

WILLAMETTE VALLEY FISH PASSAGE MONITORING –RESERVOIR DISTRIBUTION & RIVERINE SAMPLING

Bi-Weekly Report: March 01 – March 15, 2025



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RESERVOIR DISTRIBUTION SUMMARY

Reservoir sampling during the reporting period was conducted in the nearshore areas of Lookout Point and Green Peter reservoirs using Oneida lake traps and box minnow traps (Table 1). Each reservoir was sampled every other week.

On Lookout Point Reservoir, traps were deployed on 03/03/2025 and pulled on 03/06/2025. During the sampling week, average surface temperatures were 6.8 C (Table 2; Figure 1). Traps were set at the surface in each reservoir zone (Lower, Middle, and Upper). One Oneida trap and three box minnow traps were set in each reservoir longitudinal zone per sampling day. Over the course of the sampling week (n=9 Oneida sets, n=27 box minnow sets), three juvenile natural origin *O. mykiss*, seven cutthroat trout, one speckled dace, three northern pikeminnow, two reidside shiner, four bluegill, one smallmouth bass, and one white crappie were captured (Tables 1, 3-5). No Chinook salmon were captured. All three *O. mykiss* were captured in the upper reservoir zone and were implanted with PIT tags by our crew. There were no recaptures or sampling related mortalities of target species on Lookout Point Reservoir this reporting period.

Green Peter Reservoir was sampled from 3/10/2025 – 3/14/2025. On Thursday 03/13/2025, our crew suspended sampling at noon due to adverse weather conditions (snow and thunderstorms). As a result, they were unable to remove all traps from the lake that day. Six box minnow traps and one Oneida trap were left out on the lake to fish an additional 24h before being safely retrieved on Friday 03/14/2025. Over the sampling week, average surface temperatures were 7.8 C (Table 2; Figure 2). Traps were set at the surface in each reservoir zone (Lower, Middle, Upper, and Quartzville). Over the sampling period (n=12 Oneida sets, n=30 box minnow sets), 38 natural origin fry/parr Chinook salmon, one cutthroat trout, and seven bluegill were captured (Tables 1, 3-5). Chinook salmon were captured in the Upper (n=28), Quartzville (n=4), Middle (n=5) and Lower (n=1) zones. All natural origin Chinook salmon greater than 45mm were implanted with PIT tags (n=12). One natural origin Chinook parr was likely a recapture. That specimen had no PIT tag, but had a clear PIT tag scar and evidence of a prior caudal fin clip (likely shed tag). We reinserted a new PIT tag in that fish prior to release. There were no sampling related mortalities for target species this reporting period on Green Peter Reservoir.

Table 1. Start and end date by statistical week for 2025 reservoir sampling.

Week	Start	End	Reservoir	Net Type	Effort (# sets)	Effort (hrs)
6	2/3/2025	2/4/2025	Lookout Point	box minnow	5	118
6	2/3/2025	2/4/2025	Lookout Point	oneida	2	47
7	2/10/2025	2/12/2025	Green Peter	box minnow	18	414
7	2/10/2025	2/12/2025	Green Peter	oneida	8	187
8	2/17/2025	2/20/2025	Lookout Point	box minnow	21	485
8	2/17/2025	2/20/2025	Lookout Point	oneida	9	208
9	2/24/2025	2/27/2025	Green Peter	box minnow	26	615
9	2/24/2025	2/27/2025	Green Peter	oneida	11	261
10	3/3/2025	3/6/2025	Lookout Point	box minnow	27	646
10	3/3/2025	3/6/2025	Lookout Point	oneida	9	214
11	3/10/2025	3/14/2025	Green Peter	box minnow	30	841
11	3/10/2025	3/14/2025	Green Peter	oneida	12	301

Table 2. Mean surface water temperature measured during each trap net deployment.

Week	Reservoir	Mean Water Surface Temperature °C
6	Lookout Point	4.3
7	Green Peter	4.8
8	Lookout Point	4.8
9	Green Peter	6.2
10	Lookout Point	6.8
11	Green Peter	7.8

Table 3. Summary of total catch by reservoir. CHS – Chinook salmon, RBT – *O. mykiss*, CUT - Cutthroat trout, KOK – Kokanee, DAC – Speckled Dace, NPM - Northern Pikeminnow, RSS – Redside Shiner, 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	DAC	NPM	RSS	SCU	BLG	LWB	BBH	YBH	LSS	SMB	LMB	BLC	WHC	WAL	UNID
6	Lookout Point	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Green Peter	11	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8	Lookout Point	1	2	2	0	1	1	0	0	1	0	0	0	0	2	0	0	0	0	0
9	Green Peter	28	1	4	0	0	3	0	0	15	0	0	0	0	0	0	0	0	0	0
10	Lookout Point	0	3	7	0	1	3	2	0	4	0	0	0	0	1	0	0	1	0	0
11	Green Peter	38	0	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0

Table 4. Catch summary of Chinook salmon and *O. mykiss* 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	Adult	0	0	1	0
7	Green Peter	CHS-AD	Yearling	0	1	0	0
7	Green Peter	CHS-natural	Fry	0	0	10	0
7	Green Peter	RBT-AD	Adult	0	1	0	0
8	Lookout Point	CHS-AD	Yearling	1	0	0	0
8	Lookout Point	RBT-natural	Adult	0	1	0	0
8	Lookout Point	RBT-natural	Juvenile	0	1	0	0
9	Green Peter	CHS-natural	Fry	0	8	11	1
9	Green Peter	CHS-natural	Sub-Yearling	0	4	4	0
9	Green Peter	RBT-natural	Juvenile	0	0	0	1
10	Lookout Point	RBT-natural	Juvenile	0	0	3	0
11	Green Peter	CHS-natural	Fry	1	2	21	2
11	Green Peter	CHS-natural	Sub-Yearling	0	3	7	2

Table 5. Summary of Chinook salmon and *O. mykiss* lengths, tags implanted, recaptures and sampling mortalities. LOP – Lookout Point Reservoir, GPR – Green Peter Reservoir. FL = fork length. *One fish was captured that had no PIT tag, but had a PIT tag scar and evidence of prior fin clip (likely tag shed).

Week	Reservoir	Species	Lifestage	Catch	Min FL (mm)	Mean FL (mm)	Max FL (mm)	# VIE tagged	# PIT tagged	# Recap	mortalities
6	Lookout Point	RBT-natural	Adult	1	235	235	235	0	0	0	0
7	Green Peter	CHS-AD	Yearling	1	95	95	95	0	0	0	1
7	Green Peter	CHS-natural	Fry	10	39	42.4	45	0	0	0	1
7	Green Peter	RBT-AD	Adult	1	334	334	334	0	0	0	0
8	Lookout Point	CHS-AD	Yearling	1	120	120	120	0	1	0	0
8	Lookout Point	RBT-natural	Adult	1	359	359	359	0	0	0	0
8	Lookout Point	RBT-natural	Juvenile	1	80	80	80	0	1	0	0
9	Green Peter	CHS-natural	Fry	20	34	39	44	0	0	0	2
9	Green Peter	CHS-natural	Sub-Yearling	8	46	49.9	53	0	6	0	3
9	Green Peter	RBT-natural	Juvenile	1	182	182	182	0	1	0	0
10	Lookout Point	RBT-natural	Juvenile	3	116	117	118	0	3	0	0
11	Green Peter	CHS-natural	Fry	26	34	39.8	44	0	0	0	0
11	Green Peter	CHS-natural	Sub-Yearling	12	46	52	58	0	12	1*	0

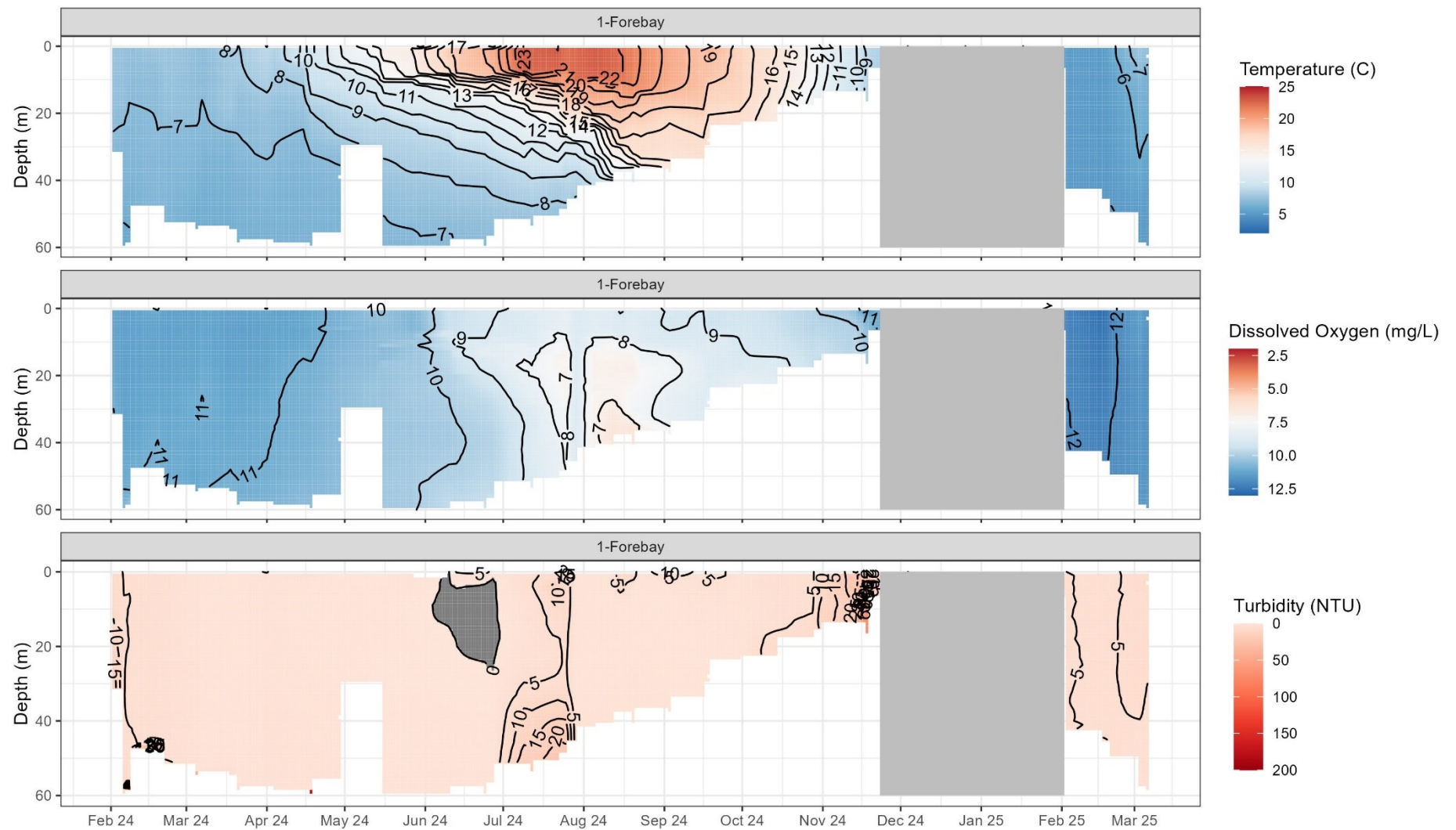


Figure 1. Lookout Point limnology data. Light gray indicates no sampling. Turbidity data in dark gray have been removed due to a sensor malfunction/calibration issue.

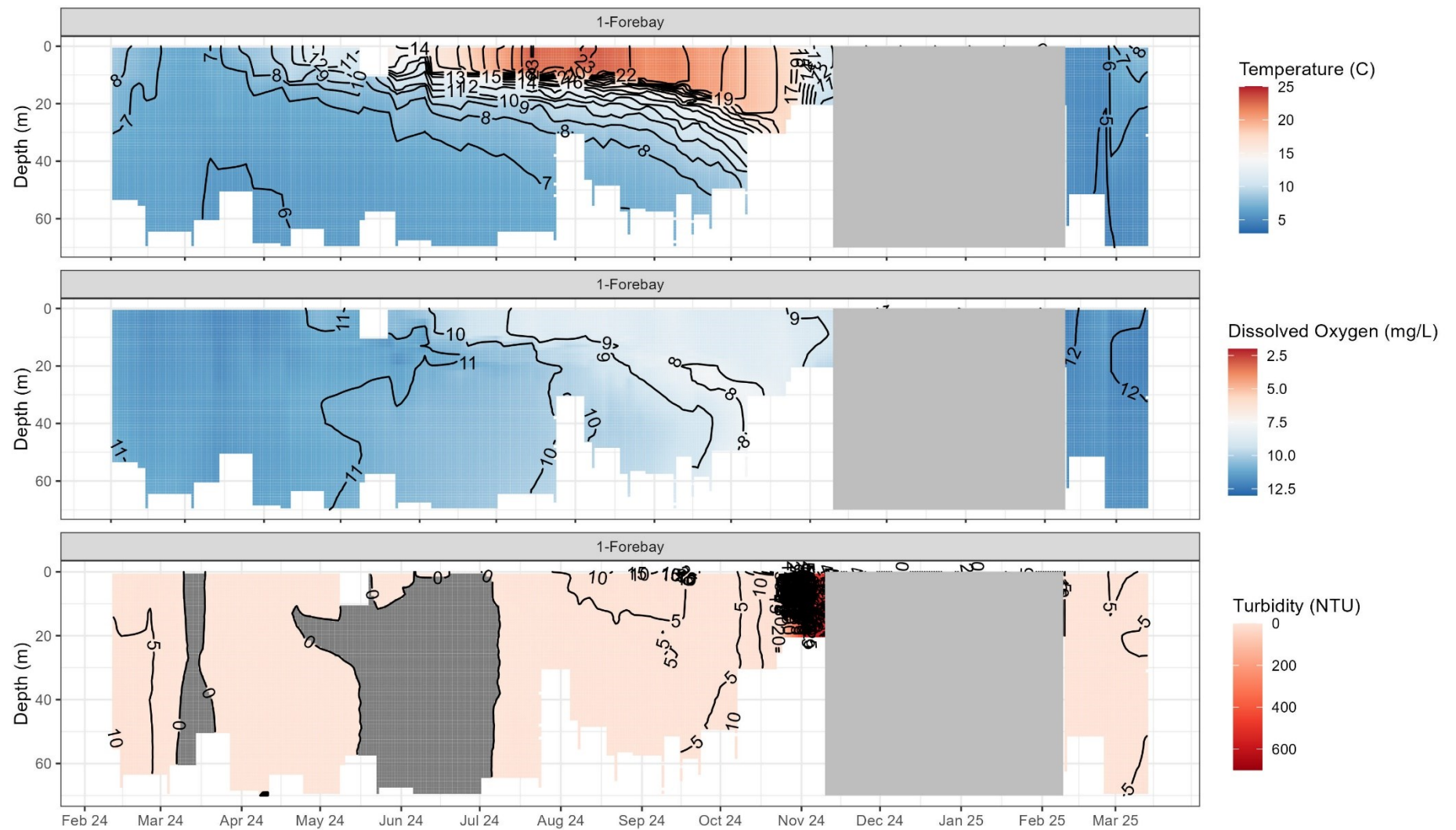


Figure 2. Green Peter limnology data. Light gray indicates no sampling. Turbidity data in dark gray have been removed due to a sensor malfunction/calibration issue.

RIVERINE SAMPLING SUMMARY

Riverine sampling was conducted on a weekly basis during the reporting for both the Middle Santiam River and Quartzville Creek using a 20 m river seine and 9.1 m pole seine.

Quartzville Creek was sampled this reporting period from 3/4/2025 – 3/6/2025 (Week 10) and 3/10/2025 - 3/14/2025 (Week 11) (Table 6). Week 10 effort consisted of 24 seine hauls over three days (Table 6). The water temperature averaged 6.06 C for Week 10 (Table 7). Over three days of sampling (n=14 pole seine hauls, n=10 river seine hauls), no target species were captured. Non-target catch consisted of 27 unidentified dace (Tables 8). Week 11 consisted of three days of seining effort 3/10/2025 - 3/12/2025 and two nights 3/13/2025 - 3/14/2025. Week 11 daytime effort consisted of 25 seine hauls (Table 6). The water temperature averaged 5.7 C for week 11 (Table 7). Over the three days of sampling (n=16 pole seine hauls, n=9 river seine hauls), no target species were captured. The only fish caught were 55 unidentified dace. Week 11 nighttime effort consisted of 12 seine hauls (Table 6). Over the two nights of sampling (n = 4 pole seine hauls, n = 8 river seine hauls), 10 Chinook salmon and five rainbow trout were captured; along with 29 unidentified dace, 41 unidentified sculpin, one juvenile large-scale sucker, and one unidentified lamprey (Table 8). Of the Chinook salmon captured, five were natural origin fry, two were natural origin yearling smolts, and three were hatchery origin fry (Table 9 and 10). The hatchery origin fry were recaptures from the bulk marking project releases that took place on 3/12/2025 above the seining locations in Quartzville Creek. The two Chinook salmon smolts and one fry (47mm) were PIT tagged and released downstream of the seining location. All rainbow trout were of natural origin, consisting of four juveniles and one adult.

The Middle Santiam River was sampled this reporting period from 3/6/2025 – 3/8/2025 (Week 10), as well as from 3/10/2025 - 3/11/2025 and 3/13/2025 - 3/15/2025 (Week 11) (Table 6). Week 10 effort on the Middle Santiam consisted of 25 hauls over three days. The water temperature for the week averaged 5.77 C (Table 7). Over the three days of sampling (n=23 pole seine hauls, n=2 river seine hauls), no target species were captured. Two non-target unidentified juvenile dace were captured. Week 11 on the Middle Santiam consisted of two nights of seining effort on 3/10/2025 - 3/11/2025 and 3 days of seining on 3/13/2025 - 3/15/2025. The water temperature for the week averaged 5.94 C (Table 7). Week 11 nighttime effort consisted of 11 hauls. Over two nights of sampling (n=9 pole seine hauls, n=2 river seine hauls), two Chinook salmon and four rainbow trout were captured, along with four dace, one sculpin, one sucker, and two lamprey (Tables 8-10). Of the Chinook salmon captured, one was a natural origin fry and one was a hatchery origin yearling smolt. The hatchery smolt was from a RST trap efficiency trial conducted using hatchery smolts that took place on 3/9/2025. The hatchery Chinook salmon smolt was PIT tagged by the seining crew as it was captured without a tag and released downstream of the seining location. All rainbow trout were of natural origin, consisting of four juveniles (<200mm). Week 11 daytime effort consisted of 24 hauls over three days of sampling 3/13/2025 - 3/15/2025. Over the sample days (n=18 pole seines, n=6 river seines), three Chinook salmon and one unidentified dace were captured. Of the Chinook salmon captured, two were natural origin fry and one fry was of hatchery origin. The hatchery origin fry was a PIT tagged recapture from the bulk marking releases that took place on 3/12/2025 above the seining locations in the Middle Santiam River.

Table 6. Start and end date by statistical week for riverine sampling.

Week	Start	End	River	Day/ Night	Seine Type	Effort (#)
4	1/23/2025	1/24/2025	Middle Santiam	Day	Pole	17
4	1/23/2025	1/24/2025	Middle Santiam	Day	River	0
5	1/29/2025	1/31/2025	Middle Santiam	Day	Pole	18

Week	Start	End	River	Day/ Night	Seine Type	Effort (#)
5	1/29/2025	1/31/2025	Middle Santiam	Day	River	0
6	2/3/2025	2/4/2025	Quartzville Creek	Day	Pole	11
6	2/3/2025	2/4/2025	Quartzville Creek	Day	River	7
6	2/5/2025	2/7/2025	Middle Santiam	Day	Pole	17
6	2/5/2025	2/7/2025	Middle Santiam	Day	River	4
7	2/11/2025	2/14/2025	Middle Santiam	Day	Pole	17
7	2/11/2025	2/14/2025	Middle Santiam	Day	River	1
8	2/19/2025	2/20/2025	Quartzville Creek	Day	Pole	11
8	2/19/2025	2/20/2025	Quartzville Creek	Day	River	1
8	2/17/2025	2/21/2025	Middle Santiam	Day	Pole	15
8	2/17/2025	2/21/2025	Middle Santiam	Day	River	0
9	2/27/2025	3/1/2025	Quartzville Creek	Day	Pole	18
9	2/27/2025	3/1/2025	Quartzville Creek	Day	River	6
9	2/28/2025	3/1/2025	Middle Santiam	Day	Pole	9
9	2/28/2025	3/1/2025	Middle Santiam	Day	River	0
10	3/4/2025	3/6/2025	Quartzville Creek	Day	Pole	14
10	3/4/2025	3/6/2025	Quartzville Creek	Day	River	10
10	3/6/2025	3/8/2025	Middle Santiam	Day	Pole	23
10	3/6/2025	3/8/2025	Middle Santiam	Day	River	2
11	3/10/2025	3/12/2025	Quartzville Creek	Day	Pole	16
11	3/10/2025	3/12/2025	Quartzville Creek	Day	River	9
11	3/13/2025	3/14/2025	Quartzville Creek	Night	Pole	4
11	3/13/2025	3/14/2025	Quartzville Creek	Night	River	8
11	3/10/2025	3/11/2025	Middle Santiam	Night	Pole	9
11	3/10/2025	3/11/2025	Middle Santiam	Night	River	2
11	3/13/2025	3/15/2025	Middle Santiam	Day	Pole	18
11	3/13/2025	3/15/2025	Middle Santiam	Day	River	6

Table 7. Mean water temperature per sample week for riverine sampling.

Week	River	Mean Water Temperature °C
4	Middle Santiam	4.45
5	Middle Santiam	3.01
5	Quartzville Creek	2.68
6	Middle Santiam	3.75
6	Quartzville Creek	3.65
7	Middle Santiam	2.76
7	Quartzville Creek	2.60
8	Middle Santiam	5.14
8	Quartzville Creek	5.46
9	Middle Santiam	5.88
9	Quartzville Creek	6.32
10	Middle Santiam	5.77

Week	River	Mean Water Temperature °C
10	Quartzville Creek	6.06
11	Middle Santiam	5.94
11	Quartzville Creek	5.7

Table 8. Summary of total catch by river. CHS – Chinook salmon, RBT – *O. mykiss*, DACE – Unidentified Dace, SCU – Unidentified Sculpin, Sucker - *Sucker spp*, Lamprey - *Lamprey spp*.

Week	River	Day/ Night	CHS	RBT	DACE	SCU	Sucker	Lamprey
4	Middle Santiam	Day	4	0	1	0	0	0
5	Middle Santiam	Day	1	0	1	0	0	0
6	Quartzville Creek	Day	0	0	3	1	0	0
6	Middle Santiam	Day	6	0	1	0	0	0
7	Middle Santiam	Day	2	0	0	0	0	0
8	Quartzville Creek	Day	3	0	11	1	0	0
8	Middle Santiam	Day	6	0	0	0	0	0
9	Quartzville Creek	Day	1	0	26	4	0	0
9	Middle Santiam chin	Day	0	0	1	0	0	0
10	Quartzville Creek	Day	0	0	27	0	0	0
10	Middle Santiam	Day	0	0	2	0	0	0
11	Quartzville Creek	Day	0	0	55	0	0	0
11	Quartzville Creek	Night	10	5	29	41	1	1
11	Middle Santiam	Night	2	4	4	1	1	2
11	Middle Santiam	Day	3	0	1	0	0	0

Table 9. Catch summary of target species by habitat unit type for riverine sampling. 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	River	Species	Lifestage	Riffle	Run	Pool	Pooltail	Total
4	Middle Santiam	CHS-natural	fry	0	0	4	0	4
5	Middle Santiam	CHS-natural	fry	0	0	1	0	1
6	Quartzville Creek	No Catch	-	0	0	0	0	0
6	Middle Santiam	CHS-natural	fry	0	0	6	0	6
7	Middle Santiam	CHS-natural	fry	0	0	2	0	2
8	Quartzville Creek	CHS-natural	fry	0	0	3	0	3
8	Middle Santiam	CHS-natural	fry	0	0	7	0	7
9	Quartzville Creek	CHS-natural	fry	0	0	1	0	1
9	Middle Santiam	No Catch	-	0	0	0	0	0
10	Quartzville Creek	No Catch	-	0	0	0	0	0
10	Middle Santiam	No Catch	-	0	0	0	0	0
11	Quartzville Creek	CHS-natural	fry	0	0	5	0	5
11	Quartzville Creek	CHS-natural	smolt	0	0	2	0	2
11	Quartzville Creek	CHS- hatchery	fry	0	0	3	0	3
11	Quartzville Creek	RBT- natural	juvenile	0	0	4	0	4

Week	River	Species	Lifestage	Riffle	Run	Pool	Pooltail	Total
11	Quartzville Creek	RBT-natural	adult	0	0	1	0	1
11	Middle Santiam	CHS-natural	fry	0	1	2	0	3
11	Middle Santiam	CHS-hatchery	fry	0	0	1	0	1
11	Middle Santiam	CHS- hatchery	smolt	0	0	1	0	1
11	Middle Santiam	RBT- natural	juvenile	0	0	4	0	4

Table 10. Summary of target species lengths, tags implanted and recaptures from riverine sampling. MS = Middle Santiam.

Week	River	Species	Lifestage	Catch	Min FL	Mean FL	Max FL	# PIT tagged	# recap
4	MS	CHS-natural	fry	4	32	35.2	40	0	0
5	MS	CHS-natural	fry	1	39	39	39	0	1
6	QTZ	No Catch	-	0	-	-	-	0	0
6	MS	CHS-natural	fry	6	37	39.4	45	2	0
7	MS	CHS-natural	fry	2	35	35.5	36	0	0
8	QTZ	CHS-natural	fry	3	31	34	37	0	0
8	MS	CHS-natural	fry	7	34	35.9	42	0	0
9	QTZ	CHS-natural	fry	1	29	29	29	0	0
9	MS	No Catch	-	0	-	-	-	0	0
10	QTZ	No Catch	-	0	-	-	-	0	0
10	MS	No Catch	-	0	-	-	-	0	0
11	QTZ	CHS-natural	fry	5	33	40.2	46	1	0
11	QTZ	CHS-natural	smolt	2	109	116.5	124	2	0
11	QTZ	CHS- hatchery	fry	3	44	46	47	0	3
11	QTZ	RBT- natural	juvenile	4	92	94.75	99	0	0
11	QTZ	RBT-natural	adult	1	205	205	205	0	0
11	MS	CHS-natural	fry	3	33	36.67	39	0	0
11	MS	CHS- hatchery	fry	1	47	47	47	0	1
11	MS	CHS- hatchery	smolt	1	135	135	135	1	1
11	MS	RBT- natural	juvenile	4	121	157.75	187	0	0

APPENDIX A. RESERVOIR SAMPLING ZONES

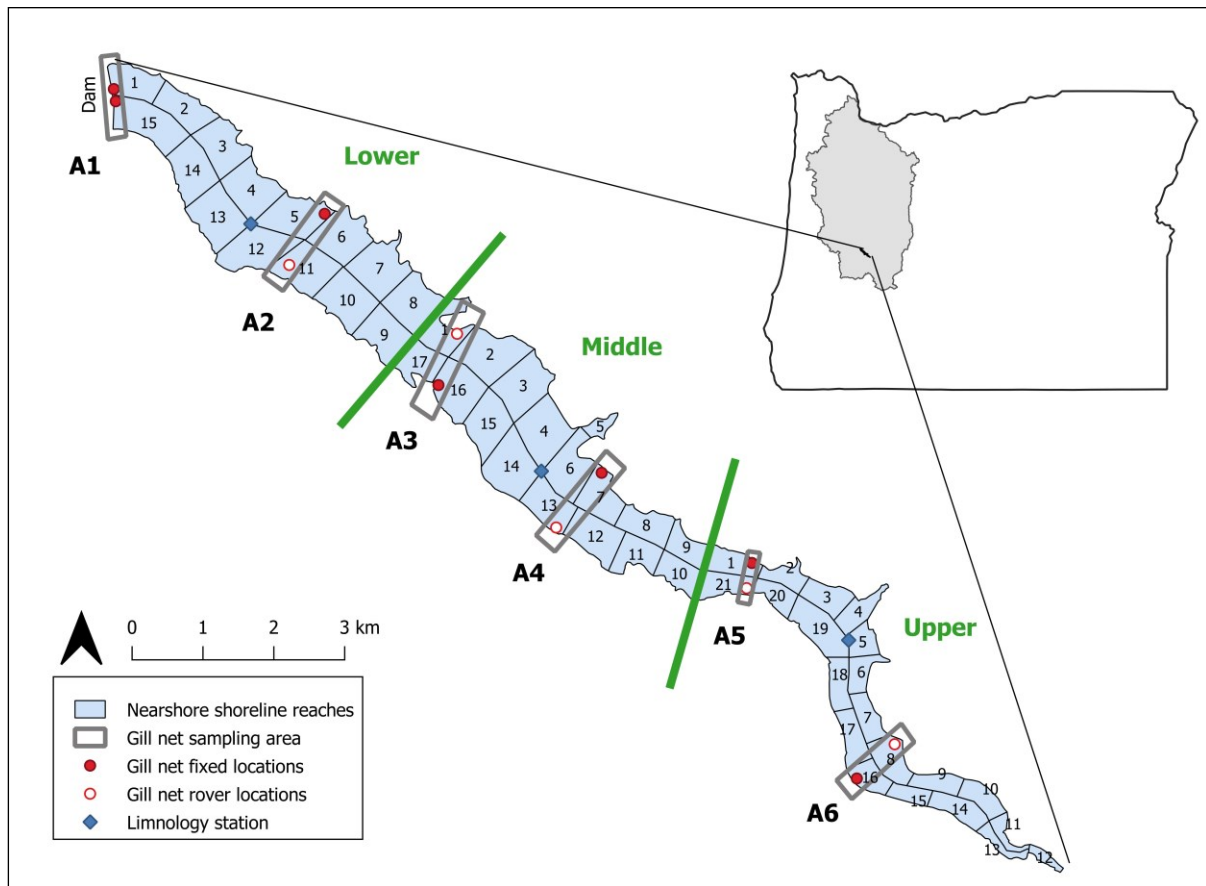


Figure A1. Map of LOP Reservoir nearshore shoreline reaches, reservoir zones (lower, middle and upper), gill netting sampling areas and limnological stations.

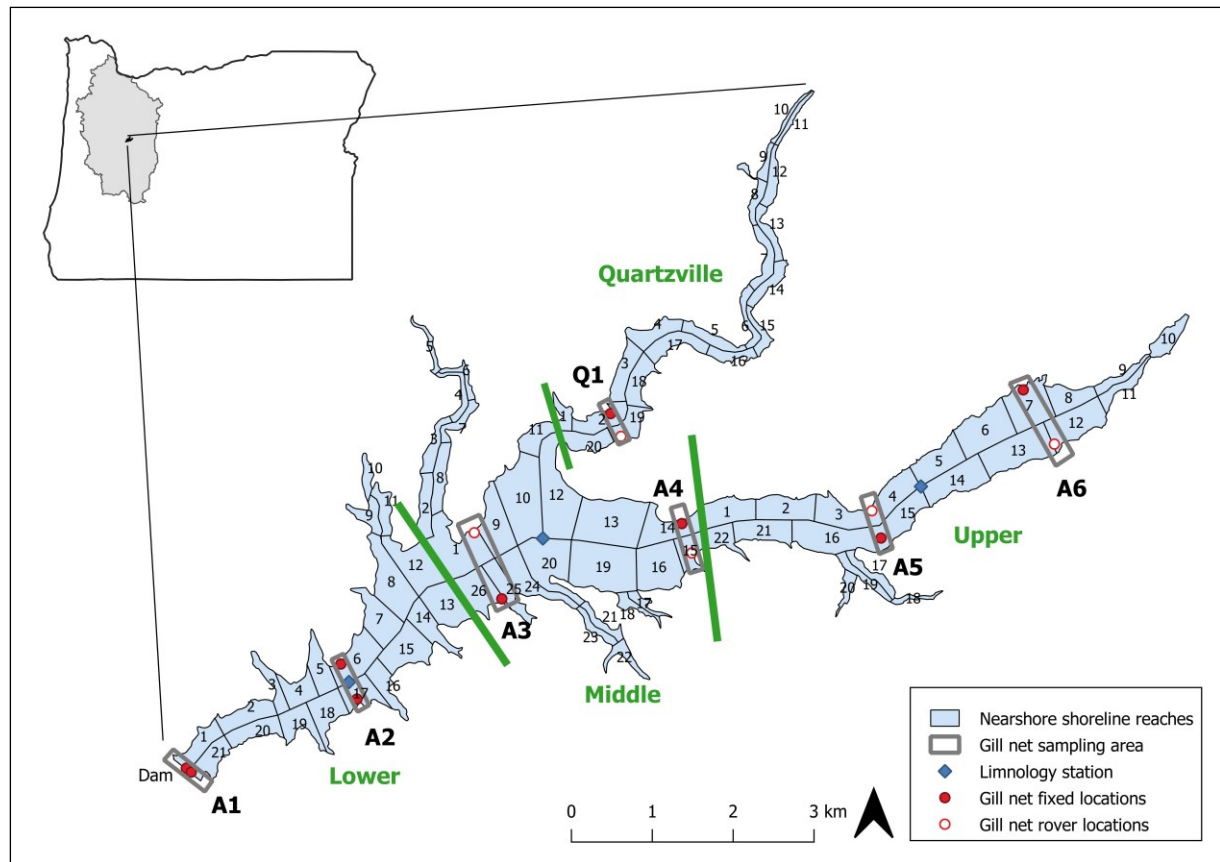


Figure A2. Map of Green Peter Reservoir nearshore shoreline reaches, reservoir zones (lower, middle and upper), gill netting sampling areas and limnological stations.