05	999	159.5	44.5	Yearling
MFW	LOP Head of Reservoir - Black Canyon	4/9/2024 10:35	2499	150.9	41.2	Yearling
MFW	LOP Head of Reservoir - Black Canyon	4/9/2024 13:00	2499	150.9	NA	Yearling
MFW	LOP Forebay - Signal Point	4/10/2024 11:00	2500	150.7	39.7	Yearling
MFW	LOP Forebay - Signal Point	4/11/2024 11:55	2500	150.7	NA	Yearling
MFW	LOP Tailrace - Pengra	4/11/2024 15:25	2000	149	38.9	Yearling
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	8/29/2023 11:30	5198	67.9	3.6	Fry
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	10/2/2023 14:20	5005	117.2	18.9	Subyearling
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	10/2/2023 19:05	3006	116.7	19	Subyearling
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	10/18/2023 11:50	3977	118.4	19.8	Subyearling
MCK	Cougar Forebay	10/18/2023 18:00	5010	120.8	21	Subyearling
MCK	Cougar Tailrace - USGS	10/19/2023 12:40	4000	112.5	16.8	Subyearling
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	11/13/2023 13:15	3999	121.3	23	Subyearling
MCK	Cougar Forebay	11/14/2023 15:15	4995	124.6	23.8	Subyearling
MCK	Cougar Tailrace - USGS	11/15/2023 11:45	2411	120.1	21.5	Subyearling
MCK	Cougar Head of Reservoir - Cougar Crossing Bridge	3/8/2024 11:20	4799	136.9	31	Yearling
MCK	Cougar Forebay	3/11/2024 11:25	4800	136.5	29.5	Yearling
MCK	Cougar Tailrace - USGS	3/11/2024 15:10	2081	129.5	25.4	Yearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	5/22/2023 13:00	5171	58.5	NA	Fry
SST	Green Peter Head of Reservoir - Middle Santiam Arm	5/22/2023 20:30	4961	56.2	NA	Fry
SST	Foster Tailrace - South Santiam Hatchery	8/23/2023 16:30	1030	115.7	18.2	Subyearling
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	8/24/2023 10:00	2059	105.6	14.5	Subyearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	9/20/2023 14:00	2518	113.5	19.5	Subyearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	9/21/2023 13:40	2508	117.1	20.7	Subyearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	10/3/2023 12:45	2502	122.8	25.1	Subyearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	10/4/2023 14:40	2516	119.6	23.8	Subyearling
SST	Green Peter Tailrace - Sunnyside Boat Ramp	10/9/2023 16:05	4002	125.9	26.4	Subyearling
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	10/10/2023 14:20	5000	125.8	24.5	Subyearling
SST	Foster Tailrace - South Santiam Hatchery	10/11/2023 15:20	4000	135.2	31.8	Subyearling

Basin	Release Location	Release Date	N	Mean Length	Mean Weight	Lifestage
SST	Green Peter Head of Reservoir - Middle Santiam Arm	2/21/2024 12:00	1004	164.4	51.6	Yearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	2/22/2024 11:45	1014	150.8	40.2	Yearling
SST	Green Peter Mid Reservoir - Thistle Boat Ramp	2/22/2024 17:45	2006	153.8	42.9	Yearling
SST	Green Peter Mid Reservoir - Thistle Boat Ramp	2/23/2024 10:40	2003	159.4	46.5	Yearling
SST	Green Peter Tailrace - Sunnyside Boat Ramp	2/23/2024 14:15	1014	163.4	50.1	Yearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	3/6/2024 15:30	2506	50.1	1.4	Fry
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	3/6/2024 17:30	2500	51.3	1.4	Fry
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	3/26/2024 13:30	2997	156.3	44.1	Yearling
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	3/27/2024 11:00	3001	145.3	38	Yearling
SST	Foster Tailrace - South Santiam Hatchery	3/28/2024 13:30	3005	154.6	43.8	Yearling
SST	Foster Tailrace - South Santiam Hatchery	4/1/2024 12:55	2991	156	44.3	Yearling
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	4/4/2024 13:15	1908	145.4	37.2	Yearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	4/12/2024 11:50	2350	52.4	1.5	Fry
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	4/12/2024 13:15	2500	54.9	1.7	Fry
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	8/27/2024 13:40	2000	120.1	17.8	Subyearling
SST	Foster Tailrace - South Santiam Hatchery	8/27/2024 18:55	934	121.5	18.2	Subyearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	9/9/2024 17:55	2492	120.5	18.4	Subyearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	9/10/2024 16:35	2496	122.4	19.7	Subyearling
SST	Green Peter Head of Reservoir - Middle Santiam Arm	10/8/2024 16:00	2500	130.4	23	Subyearling
SST	Green Peter Head of Reservoir - Quartzville Creek Arm	10/9/2024 15:30	2450	131.5	24.6	Subyearling
SST	Green Peter Tailrace - Sunnyside Boat Ramp	10/10/2024 15:30	3999	133.2	26.3	Subyearling
SST	Foster Reservoir Head of Reservoir - Cascadia Covered Bridge	10/15/2024 13:45	4994	137.5	28.6	Subyearling
SST	Foster Tailrace - South Santiam Hatchery	10/15/2024 19:45	3998	136.9	28.7	Subyearling
NST	Marion Forks Hatchery Escape	6/16/2023 12:00	1247	66.5	3.4	Fry
NST	Detroit Head of Reservoir - Breitenbush River	7/13/2023 8:45	7000	66.8	3.6	Fry
NST	Detroit Head of Reservoir - North Santiam River	7/13/2023 11:35	6638	67	3.6	Fry
NST	Detroit Head of Reservoir - Breitenbush River	9/26/2023 10:45	5002	106.5	11.8	Subyearling
NST	Detroit Head of Reservoir - North Santiam River	9/26/2023 16:00	4997	102.6	10.4	Subyearling
NST	Big Cliff Tailrace - Packsaddle Boat Ramp	9/27/2023 15:30	8009	106.5	11.9	Subyearling

Basin	Release Location	Release Date	N	Mean Length	Mean Weight	Lifestage
NST	Big Cliff Tailrace - Packsaddle Boat Ramp	11/20/2023 16:50	5998	112.4	16.6	Subyearling
NST	Detroit Head of Reservoir - North Santiam River	3/20/2024 14:45	2000	128.4	25.5	Yearling
NST	Detroit Head of Reservoir - Breitenbush River	3/21/2024 11:15	2000	124	21.3	Yearling
NST	Big Cliff Tailrace - Packsaddle Boat Ramp	3/21/2024 16:30	1998	129.4	24.1	Yearling
NST	Detroit Head of Reservoir - North Santiam River	5/20/2024 12:00	7530	47	1.2	Fry
NST	Detroit Head of Reservoir - Breitenbush River	5/20/2024 18:00	7491	47	1.2	Fry
NST	Detroit Head of Reservoir - Breitenbush River	9/24/2024 15:45	5004	103.2	12.9	Subyearling
NST	Detroit Head of Reservoir - North Santiam River	9/24/2024 17:35	4997	104.2	13	Subyearling
NST	Big Cliff Tailrace - Packsaddle Boat Ramp	9/25/2024 16:20	7998	101.3	12.1	Subyearling

Table 4. PIT tag recovery summary at established interrogation sites, rotary screw traps (RST), and reservoir sampling locations. Recoveries during screw trap efficiency testing that were recaptured during the test (i.e., within one week of release) are not included in this table. Observation Location descriptions are those that are reported to PTAGIS.

Basin	Observation Location	Capture Method	Total	Reporting Period
MCK	MCKESF - South Fork McKenzie River	Screw Trap	133	0
MCK	SFM - South Fork McKenzie River	Instream Array	4	0
MCK	CGRREG - CGR - Release into the Regulating Channel of the Tailrace within 0.5 km of Dam	Screw Trap	1,542	0
MCK	CGRTUR - CGR - Release into the Turbine Channel of the Tailrace within 0.5 km of Dam	Screw Trap	71	0
MCK	Cougar Dam	Screw Trap	613	0
MCK	SID - Sauvie Island Dairy Creek	Instream Array	2	0
MCK	PD8 - Columbia River Estuary rkm 82	Instream Array	6	0
MCK	TWX - Estuary Towed Array (Exp.)	Towed Array	12	0
MCK	PD7 - Columbia River Estuary rkm 70	Instream Array	9	0
MCK	PD6 - Columbia River Estuary rkm 68	Instream Array	24	0
MCK	PD5 - Columbia River Estuary rkm 62	Instream Array	15	0
MFW	MCKESF - South Fork McKenzie River	Screw Trap	1	0
MFW	WILRMF - Middle Fork Willamette River	Screw Trap	41	0
MFW	HCRREG - HCR - Release into the Regulating Channel of the Tailrace within 0.5 km of Dam	Screw Trap	2	0

MFW	HCRTAL - HCR - Release into the Tailrace within 0.5 km downstream of Dam	Screw Trap	126	0
MFW	Hills Creek Dam	Screw Trap	189	0
MFW	WILRMF - Middle Fork Willamette River	Screw Trap	1	0
MFW	Lookout Point Dam	Fyke Net	1	0
MFW	WILRMF - Middle Fork Willamette River	Fyke Net	1	0
MFW	WILRMF - Middle Fork Willamette River	Fyke Net	1	0
MFW	Lookout Point Dam	Gillnet	1	0
MFW	Lookout Point Dam	Gillnet	1	0
MFW	LOPREG - LOP - Release into the Regulating Channel of the Tailrace within 0.5 km of Dam	Screw Trap	21	0
MFW	LOPTUR - LOP - Release into the Turbine Channel of the Tailrace within 0.5 km of Dam	Screw Trap	153	0
MFW	Lookout Point Dam	Gillnet	4	0
MFW	Lookout Point Dam	Screw Trap	37	0
MFW	Dexter Dam	Screw Trap	93	0
MFW	Fall Creek Dam	Screw Trap	651	0
MFW	WILRMF - Middle Fork Willamette River	Fyke Net	1	0
MFW	PD8 - Columbia River Estuary rkm 82	Instream Array	21	0
MFW	TWX - Estuary Towed Array (Exp.)	Towed Array	74	0
MFW	PD7 - Columbia River Estuary rkm 70	Instream Array	41	0
MFW	PD6 - Columbia River Estuary rkm 68	Instream Array	89	0
MFW	PD5 - Columbia River Estuary rkm 62	Instream Array	42	0
NST	CGRREG - CGR - Release into the Regulating Channel of the Tailrace within 0.5 km of Dam	Screw Trap	1	0
NST	Big Cliff Dam	Screw Trap	90	0
NST	NSANTR - North Santiam River, Oregon	Screw Trap	3	0
NST	NSANTR - North Santiam River, Oregon	Bypass Sub-Sample	25	0
NST	SID - Sauvie Island Dairy Creek	Instream Array	24	0
NST	ML1 - Lower Mill Creek (MILL4C)	Instream Array	1	0
NST	PD8 - Columbia River Estuary rkm 82	Instream Array	11	0
NST	TWX - Estuary Towed Array (Exp.)	Towed Array	56	0
NST	PD7 - Columbia River Estuary rkm 70	Instream Array	15	0
NST	PD6 - Columbia River Estuary rkm 68	Instream Array	39	0

NST	PD5 - Columbia River Estuary rkm 62	Instream Array	28	0
SST	MSANTR - Middle Santiam River, Oregon	Screw Trap	50	0
SST	MSANTR - Middle Santiam River, Oregon	Fyke Net	2	0
SST	MSANTR - Middle Santiam River, Oregon	Fyke Net	1	0
SST	QUARTC - Quartzville Creek, tributary to Middle Santiam River	Fyke Net	1	0
SST	MSANTR - Middle Santiam River, Oregon	Fyke Net	1	0
SST	QUARTC - Quartzville Creek, tributary to Middle Santiam River	Fyke Net	1	0
SST	SSANTR - South Santiam River, Oregon	Screw Trap	26	0
SST	MSANTR - Middle Santiam River, Oregon	Fyke Net	1	0
SST	GPD - Green Peter Dam	Screw Trap	118	0
SST	GPDTAL - GPD - Release into the Tailrace within 0.5 km downstream of Dam	Screw Trap	27	4
SST	MSANTR - Middle Santiam River, Oregon	Gillnet	1	0
SST	LD1 - Lebanon Dam South Ladder	Instream Array	126	6
SST	LD2 - Lebanon Dam North Ladder	Instream Array	90	7
SST	LD3 - Lebanon Dam Diversion Bypass	Instream Array	161	7
SST	LD4 - Lebanon Dam Spillway	Instream Array	90	10
SST	PD8 - Columbia River Estuary rkm 82	Instream Array	24	0
SST	TWX - Estuary Towed Array (Exp.)	Towed Array	66	0
SST	PD7 - Columbia River Estuary rkm 70	Instream Array	19	0
SST	PD6 - Columbia River Estuary rkm 68	Instream Array	51	0
SST	PD5 - Columbia River Estuary rkm 62	Instream Array	56	0

RESERVOIR DISTRIBUTION SUMMARY

During the reporting period, reservoir sampling was conducted in the offshore environment of Lookout Point and Green Peter reservoirs using suspended small mesh gill nets (3/8 – 1 inch) (Table 5). Lookout Point Reservoir was sampled during the weeks of October 14, 2024 and October 28, 2024. Results from the week of October 14 were included in the previous biweekly report and have been excluded here. Green Peter Reservoir was sampled during the week of October 21, 2024.

Sampling effort on Lookout Point Reservoir during the week of October 28, 2024 was restricted to the lower zone of the reservoir due to shallow water depths in the upper and middle zones. Sampling consisted of three days of 24-hour trap sets, requiring four days on the water. The 3/8" and 1/2" mesh gill net panels were bundled to prevent them fishing to reduce non-target small fish catch. This change was initiated in response to extremely high white crappie catches the week of September 30, 2024. Gill nets were set at stations A1, A1.5 and A2 at 0m, 5m and 10m as site depth allowed. These depths were selected to span the surface waters as the thermal profile showed that thermal stratification had broken down with temperatures uniform across the water column of approximately 14C (Figure 1). Over three days of sampling (n=22 gill net sets), 39 Chinook salmon, 17 *O. mykiss*, 20 northern pikeminnow, 1 bluegill, 7 largescale suckers, 13 smallmouth bass, 8 largemouth bass, 59 black crappie, 62 white crappie, and 31 walleye were captured (Tables 7-9). Chinook salmon catch consisted of 20 hatchery subyearlings, 18 unclipped subyearlings (of which 5 were USGS acoustic tag recaptures), and 1 unclipped yearling. *O. mykiss* catch was comprised of 1 hatchery adult and 16 unclipped adults.

During the week of October 21, 2024, sampling at Green Peter Reservoir involved three days of 24-hour gill net sets, requiring four days on the water. Nets were set in the lower, middle and Quartzville reservoir zones. No nets were set in the upper zone due to shallow depths. The thermal profile showed that thermal stratification had broken down, with temperatures uniform across all depths (17-18C) (Figure 2). Nets were set at 5 and 10m at all sites. Across three days (27 net sets), the catch included 65 juvenile Chinook salmon, 26 *O. mykiss*, 2 kokanee, 16 northern pikeminnow, 61 bluegill, 40 yellow bullhead, 1 largescale sucker, 40 smallmouth bass, and 2 black crappie (Tables 7-9). The Chinook salmon catch was comprised of 15 hatchery subyearlings (including 9 PIT tag recaptures) and 50 unmarked subyearlings. *O. mykiss* catch consisted of 20 hatchery adults, 4 unmarked adults and 2 unmarked juveniles.

Table 5. Start and end date by statistical week.

Week	Start	End	Reservoir	Net Type	Effort (# sets)	Effort (hrs)
6	2/5/2024	2/8/2024	Lookout Point	Box minnow	21	501
6	2/5/2024	2/8/2024	Lookout Point	Oneida	7	166
7	2/12/2024	2/15/2024	Green Peter	Box minnow	30	710
7	2/12/2024	2/15/2024	Green Peter	Oneida	12	283
8	2/19/2024	2/22/2024	Lookout Point	Box minnow	27	608
8	2/19/2024	2/22/2024	Lookout Point	Oneida	9	203
9	2/26/2024	3/4/2024	Green Peter	Box minnow	30	1680
9	2/26/2024	3/4/2024	Green Peter	Oneida	12	670
10	3/5/2024	3/7/2024	Lookout	Box minnow	18	422
10	3/5/2024	3/7/2024	Lookout	Oneida	6	138
11	3/11/2024	3/14/2024	Green Peter	Box minnow	30	715
11	3/11/2024	3/14/2024	Green Peter	Oneida	12	283
12	3/18/2024	3/21/2024	Lookout Point	Box minnow	27	621
12	3/18/2024	3/21/2024	Lookout Point	Oneida	9	206

Week	Start	End	Reservoir	Net Type	Effort (# sets)	Effort (hrs)
13	3/25/2024	3/28/2024	Green Peter	Box minnow	30	700
13	3/25/2024	3/28/2024	Green Peter	Oneida	12	280
14	4/1/2024	4/4/2024	Lookout Point	box minnow	27	629
14	4/1/2024	4/4/2024	Lookout Point	oneida	9	208
15	4/8/2024	4/11/2024	Green Peter	box minnow	30	711
15	4/8/2024	4/11/2024	Green Peter	oneida	12	283
16	4/15/2024	4/18/2024	Lookout Point	box minnow	27	632
16	4/15/2024	4/18/2024	Lookout Point	oneida	9	209
17	4/22/2024	4/25/2024	Green Peter	box minnow	30	708
17	4/22/2024	4/25/2024	Green Peter	oneida	12	280
18	4/29/2024	5/2/2024	Lookout Point	box minnow	27	657
18	4/29/2024	5/2/2024	Lookout Point	oneida	9	217
19	5/8/2024	5/10/2024	Green Peter	box minnow	20	465
19	5/8/2024	5/10/2024	Green Peter	oneida	8	188
20	5/13/2024	5/16/2024	Lookout Point	box minnow	27	636
20	5/13/2024	5/16/2024	Lookout Point	oneida	9	208
21	5/20/2024	5/23/2024	Green Peter	box minnow	30	707
21	5/20/2024	5/23/2024	Green Peter	oneida	12	283
22	5/27/2024	5/30/2024	Lookout Point	box minnow	27	558
22	5/27/2024	5/30/2024	Lookout Point	oneida	9	207
23	6/3/2024	6/6/2024	Green Peter	box minnow	30	689
23	6/3/2024	6/6/2024	Green Peter	oneida	12	277
24	6/10/2024	6/13/2024	Lookout Point	box minnow	27	619
24	6/10/2024	6/13/2024	Lookout Point	oneida	9	209
25	6/17/2024	6/20/2024	Green Peter	gill net 80'	26	620
26	6/24/2024	6/27/2024	Lookout Point	gill net 80'	24	552
27	7/1/2024	7/4/2024	Green Peter	gill net 80'	27	632
28	7/9/2024	7/12/2024	Lookout Point	gill net 80'	24	547
29	7/15/2024	7/18/2024	Green Peter	gill net 80'	27	648
30	7/22/2024	7/25/2024	Lookout Point	gill net 80'	24	546
30	7/24/2024	7/25/2024	Green Peter	gill net 80'	8	172
31	7/29/2024	7/31/2024	Lookout Point	gill net 80'	16	495
31	7/30/2024	7/31/2024	Green Peter	gill net 80'	9	238
32	8/5/2024	8/11/2024	Lookout	gill net 80'	7	106
32	8/5/2024	8/11/2024	Green Peter	gill net 80'	26	604
33	8/12/2024	8/18/2024	Lookout	gill net 80'	10	230
33	8/12/2024	8/18/2024	Green Peter	gill net 80'	27	637
34	8/19/2024	8/25/2024	Lookout	gill net 80'	9	211
34	8/19/2024	8/25/2024	Green Peter	gill net 80'	27	649
35	8/26/2024	9/1/2024	Green Peter	gill net 80'	26	626
36	9/2/2024	9/8/2024	Lookout Point	gill net 80'	6	144
37	9/9/2024	9/15/2024	Green Peter	gill net 80'	27	627
38	9/16/2024	9/19/2024	Lookout Point	gill net 80'	8	183
38	9/16/2024	9/19/2024	Green Peter	gill net 80'	18	416
39	9/23/2024	9/26/2024	Green Peter	gill net 80'	25	578
40	9/30/2024	10/6/2024	Lookout Point	gill net 80'	9	213

Week	Start	End	Reservoir	Net Type	Effort (# sets)	Effort (hrs)
41	10/7/2024	10/13/2024	Green Peter	gill net 80'	27	630
42	10/14/2024	10/20/2024	Lookout Point	gill net 80'	9	204
43	10/21/2024	10/27/2024	Green Peter	gill net 80'	27	643
44	10/28/2024	11/3/2024	Lookout Point	gill net 80'	22	528

Table 6. Mean surface water temperature measure during each trap net deployment.

Week	Reservoir	Mean Water Surface Temperature °C
6	Lookout Point	8.0
7	Green Peter	8.2
8	Lookout Point	8.9
9	Green Peter	8.4
10	Lookout Point	8.3
11	Green Peter	8.5
12	Lookout Point	9.6
13	Green Peter	9.7
14	Lookout Point	10.6
15	Green Peter	12.2
16	Lookout Point	11.7
17	Green Peter	13.6
18	Lookout Point	13.6
19	Green Peter	15.1
20	Lookout Point	16.1
21	Green Peter	16.8
22	Lookout Point	17.4
23	Green Peter	18.1
24	Lookout Point	20.3
25	Green Peter	19.5
26	Lookout Point	21.1
27	Green Peter	21.9
28	Lookout Point	24.9
29	Green Peter	25.3
30	Lookout Point	24.4
30	Green Peter	24
31	Lookout Point	23.9
31	Green Peter	24.3
32	Lookout Point	23.1
32	Green Peter	24.9
33	Lookout Point	23.2
33	Green Peter	23.9
34	Lookout Point	21.6
34	Green Peter	23.2
35	Green Peter	22.3
36	Lookout Point	20.7
37	Green Peter	21.7

Week	Reservoir	Mean Water Surface Temperature °C
38	Lookout Point	19
38	Green Peter	20.2
39	Green Peter	19.9
40	Lookout Point	18
41	Green Peter	18.4
42	Lookout Point	16.1
43	Green Peter	16.4
44	Lookout Point	13.5

Table 7. Summary of total catch by reservoir. CHS – Chinook salmon, RBT – *O. mykiss*, CUT - Cutthroat trout, KOK – Kokanee, NPM - Northern Pike minnow, SCU – Sculpin, BLG - Bluegill, LWB – Western Brook Lamprey, BBH- Brown bullhead, YBH – Yellow bullhead, LSS - Large-scale sucker, SMB - Smallmouth Bass, LMB – largemouth bass, BLC – black crappie, WHC – white crappie, WAL – walleye, UNID – unidentified. *Unidentified larval centrarchid.

Week	Reservoir	CHS	RBT	CUT	KOK	NPM	SCU	BLG	LWB	BBH	YBH	LSS	SMB	LMB	BLC	WHC	WAL	UNID
6	Lookout Point	4	2	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
7	Green Peter	7	6	2	0	1	0	8	1	0	0	0	0	0	0	0	0	0
8	Lookout Point	6	9	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
9	Green Peter	12	3	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
10	Lookout Point	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11	Green Peter	19	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0
12	Lookout Point	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
13	Green Peter	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0
14	Lookout Point	1	7	0	0	3	0	0	0	9	0	3	0	0	0	0	0	0
15	Green Peter	9	2	4	0	0	0	5	0	0	0	0	2	0	0	0	0	0
16	Lookout Point	2	2	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
17	Green Peter	0	1	2	0	3	0	6	0	0	0	0	0	0	0	0	0	0
18	Lookout Point	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
19	Green Peter	1	1	0	0	3	0	5	0	0	0	0	0	0	0	0	0	0
20	Lookout Point	2	6	0	0	5	0	2	0	0	0	0	0	0	0	0	0	0
21	Green Peter	3	0	1	0	17	0	8	0	0	0	0	0	0	0	0	0	0
22	Lookout Point	0	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
23	Green Peter	6	0	0	0	3	0	52	0	0	0	0	1	0	0	0	0	0
24	Lookout Point	0	2	0	0	0	264	3	0	0	0	0	1	0	0	0	0	116*
25	Green Peter	19	55	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
26	Lookout Point	8	2	0	0	0	0	0	0	0	0	1	2	0	4	0	0	0
27	Green Peter	1	21	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
28	Lookout Point	14	8	0	0	0	0	0	0	0	0	0	2	1	1	2	6	0
29	Green Peter	1	29	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0
30	Lookout Point	8	14	0	0	15	0	0	0	0	0	1	92	0	0	275	0	0
30	Green Peter	2	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Lookout Point	9	20	0	0	4	0	0	0	1	0	1	227	2	296	608	40	0

Week	Reservoir	CHS	RBT	CUT	KOK	NPM	SCU	BLG	LWB	BBH	YBH	LSS	SMB	LMB	BLC	WHC	WAL	UNID
31	Green Peter	0	21	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
32	Lookout Point	7	2	0	0	0	0	0	0	0	0	0	514	5	0	546	0	0
32	Green Peter	3	98	0	0	3	0	2	0	0	1	0	9	0	0	0	0	0
33	Lookout Point	14	12	0	0	0	0	0	0	0	0	0	880	3	608	2875	0	0
33	Green Peter	24	90	0	0	0	0	1	0	0	1	1	7	0	0	0	0	0
34	Lookout Point	14	8	0	0	0	0	0	0	0	0	0	232	1	97	1508	0	0
34	Green Peter	4	61	0	0	1	0	6	0	0	4	0	4	0	0	0	0	0
35	Green Peter	10	62	0	0	2	0	5	0	0	5	0	25	0	0	0	0	0
36	Lookout Point	3	0	0	0	0	0	0	0	0	0	0	194	3	36	1387	0	0
37	Green Peter	26	94	0	0	0	0	19	0	0	12	0	17	3	0	0	0	0
38	Lookout Point	12	1	0	0	0	0	0	0	0	0	0	577	1	316	2405	2	0
38	Green Peter	1	25	0	0	1	0	28	0	0	13	0	71	0	4	0	0	0
39	Green Peter	20	38	0	0	0	0	20	0	0	10	0	15	0	0	1	0	0
40	Lookout Point	31	4	0	0	4	0	0	0	0	0	0	105	3	283	4168	7	0
41	Green Peter	19	4	0	1	0	0	47	0	0	1	0	12	1	0	0	0	0
42	Lookout Point	6	3	0	0	6	0	0	0	0	0	0	35	0	41	137	14	0
43	Green Peter	65	26	0	2	16	0	61	0	0	40	1	40	0	2	0	0	0
44	Lookout Point	39	17	0	0	20	0	1	0	0	0	7	13	8	59	62	31	0

Table 8. Catch summary of target species by reservoir zone. CHS-AD = ad clipped Chinook salmon, CHS-natural = natural origin Chinook salmon, RBT-AD = ad clipped *O. mykiss*, RBT-natural = natural origin *O. mykiss*.

Week	Reservoir	Species	Lifestage	LOWER	MIDDLE	UPPER	QUARTZVILLE
6	Lookout Point	RBT-natural	yearling	1	1	0	0
6	Lookout Point	CHS-AD	yearling	0	1	0	0
6	Lookout Point	CHS-natural	yearling	0	2	1	0
7	Green Peter	CHS-natural	fry	1	5	1	0
7	Green Peter	RBT-natural	adult	1	0	0	0
7	Green Peter	RBT-natural	yearling	1	0	0	1
7	Green Peter	RBT-natural	fry	0	0	3	0
8	Lookout Point	RBT-natural	yearling	2	4	3	0
8	Lookout Point	CHS-AD	yearling	0	1	0	0
8	Lookout Point	CHS-natural	yearling	0	1	4	0
9	Green Peter	CHS-AD	yearling	1	0	0	1
9	Green Peter	CHS-natural	fry	0	2	5	1
9	Green Peter	CHS-natural	yearling	0	1	1	0
9	Green Peter	RBT-natural	fry	0	0	1	1
9	Green Peter	RBT-natural	yearling	0	0	1	0
10	Lookout Point	RBT-natural	yearling	0	1	0	0
10	Lookout Point	CHS-natural	fry	0	0	1	0
10	Lookout Point	RBT-natural	Adult	0	0	1	0
11	Green Peter	CHS-AD	fry	1	3	11	3
11	Green Peter	CHS-natural	fry	0	0	1	0
12	Lookout Point	CHS-natural	fry	0	1	0	0
12	Lookout Point	CHS-natural	yearling	0	1	0	0
12	Lookout Point	RBT-natural	yearling	0	1	1	0
13	Green Peter	RBT-natural	yearling	1	0	0	0
13	Green Peter	CHS-AD	parr	0	0	0	1
14	Lookout Point	RBT-natural	yearling	4	1	2	0
14	Lookout Point	CHS-natural	yearling	0	0	1	0
15	Green Peter	CHS-natural	fry	0	0	0	3
15	Green Peter	CHS-natural	parr	0	1	5	0
15	Green Peter	RBT-AD	adult	0	1	0	0
15	Green Peter	RBT-natural	yearling	0	0	1	0
16	Lookout Point	CHS-AD	yearling	1	0	0	0
16	Lookout Point	CHS-natural	parr	0	1	0	0
16	Lookout Point	RBT-natural	yearling	0	1	1	0
17	Green Peter	RBT-AD	adult	1	0	0	0
18	Lookout Point	RBT-natural	yearling	1	1	3	0
19	Green Peter	CHS-natural	parr	0	0	0	1
19	Green Peter	RBT-natural	yearling	0	0	0	1
20	Lookout Point	CHS-natural	fry	0	0	2	0

Week	Reservoir	Species	Lifestage	LOWER	MIDDLE	UPPER	QUARTZVILLE
20	Lookout Point	RBT-AD	yearling	0	0	1	0
20	Lookout Point	RBT-natural	yearling	0	0	5	0
21	Green Peter	CHS-natural	subyearling	0	1	0	1
21	Green Peter	CHS-AD	subyearling	0	0	1	0
22	Lookout Point	RBT-natural	yearling	0	1	2	0
23	Green Peter	CHS-natural	subyearling	1	0	1	0
23	Green Peter	CHS-natural	yearling	1	0	0	0
23	Green Peter	CHS-AD	subyearling	0	0	3	0
24	Lookout Point	RBT-natural	yearling	1	0	1	0
25	Green Peter	CHS-AD	subyearling	1	0	0	0
25	Green Peter	CHS-natural	subyearling	4	4	7	1
25	Green Peter	CHS-natural	yearling	0	0	2	0
25	Green Peter	RBT-AD	adult	7	11	33	0
25	Green Peter	RBT-natural	yearling	1	0	2	0
25	Green Peter	RBT-natural	adult	0	0	1	0
26	Lookout Point	CHS-AD	subyearling	1	0	0	0
26	Lookout Point	CHS-natural	subyearling	7	0	0	0
26	Lookout Point	RBT-AD	adult	1	0	0	0
26	Lookout Point	RBT-natural	adult	0	0	1	0
27	Green Peter	RBT-AD	adult	7	2	12	0
27	Green Peter	CHS-natural	subyearling	0	0	1	0
28	Lookout Point	CHS-AD	subyearling	4	0	5	0
28	Lookout Point	CHS-natural	subyearling	1	1	2	0
28	Lookout Point	CHS-natural	yearling	1	0	0	0
28	Lookout Point	RBT-AD	adult	1	0	0	0
28	Lookout Point	RBT-natural	adult	4	0	2	0
28	Lookout Point	RBT-natural	yearling	0	0	1	0
29	Green Peter	RBT-AD	adult	7	4	15	0
29	Green Peter	RBT-natural	yearling	1	1	0	1
29	Green Peter	CHS-natural	subyearling	0	0	0	1
30	Lookout Point	CHS-AD	subyearling	6	0	0	0
30	Lookout Point	CHS-natural	subyearling	1	0	0	0
30	Lookout Point	CHS-natural	yearling	1	0	0	0
30	Lookout Point	RBT-AD	adult	4	1	1	0
30	Lookout Point	RBT-natural	adult	5	1	1	0
30	Lookout Point	RBT-natural	yearling	0	0	1	0
30	Green Peter	RBT-AD	adult	3	1	11	3
30	Green Peter	RBT-natural	yearling	1	0	0	0
30	Green Peter	CHS-natural	subyearling	0	2	0	0
30	Green Peter	RBT-natural	adult	0	0	1	0
31	Lookout Point	CHS-AD	subyearling	2	0	1	0
31	Lookout Point	CHS-AD	yearling	1	0	0	0
31	Lookout Point	CHS-natural	subyearling	2	1	0	0

Week	Reservoir	Species	Lifestage	LOWER	MIDDLE	UPPER	QUARTZVILLE
31	Lookout Point	CHS-natural	yearling	2	0	0	0
31	Lookout Point	RBT-AD	adult	1	0	0	0
31	Lookout Point	RBT-natural	adult	18	1	0	0
31	Green Peter	RBT-AD	adult	16	1	2	0
31	Green Peter	RBT-natural	adult	1	0	0	0
31	Green Peter	RBT-natural	yearling	1	0	0	0
32	Lookout Point	CHS-AD	subyearling	1	6	0	0
32	Lookout Point	RBT-natural	adult	2	0	0	0
32	Green Peter	CHS-AD	subyearling	2	0	0	0
32	Green Peter	CHS-natural	subyearling	1	0	0	0
32	Green Peter	RBT-AD	adult	44	13	31	1
32	Green Peter	RBT-AD	yearling	1	0	0	0
32	Green Peter	RBT-natural	adult	4	0	1	0
32	Green Peter	RBT-natural	yearling	3	0	0	0
33	Lookout Point	CHS-AD	subyearling	11	0	0	0
33	Lookout Point	CHS-natural	subyearling	3	0	0	0
33	Lookout Point	RBT-AD	adult	2	0	0	0
33	Lookout Point	RBT-natural	adult	10	0	0	0
33	Green Peter	CHS-AD	subyearling	1	0	0	0
33	Green Peter	CHS-natural	subyearling	7	11	2	3
33	Green Peter	RBT-AD	NA	37	15	19	6
33	Green Peter	RBT-natural	adult	9	1	0	0
33	Green Peter	RBT-natural	yearling	3	0	0	0
34	Lookout Point	CHS-AD	subyearling	10	0	0	0
34	Lookout Point	CHS-AD	yearling	1	0	0	0
34	Lookout Point	CHS-natural	subyearling	3	0	0	0
34	Lookout Point	RBT-AD	adult	2	0	0	0
34	Lookout Point	RBT-natural	adult	5	0	0	0
34	Lookout Point	RBT-natural	yearling	1	0	0	0
34	Green Peter	RBT-AD	adult	32	17	6	4
34	Green Peter	RBT-natural	adult	1	1	0	0
34	Green Peter	CHS-AD	yearling	0	1	0	0
34	Green Peter	CHS-natural	subyearling	0	1	1	1
35	Green Peter	CHS-AD	subyearling	1	2	0	0
35	Green Peter	CHS-natural	subyearling	2	4	1	0
35	Green Peter	RBT-AD	adult	26	17	7	8
35	Green Peter	RBT-natural	adult	1	2	0	0
35	Green Peter	RBT-natural	yearling	1	0	0	0
36	Lookout Point	CHS-AD	subyearling	3	0	0	0
37	Green Peter	CHS-AD	subyearling	2	0	1	0
37	Green Peter	CHS-natural	subyearling	14	1	2	5
37	Green Peter	CHS-natural	yearling	1	0	0	0
37	Green Peter	RBT-AD	Adult	30	38	7	8

Week	Reservoir	Species	Lifestage	LOWER	MIDDLE	UPPER	QUARTZVILLE
37	Green Peter	RBT-natural	adult	5	5	0	0
38	Lookout Point	CHS-AD	subyearling	9	0	0	0
38	Lookout Point	CHS-natural	subyearling	3	0	0	0
38	Lookout Point	RBT-natural	adult	1	0	0	0
38	Green Peter	CHS-natural	subyearling	1	0	0	0
38	Green Peter	RBT-AD	Adult	8	8	4	2
38	Green Peter	RBT-natural	adult	1	1	0	0
38	Green Peter	RBT-natural	yearling	0	0	1	0
39	Green Peter	CHS-AD	subyearling	1	0	0	1
39	Green Peter	CHS-natural	subyearling	11	4	0	3
39	Green Peter	RBT-AD	Adult	9	18	0	7
39	Green Peter	RBT-natural	adult	3	0	0	1
40	Lookout Point	CHS-AD	subyearling	24	0	0	0
40	Lookout Point	CHS-natural	subyearling	7	0	0	0
40	Lookout Point	RBT-natural	adult	4	0	0	0
41	Green Peter	CHS-AD	subyearling	2	2	0	1
41	Green Peter	CHS-natural	subyearling	6	5	0	3
41	Green Peter	RBT-AD	Adult	1	1	0	0
41	Green Peter	RBT-natural	adult	2	0	0	0
42	Lookout Point	CHS-AD	subyearling	3	0	0	0
42	Lookout Point	CHS-natural	subyearling	3	0	0	0
42	Lookout Point	RBT-AD	adult	1	0	0	0
42	Lookout Point	RBT-natural	adult	2	0	0	0
43	Green Peter	CHS-AD	subyearling	7	4	0	4
43	Green Peter	CHS-natural	subyearling	21	8	0	21
43	Green Peter	RBT-AD	Adult	8	7	0	5
43	Green Peter	RBT-natural	adult	1	1	0	2
43	Green Peter	RBT-natural	yearling	0	0	0	2
44	Lookout Point	CHS-AD	subyearling	20	0	0	0
44	Lookout Point	CHS-natural	subyearling	18	0	0	0
44	Lookout Point	CHS-natural	yearling	1	0	0	0
44	Lookout Point	RBT-AD	adult	1	0	0	0
44	Lookout Point	RBT-natural	adult	16	0	0	0

Table 9. Summary of target species lengths, tags implanted and recaptures. LOP – Lookout Point Reservoir, GPR – Green Peter Reservoir.

Week	Reservoir	Species	Lifestage	Catch	length_min	length_mean	length_max	# VIE tagged	# PIT tagged	# recap
6	LOP	CHS-AD	yearling	1	117	117	117	0	0	1
6	LOP	CHS-natural	yearling	3	80	84	88	0	3	0
6	LOP	RBT-natural	yearling	2	79	88	97	0	1	0
7	GPR	CHS-natural	fry	7	37	40.6	46	7	0	0

Week	Reservoir	Species	Lifestage	Catch	length_min	length_mean	length_max	# VIE tagged	# PIT tagged	# recap
7	GPR	RBT-natural	adult	1	305	305	305	0	1	0
7	GPR	RBT-natural	fry	3	35	36.7	38	3	0	0
7	GPR	RBT-natural	yearling	2	149	168.5	188	0	2	0
8	LOP	CHS-AD	yearling	1	174	174	174	0	0	1
8	LOP	CHS-natural	yearling	5	73	87.6	101	0	4	0
8	LOP	RBT-natural	yearling	9	103	153.2	206	0	9	0
9	GPR	CHS-AD	yearling	2	83	89	95	0	1*	2
9	GPR	CHS-natural	fry/parr	8	36	41.6	51	8	0	0
9	GPR	CHS-natural	yearling	2	117	118.5	120	0	2	0
9	GPR	RBT-natural	fry	2	34	35	36	1	0	0
9	GPR	RBT-natural	yearling	1	169	169	169	0	1	0
10	LOP	CHS-natural	fry/parr	1	47	47.0	47	1	0	0
10	LOP	RBT-natural	adult	1	296	296.0	296	0	1	0
10	LOP	RBT-natural	yearling	1	108	108.0	108	0	1	0
11	GPR	CHS-AD	fry/parr	1	56	56.0	56	0	0	1
11	GPR	CHS-natural	fry/parr	18	34	41.7	58	11	4	0
12	LOP	CHS-natural	fry	1	38	38	38	1	0	0
12	LOP	CHS-natural	yearling	1	97	97	97	0	1	0
12	LOP	RBT-natural	yearling	2**	107	126.5	146	0	0	0
13	GPR	CHS-AD	fry/parr	1	58	58	58	0	0	1
13	GPR	RBT-natural	yearling	1**	157	157	157	0	0	0
14	LOP	CHS-natural	yearling	1	93	93	93	0	1	0
14	LOP	RBT-natural	yearling	7**	96	148	174	0	0	0
15	GPR	CHS-natural	fry	3	32	37.7	42	2	0	0
15	GPR	CHS-natural	parr	6	51	59.8	74	0	6	0
15	GPR	RBT-AD	adult	1	229	229	229	0	0	0
15	GPR	RBT-natural	yearling	1**	149	149	149	0	0	0
16	LOP	CHS-AD	yearling	1	119	119	119	0	0	1
16	LOP	CHS-natural	parr	1	73	73	73	0	1	0
16	LOP	RBT-natural	yearling	2	145	165.5	186	0	1	0
17	GPR	RBT-AD	adult	1	290	290	290	0	0	0
18	LOP	RBT-natural	yearling	5	135	143.8	157	1	5	0
19	GPR	CHS-natural	parr	1	50	50	50	0	1	0
19	GPR	RBT-natural	yearling	1	116	116	116	0	1	0
20	LOP	CHS-natural	fry	2	43	43.5	44	0	1	0
20	LOP	RBT-AD	yearling	1	169	169	169	0	1	0
20	LOP	RBT-natural	yearling	5	96	120	138	0	4	0
21	GPR	CHS-AD	subyear	1	140	140	140	0	0	1
21	GPR	CHS-natural	subyear	2	65	84	103	0	0	0
22	LOP	RBT-natural	yearling	3	130	137.3	146	0	0	0
23	GPR	CHS-AD	subyear	3	96	104	113	0	0	2
23	GPR	CHS-natural	subyear	2	85	86.5	88	0	0	0
23	GPR	CHS-natural	yearling	1	169	169	169	0	0	0

Week	Reservoir	Species	Lifestage	Catch	length_min	length_mean	length_max	# VIE tagged	# PIT tagged	# recap
24	LOP	RBT-natural	yearling	2	131	136.5	142	0	0	0
25	GPR	CHS-AD	subyear	1	134	134	134	0	0	1
25	GPR	CHS-natural	subyear	16	84	106.2	135	0	0	0
25	GPR	CHS-natural	yearling	2	157	172.5	188	0	0	0
25	GPR	RBT-AD	adult	51	213	269.2	320	0	0	0
25	GPR	RBT-natural	adult	1	205	205	205	0	0	0
25	GPR	RBT-natural	yearling	3	158	176.7	190	0	0	0
26	LOP	CHS-AD	subyear	1	103	103	103	0	0	0
26	LOP	CHS-natural	subyear	7	81	112.4	134	0	0	0
26	LOP	RBT-AD	adult	1	320	320	320	0	0	0
26	LOP	RBT-natural	adult	1	255	255	255	0	0	0
27	GPR	CHS-natural	subyear	1	100	100	100	0	0	0
27	GPR	RBT-AD	adult	21	224	287.3	315	0	0	0
28	LOP	CHS-AD	subyear	9	86	107.6	141	0	0	0
28	LOP	CHS-natural	subyear	4	102	123.8	149	0	0	0
28	LOP	CHS-natural	yearling	1	249	249	249	0	0	0
28	LOP	RBT-AD	adult	1	304	304	304	0	0	0
28	LOP	RBT-natural	adult	6	203	252.7	312	0	0	0
28	LOP	RBT-natural	yearling	1	169	169	169	0	0	0
29	GPR	CHS-natural	subyear	1	98	98	98	0	0	0
29	GPR	RBT-AD	adult	26	257	297	329	0	0	0
29	GPR	RBT-natural	yearling	3	166	174.3	187	0	0	0
30	LOP	CHS-AD	subyear	6	116	132.5	153	0	0	0
30	LOP	CHS-natural	subyear	1	141	141	141	0	0	0
30	LOP	CHS-natural	yearling	1	150	150	150	0	0	0
30	LOP	RBT-AD	adult	6	265	325.3	375	0	0	0
30	LOP	RBT-natural	adult	7	211	318.3	485	0	0	0
30	LOP	RBT-natural	yearling	1	158	158	158	0	0	0
30	GPR	CHS-natural	subyear	2	146	159	172	0	0	0
30	GPR	RBT-AD	adult	18	277	299.2	330	0	0	0
30	GPR	RBT-natural	adult	1	264	264	264	0	0	0
30	GPR	RBT-natural	yearling	1	197	197	197	0	0	0
31	LOP	CHS-AD	subyear	3	101	123	143	0	0	0
31	LOP	CHS-AD	yearling	1	214	214	214	0	0	0
31	LOP	CHS-natural	subyear	3	125	136	148	0	0	0
31	LOP	CHS-natural	yearling	2	235	252.5	270	0	0	0
31	LOP	RBT-AD	adult	1	374	374	374	0	0	0
31	LOP	RBT-natural	adult	19	207	273.8	370	0	0	0
31	GPR	RBT-AD	adult	19	268	301.1	334	0	0	0
31	GPR	RBT-natural	adult	1	263	263	263	0	0	0
31	GPR	RBT-natural	yearling	1	176	176	176	0	0	0
32	LOP	CHS-AD	subyear	7	136	142	156	0	0	0
32	LOP	RBT-natural	adult	2	243	244	245	0	0	0

Week	Reservoir	Species	Lifestage	Catch	length_min	length_mean	length_max	# VIE tagged	# PIT tagged	# recap
32	GPR	CHS-AD	subyear	2	185	190	195	0	0	2
32	GPR	CHS-natural	subyear	1	185	185	185	0	0	0
32	GPR	RBT-AD	adult	89	270	305.1	335	0	0	0
32	GPR	RBT-AD	yearling	1	175	175	175	0	0	0
32	GPR	RBT-natural	adult	5	225	256.4	315	0	0	0
32	GPR	RBT-natural	yearling	3	201	213.7	225	0	0	0
33	LOP	CHS-AD	subyear	11	133	155.8	176	0	0	0
33	LOP	CHS-natural	subyear	3	141	152.7	166	0	0	0
33	LOP	RBT-AD	adult	2	320	335	350	0	0	0
33	LOP	RBT-natural	adult	10	218	279.1	365	0	0	0
33	GPR	CHS-AD	subyear	1	194	194	194	0	0	1
33	GPR	CHS-natural	subyear	23	162	189.5	208	0	0	1
33	GPR	RBT-AD	adult	77	262	307.8	343	0	0	0
33	GPR	RBT-natural	adult	10	232	270.4	321	0	0	0
33	GPR	RBT-natural	yearling	3	142	174	196	0	0	0
34	LOP	CHS-AD	subyear	10	144	159.8	182	0	0	0
34	LOP	CHS-AD	yearling	1	220	220	220	0	0	0
34	LOP	CHS-natural	subyear	3	117	152.3	180	0	0	1
34	LOP	RBT-AD	adult	2	370	402	434	0	0	0
34	LOP	RBT-natural	adult	5	204	236.4	304	0	0	0
34	LOP	RBT-natural	yearling	1	198	198	198	0	0	0
34	GPR	CHS-AD	yearling	1	223	223	223	0	0	0
34	GPR	CHS-natural	subyear	3	155	174.3	188	0	0	0
34	GPR	RBT-AD	Adult	59	269	308.8	349	0	0	0
34	GPR	RBT-natural	adult	2	243	246.5	250	0	0	0
35	GPR	CHS-AD	subyear	3	183	192.3	202	0	0	1
35	GPR	CHS-natural	subyear	7	193	200	206	0	0	0
35	GPR	RBT-AD	Adult	58	270	311.5	354	0	0	0
35	GPR	RBT-natural	adult	3	247	254.7	268	0	0	0
35	GPR	RBT-natural	yearling	1	245	245	245	0	0	0
36	LOP	CHS-AD	subyear	3	139	149.7	166	0	0	0
37	GPR	CHS-AD	subyear	3	112	175.7	220	0	0	1
37	GPR	CHS-natural	subyear	22	200	218.2	241	0	0	0
37	GPR	CHS-natural	yearling	1	270	270	270	0	0	0
37	GPR	RBT-AD	Adult	83	275	318	355	0	0	0
37	GPR	RBT-AD	Juvenile	1	154	154	154	0	0	0
37	GPR	RBT-natural	adult	10	234	269.8	337	0	0	0
38	LOP	CHS-AD	subyear	9	165	195.4	222	0	0	0
38	LOP	CHS-natural	subyear	3	160	191.3	213	0	0	1
38	LOP	RBT-natural	adult	1	221	221	221	0	0	0
38	GPR	CHS-natural	subyear	1	182	182	182	0	0	0
38	GPR	RBT-AD	Adult	22	301	317.2	333	0	0	0
38	GPR	RBT-natural	adult	2	233	250.5	268	0	0	0

Week	Reservoir	Species	Lifestage	Catch	length_min	length_mean	length_max	# VIE tagged	# PIT tagged	# recap
38	GPR	RBT-natural	yearling	1	184	184	184	0	0	0
39	GPR	CHS-AD	subyear	2	225	237.5	250	0	0	2
39	GPR	CHS-natural	subyear	18	178.8	224.6	253	0	0	0
39	GPR	RBT-AD	Adult	34	283	325.1	393	0	0	0
39	GPR	RBT-natural	adult	4	275	306.2	355	0	0	0
40	LOP	CHS-AD	subyear	24	151	198.2	240	0	0	0
40	LOP	CHS-natural	subyear	7	160	210.3	235	0	0	0
40	LOP	RBT-natural	adult	4	262	307.5	340	0	0	0
41	GPR	CHS-AD	subyear	5	148	189.4	253	0	0	3
41	GPR	CHS-natural	subyear	14	180	229.4	252	0	0	0
41	GPR	RBT-AD	Adult	2	314	314	314	0	0	0
41	GPR	RBT-natural	adult	2	200	218.5	237	0	0	0
42	LOP	CHS-AD	subyear	3	179	201.3	245	0	0	0
42	LOP	CHS-natural	subyear	3	200	228.3	265	0	0	0
42	LOP	RBT-AD	adult	1	502	502	502	0	0	0
42	LOP	RBT-natural	adult	2	255	286	317	0	0	0
43	Green Peter	CHS-AD	subyear	15	139	196.9	266	0	0	9
43	Green Peter	CHS-natural	subyear	50	161	243.7	280	0	0	0
43	Green Peter	RBT-AD	Adult	20	311	336	375	0	0	0
43	Green Peter	RBT-natural	adult	4	265	303.2	346	0	0	0
43	Green Peter	RBT-natural	yearling	2	226	253.5	281	0	0	0
44	Lookout Point	CHS-AD	subyear	20	150	191.9	263	0	0	0
44	Lookout Point	CHS-natural	subyear	18	144	209.1	284	0	0	5
44	Lookout Point	CHS-natural	yearling	1	326	326	326	0	0	0
44	Lookout Point	RBT-AD	adult	1	370	370	370	0	0	0
44	Lookout Point	RBT-natural	adult	16	262	310.4	368	0	0	0

*One recaptured fish was inadvertently tagged with a 2nd PIT tag. ** Not tagged, awaiting permit modification to allow for tagging RBT (modification has since been granted effective 4/16/2024).

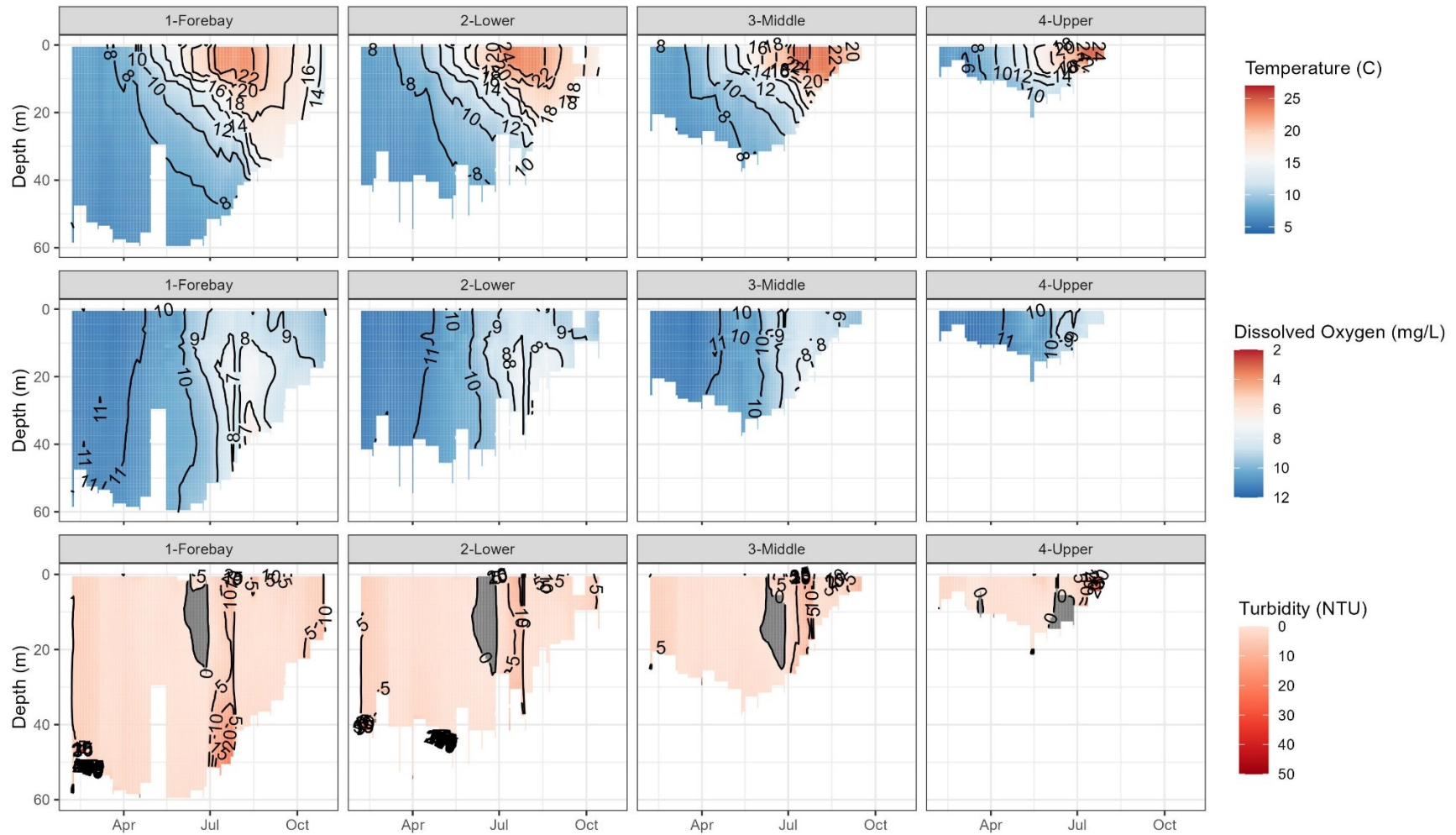


Figure 1. LOP 2024 limnology data. Note that turbidity data in gray are suspect due to a sensor malfunction/calibration issue. Readings in gray were slightly negative (erroneous) but secchi measurements taken concurrently support that turbidity was near zero.

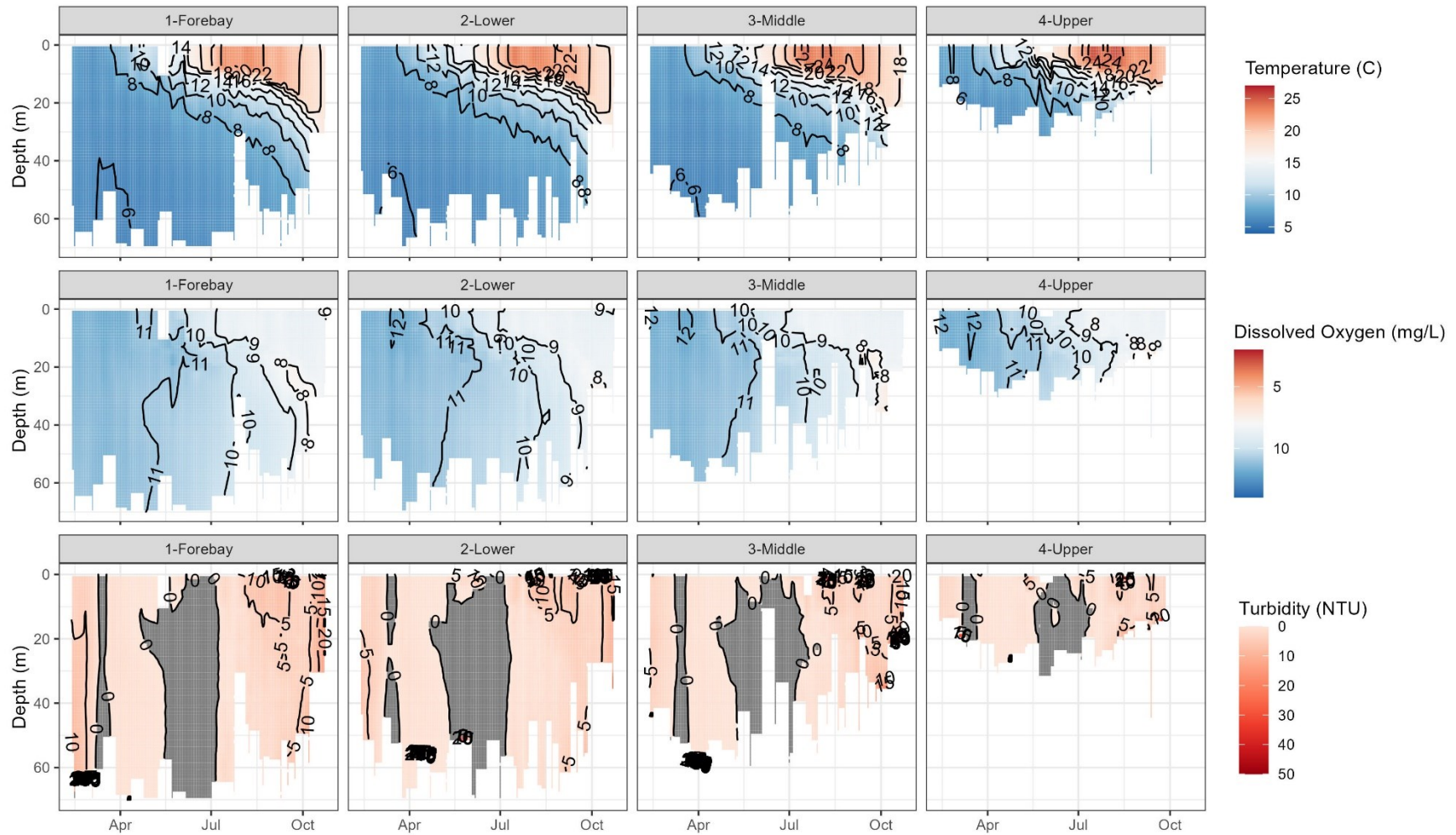


Figure 2. Green Peter 2024 limnology data. Note that turbidity data in gray are suspect due to a sensor malfunction/calibration issue. Readings in gray were slightly negative (erroneous) but secchi measurements taken concurrently support that turbidity was near zero.

Appendix A. Release Site Maps

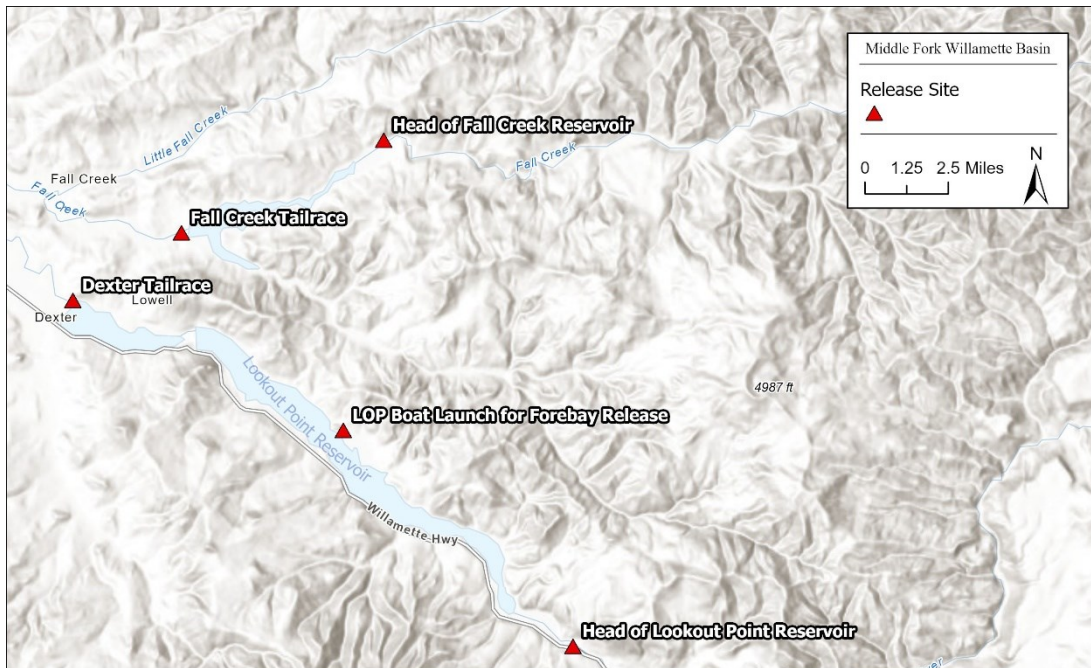


Figure A1. Map of LOP, Dexter tailrace and Fall Creek release locations within the Middle Fork Willamette Basin.

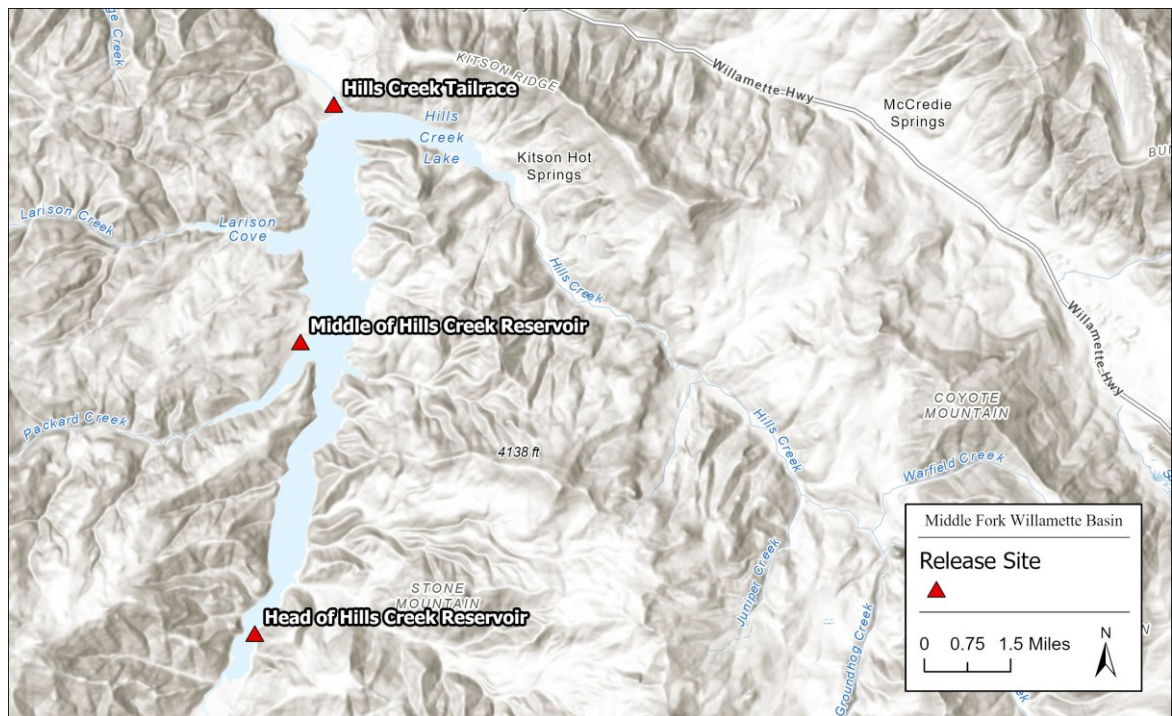


Figure A2. Map of Hills Creek Reservoir release locations within the Middle Fork Willamette Basin.

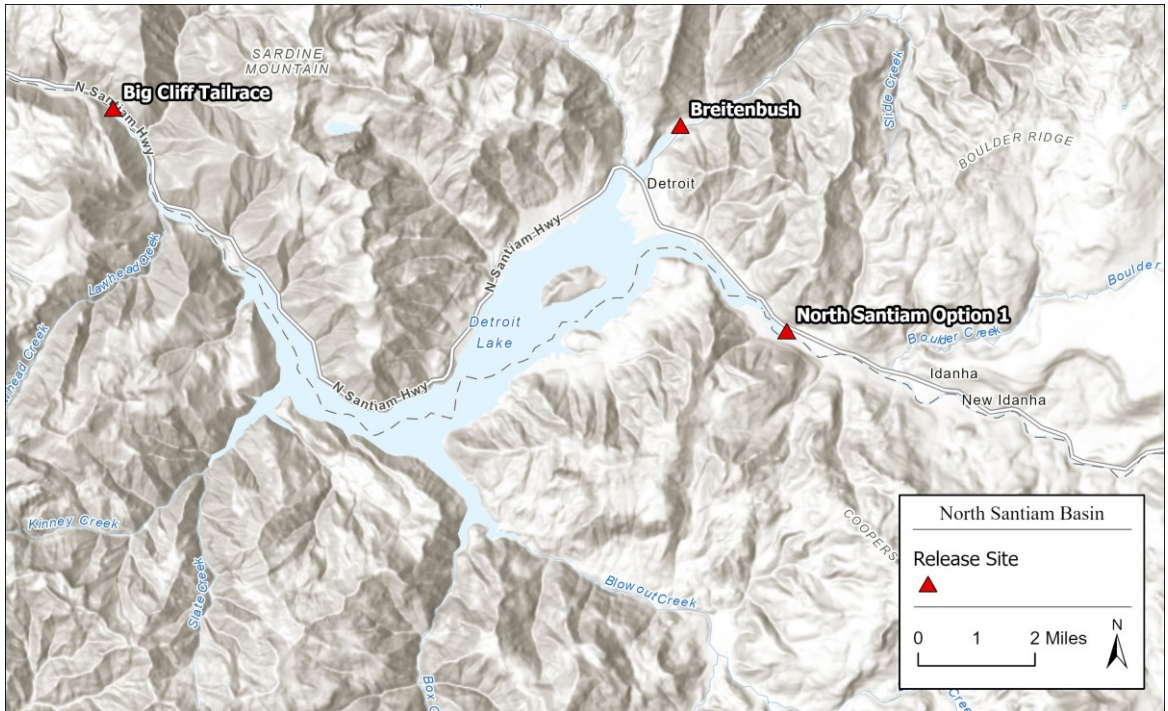


Figure A3. Map of release locations within the North Santiam Basin.

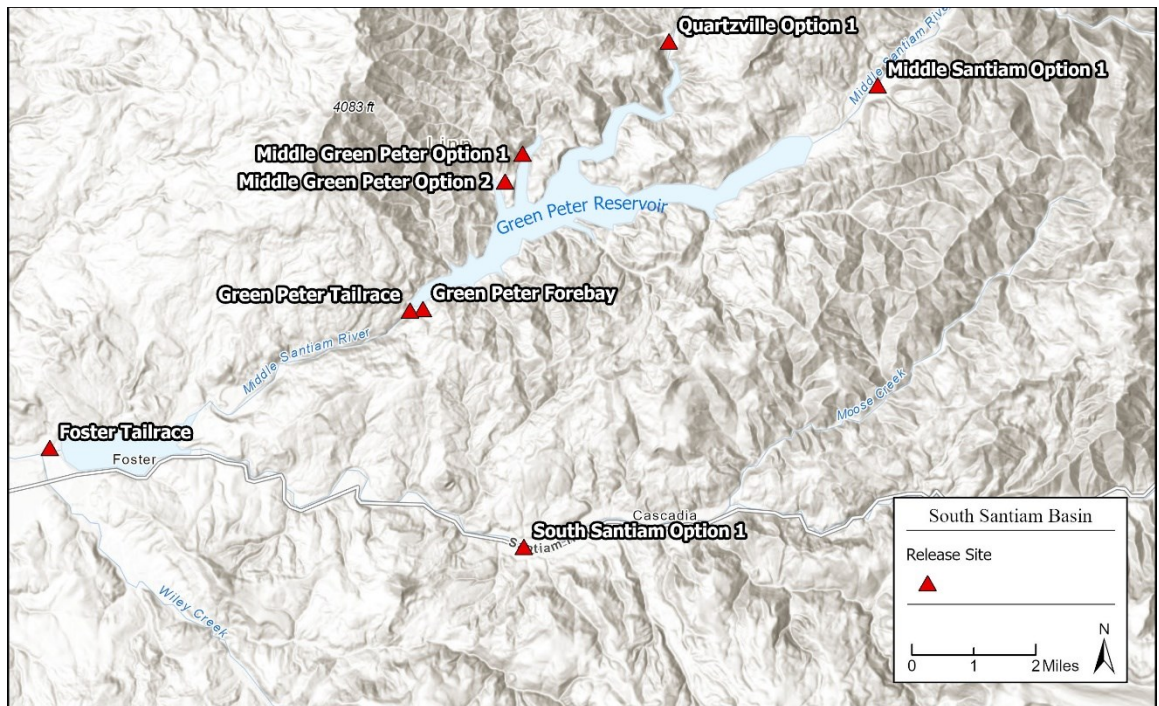


Figure A4. Map of release locations in the Middle/South Santiam basin including Green Peter Reservoir.

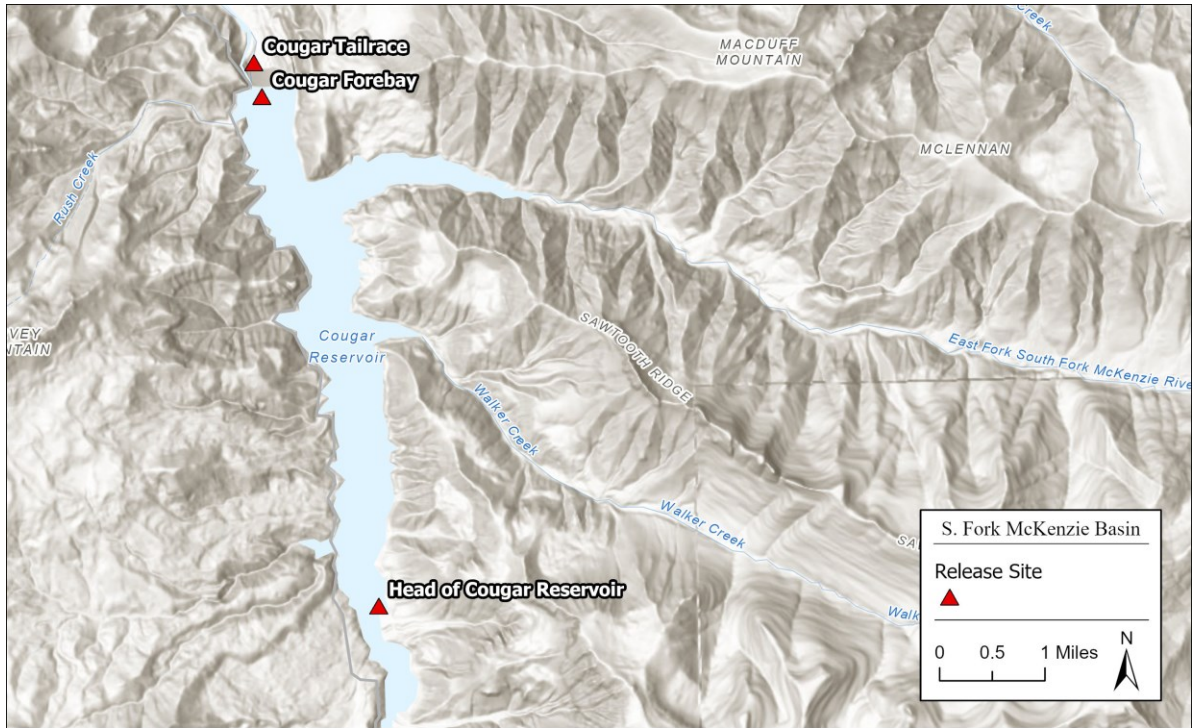


Figure A5. Map of release locations at Cougar Reservoir.

Appendix B. Reservoir Sampling Zones

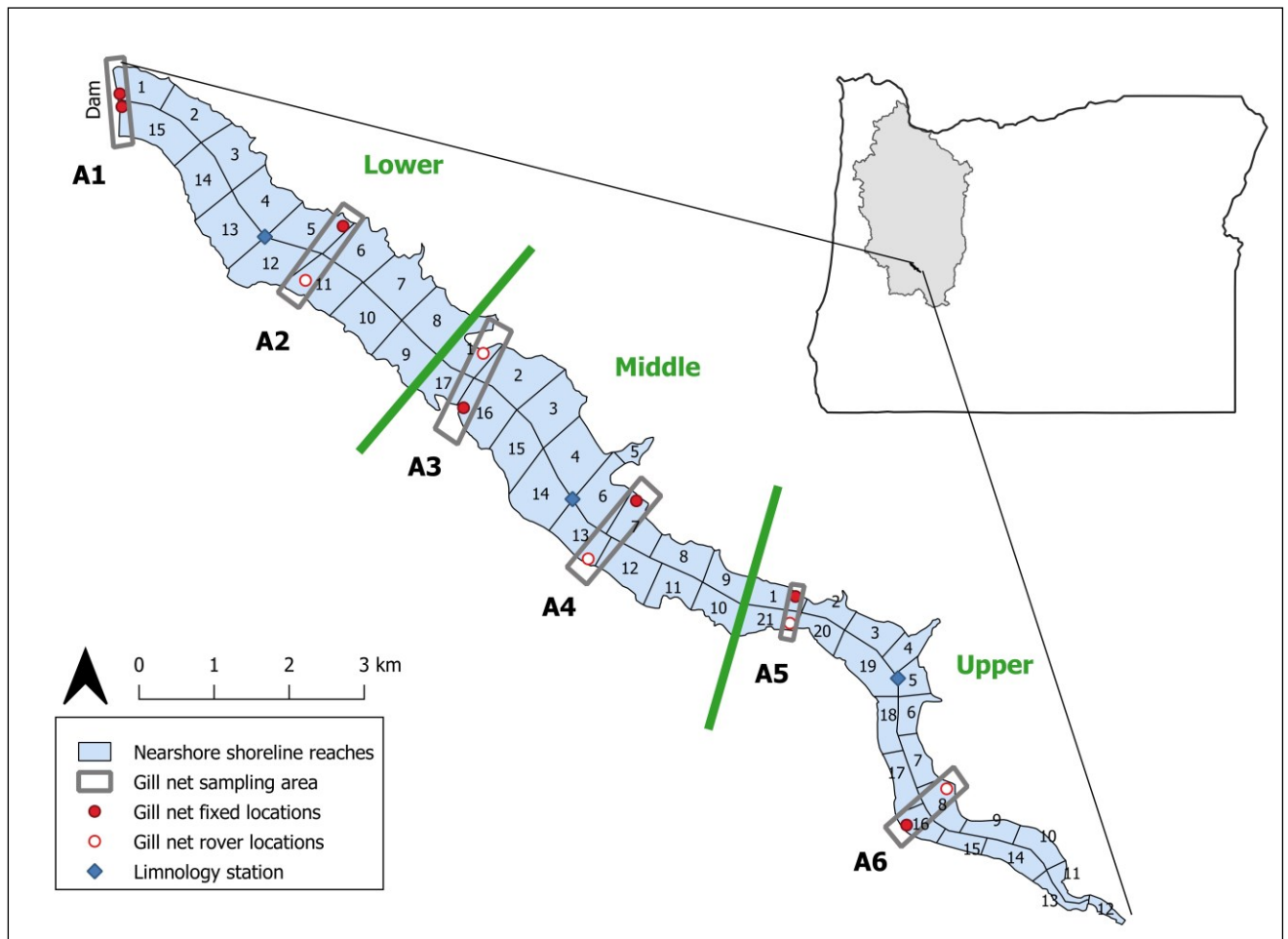


Figure B1. Map of LOP Reservoir nearshore shoreline reaches, reservoir zones (lower, middle and upper), gill netting sampling areas and limnological stations.

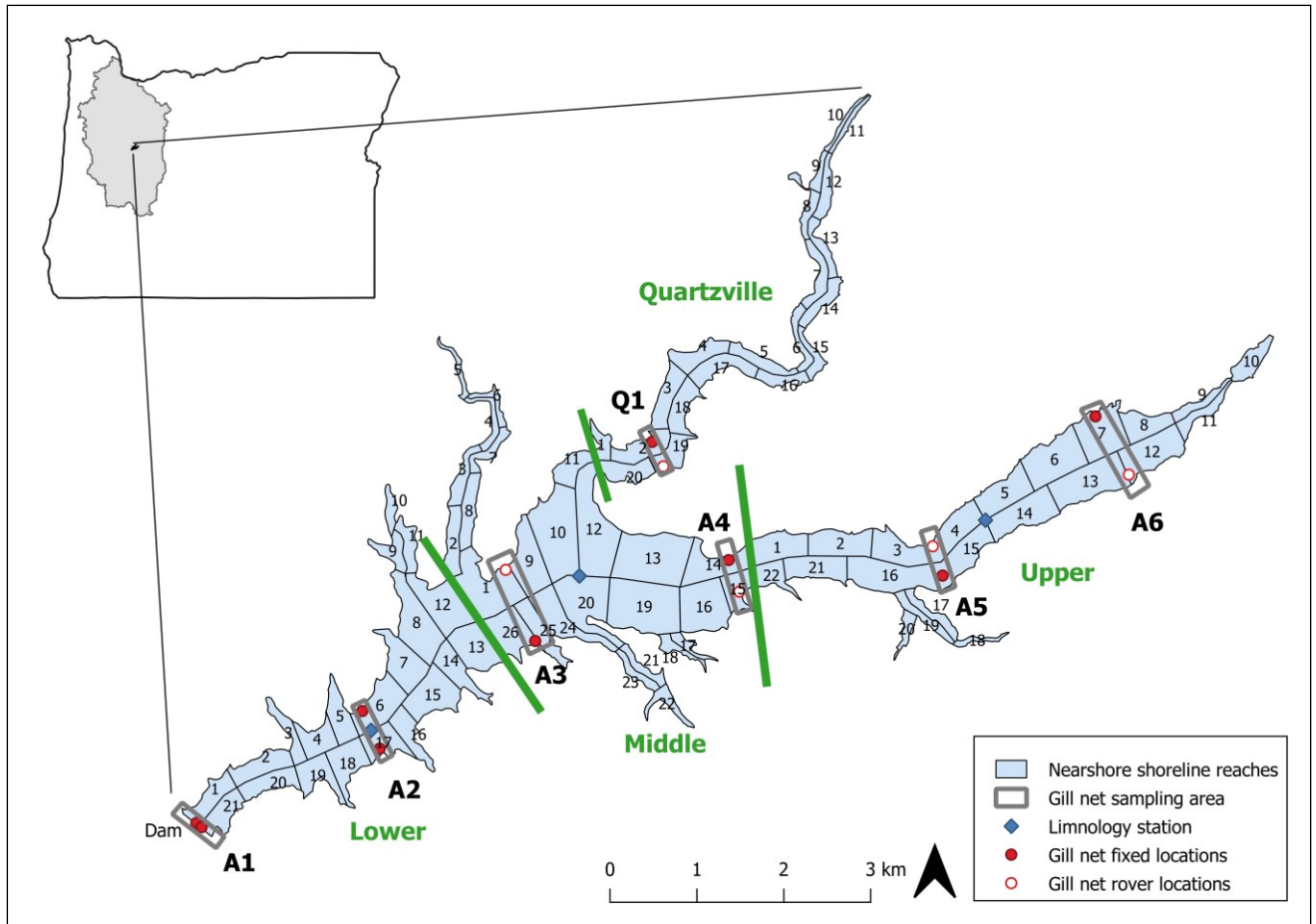


Figure B2. Map of Green Peter Reservoir nearshore shoreline reaches, reservoir zones (lower, middle and upper), gill netting sampling areas and limnological stations.

Appendix C. Hatchery Fish Sourced from ODFW Hatcheries

Table C1. Total brood year 2023 ODFW hatchery fish used for rotary screw trap efficiency tests (EAS) and for the bulk marking project (CFS) through October 15, 2024.

Brood Year 2023 - Juvenile Chinook for RM&E							
Subbasin	Life Stage	Pickup Timing Bulk Releases ¹	Total Allocation ²	Total Used (EAS)	Total Used (CFS)	Total Used	Total Remaining
North Santiam (21H)	Fry	Late February - April 2024	16500	0	15027	15027	1473
	Subyearling	September - November 2024	47000	11140	17999	29139	17861
	Yearling	February 2025	17000	0	0	0	17000
	All	NA	80500	11140	15027	26167	54333
South Santiam (24H)	Fry	Late February - April 2024	11000	0	9856	9856	1144
	Subyearling	August - October 2024	70000	18,750	25,863	44613	25387
	Yearling	February 2025	40000	0	0	0	40000
	All	NA	121000	18750	35719	54469	66531
McKenzie (23H)	Fry	February-April 2024	1,900	0	0	0	1900
	Subyearling	September-November 2024	4,500	5000		5000	-500
	Yearling	February-March 2025	0	0	0	0	0
	All	NA	6400	5,000	0	5000	1400
M. Fork Willamette (22H)	Fry	February-May 2024	0	0	0	0	0
	Subyearling	August-November 2024	8,000	8000		8000	0
	Yearling	January-February 2025	0	0	0	0	0
	All	NA	8000	8000	0	8000	0

1 - Stated pickup timing is for bulk release groups. Fish will be picked up at least once per month year-round for screw trap efficiency trials.

2 - Total numbers includes all fish needed for RM&E purposes per Brood Year (i.e., annual basis) and will come from a combination of 'routine production' and 'additional production for RM&E'. Numbers have been rounded up for general planning purposes as 'extra' fish are needed to account for tagging and holding studies.