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Report Period: December 16th to December 31st, 2022

Report No.: 2022 Willamette RST Bi-Weekly Report 12/16-12/31 by EAS

Re: WILLAMETTE VALLEY FISH PASSAGE MONITORING VIA ROTARY SCREW TRAPS

Project Schedule

Table 1. Project Schedule

Site	Task	Start	End	Days
Big Cliff Dam RST	Operation	12/01/2021	02/15/2022	441
Big Cliff Dam RST	Operation	03/15/2022	10/15/2022	
Big Cliff Dam RST	Operation	10/16/2022	12/15/2022	
Big Cliff Dam RST	Operation	12/16/2022	3/15/2023	
Big Cliff Dam Tailrace	Trap Efficiency Release (1,000 Fish)	12/22/2021	12/22/2021	1
Big Cliff Dam Tailrace	Temporary Trap Removal and Install	05/06/2022	05/13/2022	8
Big Cliff Dam Tailrace	Trap Efficiency Release (1,000 Fish)	05/25/2022	05/25/2025	1
Big Cliff Dam Tailrace	Trap Efficiency Release (1,000 Fish)	08/09/2022	08/09/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (1,000 Fish)	09/30/2022	09/30/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (500 Fish)	10/13/2022	10/13/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (535 Fish)	10/24/2022	10/24/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (549 Fish)	11/02/2022	11/02/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (510 Fish)	11/16/2022	11/16/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (502 Fish)	12/14/2022	12/14/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (1,010 Fish)	12/19/2022	12/19/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (1,014 Fish)	12/21/2022	12/21/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (704 Fish)	12/27/2022	12/27/2022	1
Big Cliff Dam Tailrace	Trap Efficiency Release (452 Fish)	12/29/2022	12/29/2022	1
Green Peter Tailrace- Middle Santiam River RST	Trap Install	03/02/2022	03/02/2022	1
Green Peter Tailrace- Middle Santiam River RST	Operation	03/03/2022	05/07/2022	65
Green Peter Tailrace- Middle Santiam River RST	Trap Efficiency Release (643 Fish)	03/29/2022	03/29/2022	1
Green Peter Tailrace- Middle Santiam River RST	Trap Efficiency Release (521 Fish)	04/30/2022	04/30/2022	1

Green Peter Tailrace- Middle Santiam River RST	Temporary Trap Removal	05/12/2022	05/12/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trap Install	03/16/2022	03/16/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Operation	03/16/2022	06/30/2022	107
Foster Dam Head of Reservoir-South Santiam River RST	Trap Removal	07/01/2022	07/01/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trap Install	09/02/2022	09/02/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Operation	09/02/2022	11/30/2022	89
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (1000 fish)	09/29/2022	09/29/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (840 fish)	10/25/2022	10/25/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (1006 fish)	11/01/2022	11/01/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (1007 fish)	11/09/2022	11/09/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (1009 fish)	11/15/2022	11/15/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trapping Efficiency Release (933 fish)	11/22/2022	11/22/2022	1
Foster Dam Head of Reservoir-South Santiam River RST	Trap Removal	12/06/2022	12/06/2022	1
Cougar Dam RST	Operation	11/30/2021	11/30/2022	730
Cougar Dam RST	Operation	12/01/2022	11/30/2023	
Cougar Dam	Trap Efficiency Release (1,200 Fish, 600 per route)	01/19/2022	01/19/2022	1
Cougar Dam	Trap Efficiency Release (735 Fish, ~365 per route)	04/20/2022	04/20/2022	1
Cougar Dam	Trap Efficiency Release (993 Fish, RO route)	05/15/2022	05/15/2022	1
Cougar Dam	Trap Efficiency Release (500 Fish, PH route)	07/19/2022	07/19/2022	1
Cougar Dam	Trap Efficiency Release (501 Fish, PH route)	08/11/2022	08/11/2022	1
Cougar Dam	Trap Efficiency Release (442 Fish, RO route)	10/14/2022	10/14/2022	1
Cougar Dam	Trap Efficiency Release (504 Fish, RO route)	11/22/2022	11/22/2022	1
Cougar Dam	Trap Efficiency Release (506 Fish, RO route)	12/13/2022	12/13/2022	1
Cougar Dam	Trap Efficiency Release (1,015 Fish, RO route)	12/15/2022	12/15/2022	1
Cougar Dam	Trap Efficiency Release (500 Fish, RO route)	12/20/2022	12/20/2022	1
Cougar Dam	Trap Efficiency Release (445 Fish, RO route)	12/28/2022	12/28/2022	1
Cougar Dam Head of Reservoir	Highline and Trap Install	03/07/2022	03/07/2022	1
Cougar Dam Head of Reservoir	Operation	03/08/2022	06/30/2022	115
Cougar Dam Head of Reservoir	Operation	09/16/2022	11/30/2022	75
Cougar Dam Head of Reservoir	Trap Efficiency Release (806 Fish)	03/18/2022	03/18/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (500 Fish)	05/19/2022	05/19/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release	06/23/2022	06/23/2022	1

	(515 Fish)			
Cougar Dam Head of Reservoir	Trap Removal	07/01/2022	07/01/2022	1
Cougar Dam Head of Reservoir	Highline Install	09/14/2022	09/14/2022	1
Cougar Dam Head of Reservoir	Trap Install	09/16/2022	09/16/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (551 Fish)	09/22/2022	09/22/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (608 Fish)	10/5/2022	10/5/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (721 Fish)	11/10/2022	11/10/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (719 Fish)	11/16/2022	11/16/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (752 Fish)	11/23/2022	11/23/2022	1
Cougar Dam Head of Reservoir	Trap Efficiency Release (620 Fish)	11/29/2022	11/29/2022	1
Cougar Dam Head of Reservoir	Trap Removal	11/30/2022	11/30/2022	1
Dexter Dam Tailrace RST	Highline Install	03/02/2022	03/02/2022	1
Dexter Dam Tailrace RST	Trap Install	03/03/2022	03/03/2022	1
Dexter Dam Tailrace RST	Operation	03/07/2022	12/16/2022	649
Dexter Dam Tailrace RST	Operation	12/17/2022	12/16/2023	
Dexter Dam Tailrace RST	Trap Efficiency Release (988 Fish)	03/23/2022	03/23/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (1000 Fish)	05/04/2022	05/04/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (1019 Fish)	05/24/2022	05/24/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (981 Fish)	07/21/2022	07/21/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (1007 Fish)	10/26/2022	10/26/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (775 Fish)	11/01/2022	11/01/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (991 Fish)	11/17/2022	11/17/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (1,010 Fish)	12/06/2022	12/06/2022	1
Dexter Dam Tailrace RST	Trap Efficiency Release (1,025 Fish)	12/15/2022	12/15/2022	1
Lookout Dam Tailrace RSTs	Operation	03/15/2022	07/31/2022	365
Lookout Dam Tailrace RSTs	Operation	08/01/2022	10/17/2022	
Lookout Dam Tailrace RSTs	Operation	10/18/2022	3/15/2023	
Lookout Dam Tailrace RSTs	Trap Efficiency Release (1,013 fish, PWR route)	04/13/2022	04/13/2022	1
Lookout Point Head of Reservoir RST	Trap Install	03/06/2022	03/06/2022	1
Lookout Point Head of Reservoir RST	Operation	03/07/2022	12/16/2022	649
Lookout Point Head of Reservoir RST	Operation	12/17/2022	12/16/2023	
Lookout Point Head of Reservoir RST	Trap Efficiency Release (993 fish)	04/05/2022	04/05/2022	1
Lookout Point Head of Reservoir RST	Trap Efficiency Release (989 fish)	04/14/2022	04/14/2022	1
Lookout Point Head of Reservoir RST	Trap Efficiency Release (1007 fish)	05/18/2022	05/18/2022	1

Lookout Point Head of Reservoir RST	Trap Efficiency Release (1005 fish)	07/20/2022	07/20/2022	1
Lookout Point Head of Reservoir RST	Trap Efficiency Release (506 fish)	10/27/2022	10/27/2022	1
Lookout Point Head of Reservoir RST	Trap Efficiency Release (510 fish)	11/17/2022	11/17/2022	1
Lookout Point Head of Reservoir RST	Trap Efficiency Release (510 fish)	12/12/2022	12/12/2022	1
Fall Creek Dam Tailrace RST	Operation	03/15/2022	07/15/2022	123
Fall Creek Dam Tailrace RST	Operation	10/15/2023	03/15/2023	151
Fall Creek Dam Tailrace RST	Trap Efficiency Release (518 fish)	06/08/2022	06/08/2022	1
Fall Creek Dam Tailrace RST	Trap Efficiency Release (513 fish)	06/30/2022	06/30/2022	1
Fall Creek Dam Tailrace RST	Trap Efficiency Release (500 fish)	07/13/2022	07/13/2022	1
Fall Creek Dam Tailrace RST	Deployment	10/15/2022	10/15/2022	1
Fall Creek Head of Reservoir RST	Trap and Highline Install	01/11/2022	01/11/2022	1
Fall Creek Head of Reservoir RST	Operation	01/02/2022	05/31/2022	150
Fall Creek Head of Reservoir RST	Removal	06/02/2022	06/02/2022	1
Hills Creek Dam RO and PWR	Deployment	10/12/2021	10/12/2021	1
Hills Creek Dam RO	Operation	10/15/2021	03/01/2022	138
Hills Creek Dam PWR	Operation	10/15/2021	03/01/2022	138
Hills Creek Dam	Trap Efficiency Release (1,200 fish, 600 per route)	01/6/2022	01/6/2022	1
Hills Creek Dam	Trap Efficiency Release (1,200 fish, 600 per route)	02/16/2022	02/16/2022	1
Hills Creek Dam	Trap Efficiency Release (1,200 fish, 600 per route)	02/23/2022	02/23/2022	1
Hills Creek Dam RSTs	Trap Removal	03/01/2022	03/01/2022	1
Hills Creek Dam RSTs	Trap Install	09/14/2022	09/14/2022	1
Hills Creek Dam RSTs	Deployment	9/15/2022	9/15/2022	1
Hills Creek Dam RO	Operation	09/15/2022	06/30/2023	288
Hills Creek Dam PWR	Operation	09/15/2022	06/30/2023	288
Hills Creek Dam	Trap Efficiency Release (514 fish, PWR Route)	12/07/2022	12/07/2022	1
Hills Creek Dam	Trap Efficiency Release (516 fish, RO Route)	12/13/2022	12/13/2022	1

Summary of Rotary Screw Trap Data

Rotary screw traps (RSTs) have been operated at eleven locations in the southern Willamette River watershed. For this reporting period, traps were operated at the following seven locations: Big Cliff Dam, Cougar Dam, Fall Creek Dam, Dexter Dam Tailrace, Lookout Dam Tailrace, Lookout Point Head of Reservoir, and Hills Creek Dam. The trap in the Fall Creek Dam RO channel resumed sampling on October 15th. The Green Peter Dam Tailrace- Middle Santiam trap was removed on May 12th due to damage incurred to the highline.

The RST's at Big Cliff Dam and Lookout Dam Tailrace started sampling on March 15th. On March 1st the Middle Fork Willamette River below Hills Creek Dam RST's were removed for the sampling season in

conjunction with the end of RO spill and to prioritize the limited number of screw traps to other locations. Sampling at Hills Creek Dam resumed on September 15th.

Below Dam sites that include both RO and PWR to monitor passage routes include South Fork McKenzie River below Cougar Dam and on the Middle Fork of the Willamette River in the Lookout Dam Tailrace, and Hills Creek Dam. Below dam sites that include one RST to monitor passage include Big Cliff Dam, Green Peter Tailrace- Middle Santiam, the Middle Fork of the Willamette River below Dexter Dam and Fall Creek Dam Tailrace which is a tributary on the Middle Fork of the Willamette. At the Green Peter Dam Tailrace, the single RST is placed to sample fish passing through spillways, regulating outlets, and powerhouse outlets. The RST at Dexter Dam is placed to monitor fish passage through the spillways and powerhouse outlets. The RST in the Fall Creek Dam Tailrace is placed in a position to sample fish passing through the regulating outlet.

The RST on the North Santiam River below Big Cliff Dam was not sampled while fish passage measures were not being implemented from 16 February 2022 to 14 March 2022. Sampling resumed on 15 March 2022 in accordance with Task 2.2.

Above reservoir sites include Fall Creek Head of Reservoir, Lookout Point Head of Reservoir on the Middle Fork Willamette River, Foster Dam Head of Reservoir- South Santiam, and Cougar Dam Head of Reservoir on the South Fork McKenzie.

Sampling start dates are included in Table 2, and season total collection numbers are displayed in Table 3. The locations of the RST's are depicted in Figures 1 through 9.



FIGURE 1
Big Cliff Dam

● RST Locations

500 Feet





Imagery Source: 2021, ESRI.



FIGURE 2 Foster Dam Head of Reservoir - South Santiam River

● RST Locations ————— 500 Feet



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Wholly Owned Subsidiary of Natives of Kodiak



FIGURE 3
Cougar Dam

● RST Locations

500 Feet





Portland
 Salem
 Eugene

MAP AREA

OREGON

FIGURE 4
 Cougar Dam Head of Reservoir

● RST Locations

500 Feet



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Wholly Owned Subsidiary of Natives of Kodiak



Imagery Source: 2021, ESRI.



FIGURE 5
Fall Creek Dam Tailrace

● RST Locations

500 Feet





Imagery Source: 2021, ESRI.



FIGURE 6
Dexter Dam Tailrace

● RST Locations

500 Feet





Imagery Source: 2021, ESRI.



FIGURE 7
Lookout Dam Tailrace

● RST Locations

500 Feet





Imagery Source: 2021, ESRI.



FIGURE 8
Lookout Point Head of Reservoir

● RST Locations

500 Feet





FIGURE 9
Hills Creek Dam

● RST Locations

500 Feet



Table 2. Sampling Dates for Reporting Period

Site	Total Sampling Period Start	Current Reporting Period Start	Current Reporting Period End	Days Sampled This Period	Total Days Sampled
Big Cliff Dam	12/1/2021	12/16/2022	12/31/2022	16	338
Foster Dam Head of Reservoir- South Santiam	3/16/2022	12/16/2022	12/31/2022	0	196
Cougar Dam PH	12/1/2021	12/16/2022	12/31/2022	1	303
Cougar Dam RO	12/1/2021	12/16/2022	12/31/2022	16	388
Cougar Dam Head of Reservoir	3/7/2022	12/16/2022	12/31/2022	0	171
Fall Creek Dam Tailrace*	3/15/2022	12/16/2022	12/31/2022	1	177
Dexter Dam Tailrace	3/7/2022	12/16/2022	12/31/2022	16	289
Lookout Point Dam PH	3/15/2022	12/16/2022	12/31/2022	16	261
Lookout Point Dam Spill	3/15/2022	12/16/2022	12/31/2022	16	261
Lookout Point Head of Reservoir	3/10/2022	12/16/2022	12/31/2022	10	268
Hills Creek Dam	9/16/2022	12/16/2022	12/31/2022	16	107

*Fall Creek Dam Tailrace trap was being operated by the Corps until EAS began sampling the site on March 15th per Task 7.1

Table 3. Willamette Valley Rotary Screw Trap Monitoring Catch Summary

Site	Species	Catch (Reporting Period)	Recaptures (Reporting Period)	Total Catch	Total Recaptures
Big Cliff Dam	CHS	17	199	1253	554
Big Cliff Dam	STW	14	0	117	0
Green Peter Tailrace- Middle Santiam	CHS	0	0	0	13
Green Peter Tailrace- Middle Santiam	STW	0	0	6	0
Foster Dam Head of Reservoir- South Santiam	CHS	0	0	128	672
Foster Dam Head of Reservoir- South Santiam	STW	0	0	224	7
Cougar Dam	CHS	25	136	2996	670
Cougar Dam Head of Reservoir	CHS	0	0	710	320
Fall Creek Dam Tailrace	CHS	0	0	1	11
Dexter Dam Tailrace	CHS	1	0	99	128
Lookout Point Dam	CHS	1	0	79	2
Lookout Point Head of Reservoir	CHS	2	0	109	215
Hills Creek Dam	CHS	23	0	140	33

North Santiam – Big Cliff Dam

The RST on the North Santiam River below Big Cliff Dam was not sampled while fish passage measures were not being implemented from February 16th, 2022 to March 14th, 2022. Sampling resumed on March 15th, 2022 in accordance with Task 2.2.

Target Species

This reporting period began on December 16th and ended on December 31st. There were a total of 17 Chinook Salmon (CHS) and 14 Winter Steelhead (STW) captured during the 16-day sampling period (Figure 10). Sampling duration was 100% for the RST. Table 4 provides life stage, length, and weight data for all Chinook Salmon and Winter Steelhead that have been caught at the Big Cliff Dam site to-date and for the reporting period. Figure 11 shows length frequency data to-date.

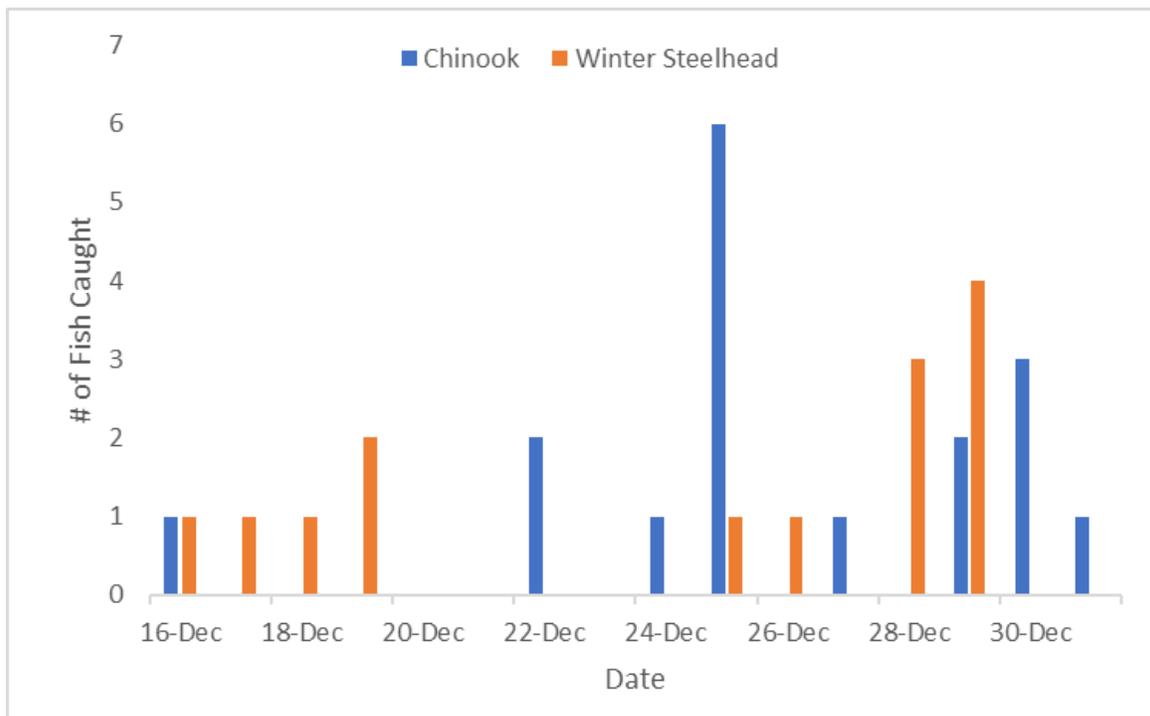
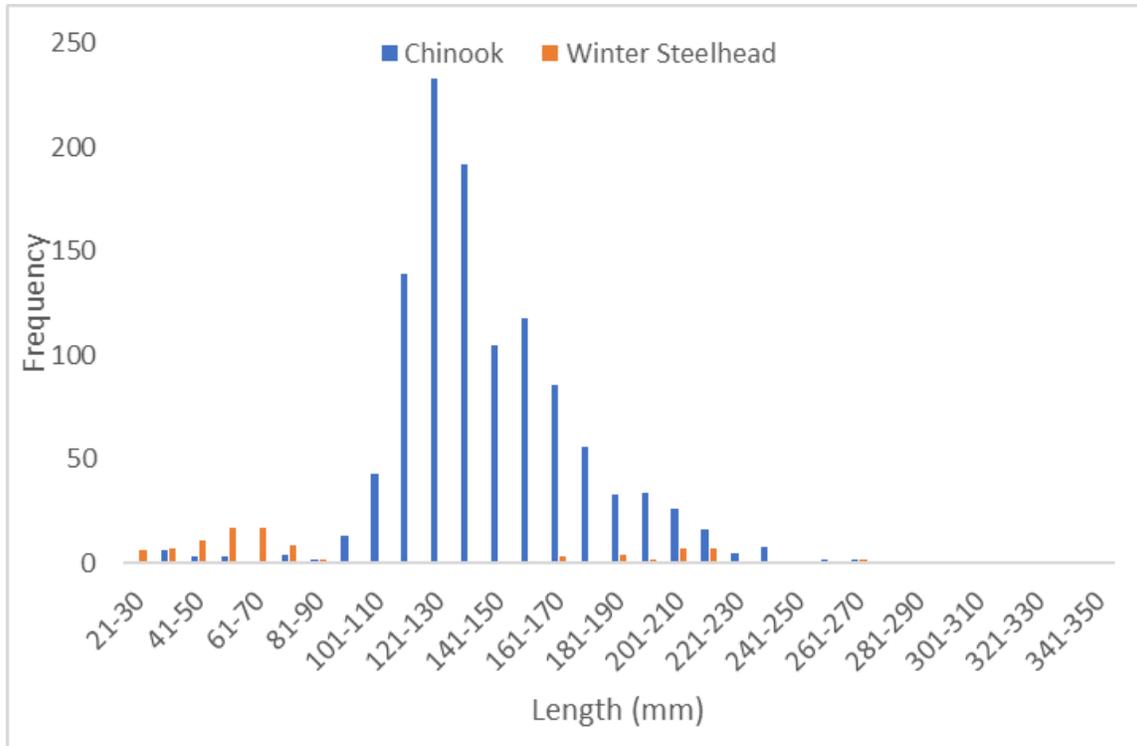


Figure 10. Chinook and Winter Steelhead Captured per day 12/16/2022 to 12/31/2022 (Big Cliff)



*Figure does not include fish without heads

Figure 11. Length Frequency of Juvenile Chinook and Winter Steelhead Sampled Season To-Date (Big Cliff)

Trapping Efficiency

A total of 1,010 juvenile hatchery Chinook (sub-yearlings) were adipose and upper caudal clipped and released on 12/19/2022 below Big Cliff Dam. A total of 92 fish were recaptured in the 8ft trap. Trapping efficiency was 9.1%.

Trapping efficiency fish displayed minor descaling and fin damage.

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	1,010	92	9.1% (92/1,010)

A total of 1,014 juvenile hatchery Chinook (sub-yearlings) were adipose clipped and released on 12/21/2022 below Big Cliff Dam. A total of 32 fish were recaptured in the 8ft trap. Trapping efficiency was 3.2%.

Trapping efficiency fish displayed minor descaling and fin damage.

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	1,014	32	3.2% (32/1,014)

A total of 704 juvenile hatchery Chinook (sub-yearlings) were adipose and upper caudal clipped and released on 12/27/2022 below Big Cliff Dam. A total of 47 fish were recaptured in the 8ft trap. Trapping efficiency was 6.68%.

Trapping efficiency fish displayed minor descaling and fin damage.

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	704	47	6.68% (47/704)

A total of 452 juvenile hatchery Chinook (sub-yearlings) were adipose clipped and released on 12/29/2022 below Big Cliff Dam. A total of 22 fish were recaptured in the 8ft trap. Trapping efficiency was 4.87%.

Trapping efficiency fish displayed minor descaling and fin damage.

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	452	22	4.87% (22/452)

Table 4. Descriptive Statistics of Target Species Captured at Big Cliff Dam Season To-Date

To-Date (Since Dec. 01, 2021)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Big Cliff	PWR	CHS	Fry	9	31	48	37.5	1.2	1.4	1.4
		CHS	Parr	27	55	136	94.5	1.8	30.0	10.7
		CHS	Smolt	1215	74	283	145.8	5.4	253.5	36.7
		STW	Fry	28	21	69	40.4	1.1	3.4	1.6
		STW	Parr	45	51	131	69.1	1.3	24.8	4.5
		STW	Smolt	34	157	350	214.6	36.1	442.0	107.0

*Fish that were missing heads are not included in length and weight calculations.

December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Big Cliff	PWR	CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	17	113	199	177.9	15.1	92.4	61.8
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	2	78	99	88.5	5.3	9.6	7.5
		STW	Smolt	12	186	222	207.0	63.6	116.9	91.3

*Fish that were missing heads are not included in length and weight calculations.

24-Hour Post Collection Holding Trial

14 Spring Chinook and 14 Winter Steelhead were captured during the current reporting period and held for 24 hours. 0 Chinook (0.0%) and 1 Winter Steelhead (7.1%) died in holding.

Injuries and Copepod Infection

Partial descaling <20% was observed in 11 of the 17 Chinook captured (64.7%), 6 displayed descaling >20% (35.3%), 15 displayed body injury (88.2%), 3 had eye injury (17.6%), 15 had copepods present in the branchial cavity (88.2%) and 8 had copepods on fins (47.1%). 0 Chinook displayed gas bubble disease (0.0%). There were 3 mortality (17.6%).

Partial descaling <20% was observed in 9 of the 14 Winter Steelhead captured (64.3%) and 4 displayed descaling >20% (28.6%), 12 displayed body injury (85.7%), 0 had eye injury (0.0%), 12 had copepods present in the branchial cavity (85.7%) and 12 had copepods on fins (85.7%). 3 Winter Steelhead displayed gas bubble disease (21.4%) (two level 2, one level 1). There were 0 mortalities (0.0%). Injury data is summarized in table 5.

Table 5. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period. (Big Cliff Dam).

Site	Species	# Fish Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Big Cliff Dam	Chinook	17	11	6	15	3	15	8	3
Big Cliff Dam	Winter Steelhead	14	9	4	12	0	12	12	0

Collected DNA and Scale Samples

For the reporting period, scales and DNA were collected from 17 Spring Chinook and 14 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.

PIT Tags

No Spring Chinook or Winter Steelhead were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Non-Target Species

14 non-targets were captured during this sampling period. A summary of to-date non-target species catch and mortality numbers are listed in Table 6.

Table 6. Summary of Non-target Species (Big Cliff Dam)

Species	PWR Capture	PWR Mortality	Season Total	Season Total Mortality
Bass	0	0	1	1
Bluegill	0	0	2683	125
Bullhead Catfish	0	0	8	1
Chinook (Adult)	0	0	2	3
Chinook (clipped)	0	0	16	0
Cutthroat	1	0	4	0
Dace	0	0	1	1
Kokanee	9	2	201	70
Kokanee (clipped)	1	1	18	1
<i>O. mykiss</i> (clipped)	0	0	7	3
Pumpkinseed	3	0	1621	29
Unknown	0	0	4	1
Mountain Whitefish	0	0	8	3
Sculpin	0	0	1	0
Totals	14	3	4575	238

Stream Statistics

Basic stream statistics at the Big Cliff Dam site were calculated from data downloaded from U.S. Geological Survey stream gauge numbers 14181410 and 14181500. Gauge height (feet) is the only metric provided at gauge 14181410. Total dissolved gas (TDG) saturation data was received from gauge 14181500, 1 rkm downstream of the trap. During the reporting period, daily maximum values for instantaneous gauge height ranged from 1,109.2 to 1,111.6 feet (mean: 1,110.0 feet) during the reporting period. Figure 12 shows instantaneous gauge height.

Total dissolved gas saturation ranged from 101 to 115% during the reporting period (mean: 106.5%). Figure 13 shows total dissolved gas saturation.

Stream temperatures were recorded every 2 hours for the length of the reporting period at the RST (Figure 14). The temperature probe operated normally for the duration of the reporting period.

Flows through the Powerhouse and Spill during the reporting period averaged 1,761.9 and 70.2 cubic feet per second (cfs), respectively (Figure 15). Catch per unit of effort (CPUE) data are summarized in Table 7. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 7. Summary of salmonid CPUE, Big Cliff Dam.

	Chinook	Winter Steelhead
Description	(8 ft)	(8 ft)
Catch	17	14
Effort (hrs)	383.9	383.9
CPUE (fish/hr)	0.044	0.036

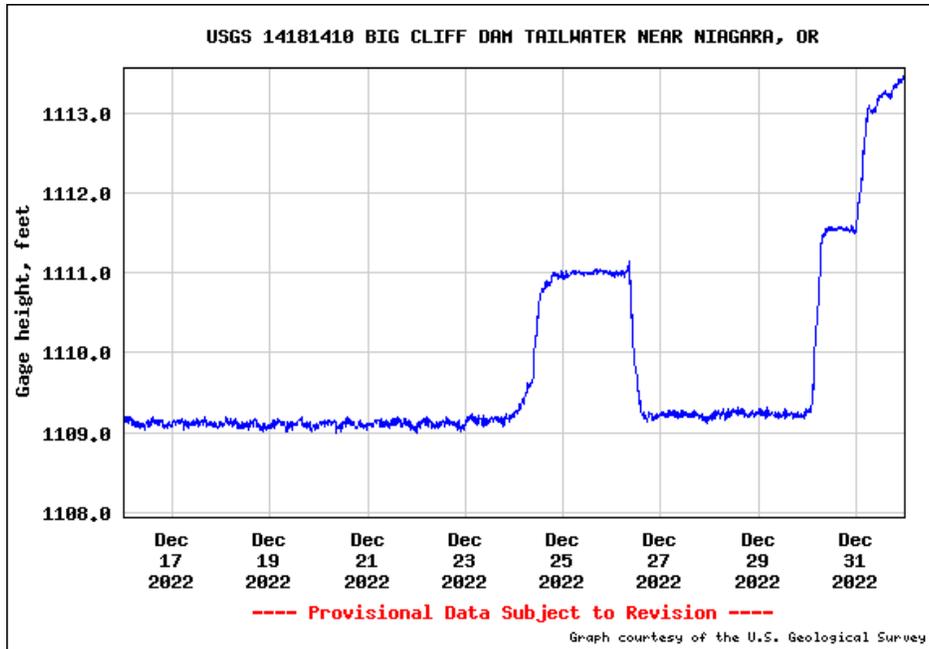


Figure 12. Gauge height (ft); below Big Cliff Dam

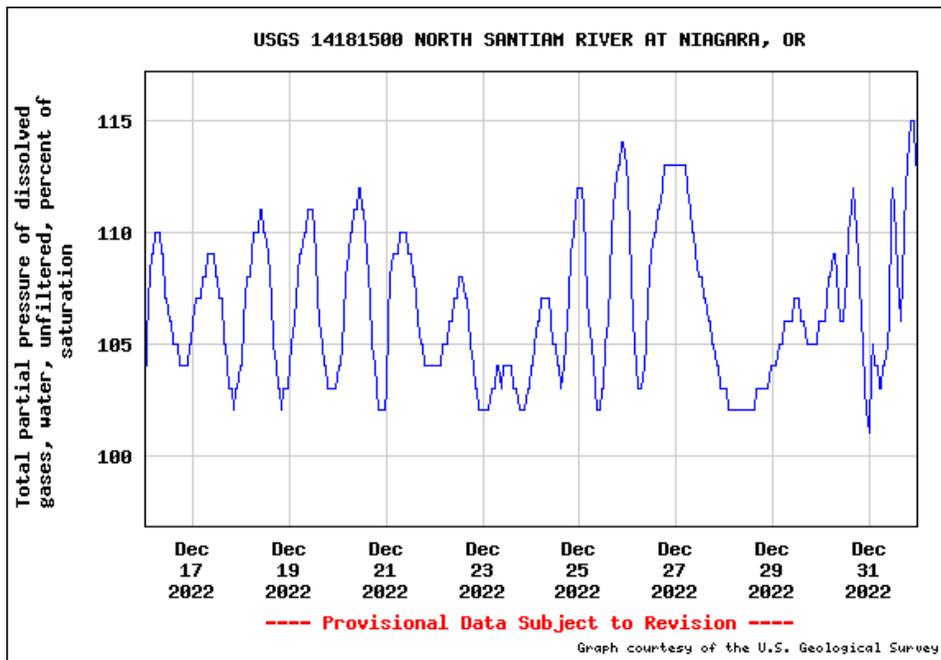


Figure 13. Total Dissolved Gas Saturation (%); below Big Cliff Dam

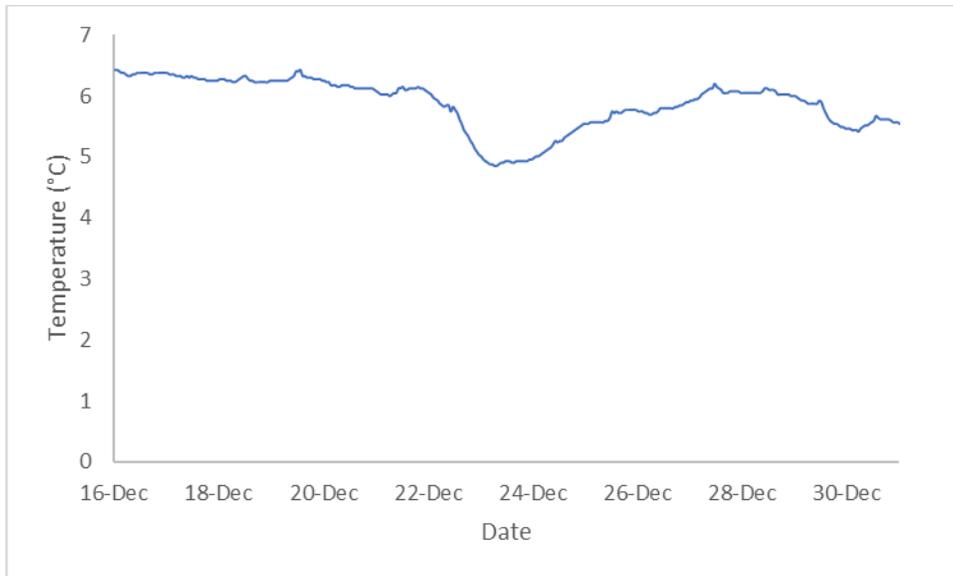


Figure 14. Temperature at RST (Big Cliff Dam)

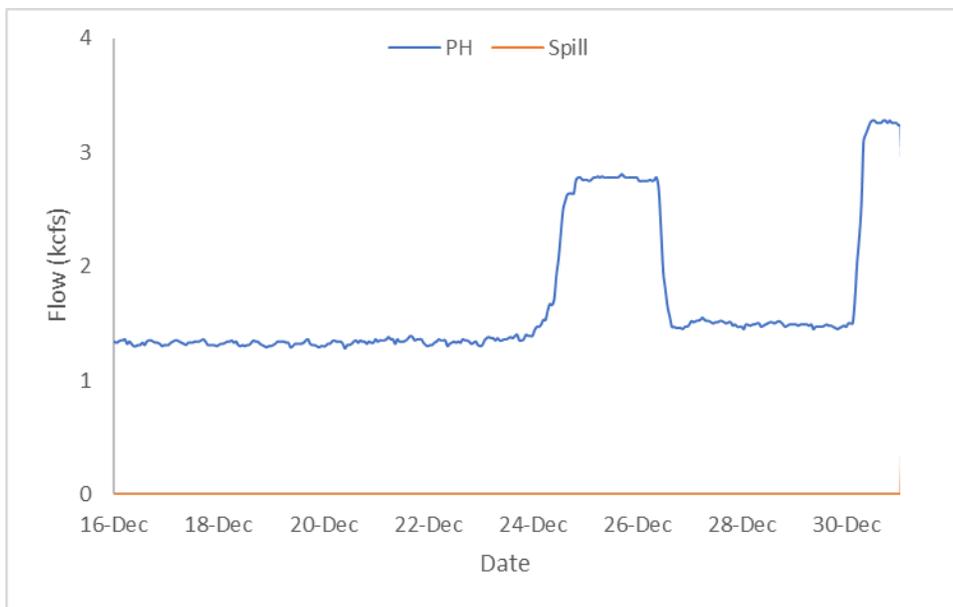
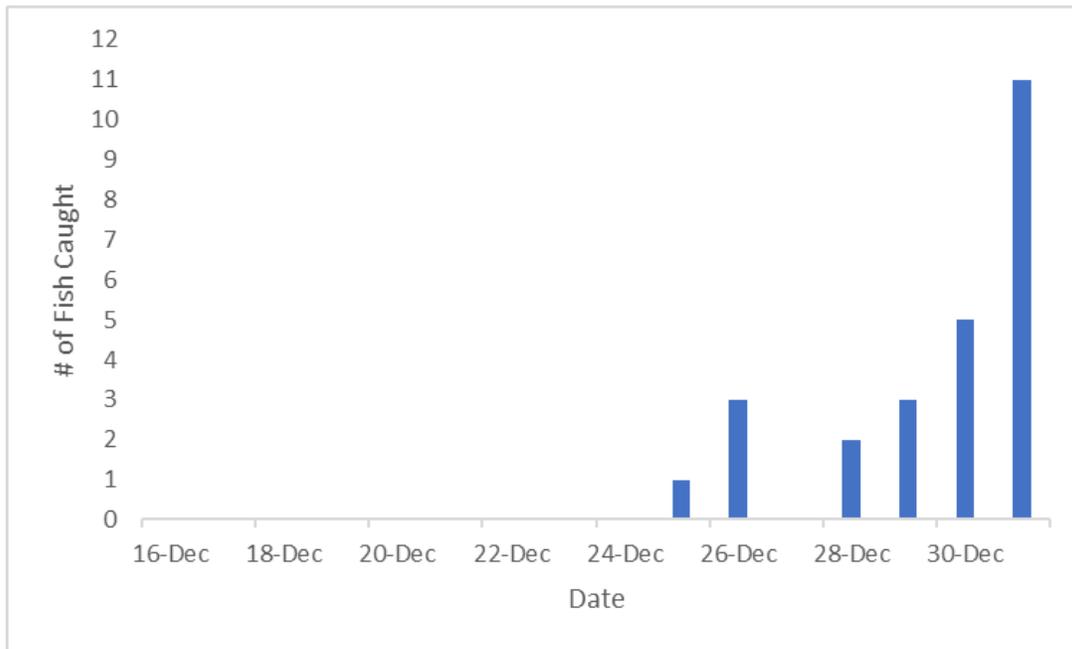


Figure 15. Hourly Flows PWR vs. Spill (Big Cliff Dam)

South Fork McKenzie – Cougar Dam

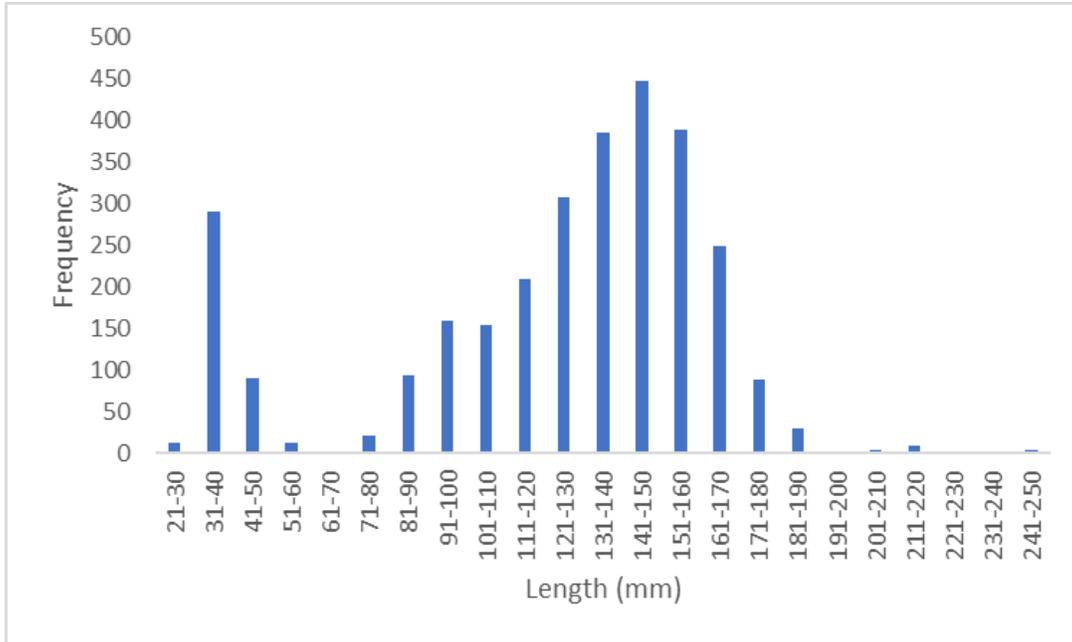
Target Species

This reporting period began on December 16th and ended on December 31st. There were a total of 25 Chinook Salmon (CHS) captured during the 16-day sampling period. The flow in the powerhouse was lowered on 10/8/2022 in order to prioritize flow from the regulating outlet. The powerhouse traps were raised on 10/8/2022 in anticipation of this event to avoid damage to the cones. The powerhouse traps resumed sampling on 12/30/2022. Sampling duration was 100.0% for the RO RST and 6.7% for the Powerhouse RSTs. Table 8 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Cougar Dam site to-date and for the reporting period. Figure 16 shows the daily capture numbers for chinook and Figure 17 shows length frequency data to-date.



*Recaptured fish for trapping efficiency trials not included.

Figure 16. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Cougar Dam)



*Figure does not include fish without heads or fish used for trapping efficiency trials.

Figure 17. Length Frequency of Juvenile Chinook Sampled Season To-Date (Cougar Dam)

Trapping Efficiency

A total of 1,015 juvenile hatchery Chinook (sub-yearlings) were bismarck adipose clipped and released on 12/15/2022 in the RO channel. 56 fish were recaptured for an efficiency of 5.5%.

Cougar Dam (12/15/2022)	Release #	Recapture #	Capture Efficiency
RO Route	1015	56	5.5% (56/1015)

A total of 500 juvenile hatchery Chinook (sub-yearlings) were bismarck brown dyed, adipose clipped, left ventral clipped and released on 12/20/2022 in the RO channel. 65 fish were recaptured for an efficiency of 13.0%.

Cougar Dam (12/20/2022)	Release #	Recapture #	Capture Efficiency
RO Route	500	65	13.0% (65/500)

A total of 445 juvenile hatchery Chinook (sub-yearlings) were bismarck brown dyed, adipose clipped, left ventral clipped and released on 12/28/2022 in the RO channel. 15 fish were recaptured for an efficiency of 3.4%.

Cougar Dam (12/28/2022)	Release #	Recapture #	Capture Efficiency
RO Route	445	15	3.4% (15/445)

Run of River Trapping Efficiency

Run of river fish were captured, caudal clipped and released for the purpose of conducting run of river trapping efficiency trials at Cougar Dam. Numbers of fish released and recaptured by route for the reporting period are listed below.

Cougar Dam	Release #	Recapture #
PH	0	0
RO	0	0

Table 8. Descriptive Statistics of Target Species Captured at Cougar Dam Season To-Date

To-Date (Since Dec. 01, 2021)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Cougar Dam	RO	CHS	Fry	21	34	48	40.8	N/A	N/A	N/A
		CHS	Parr	198	56	164	107.6	1.2	41.1	14.5
		CHS	Smolt	1584	92	247	145.3	4.7	142.4	34.7
Cougar Dam	PWR	CHS	Fry	382	25	55	38.0	1.0	1.8	1.2
		CHS	Parr	266	54	165	99.2	1.6	41.0	10.7
		CHS	Smolt	543	76	223	138.7	4.2	113.5	29.9

*Fish that were missing heads are not included in length and weight calculations.

December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Cougar Dam	RO	CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	1	92	92	92.0	8.4	8.4	8.4
		CHS	Smolt	19	99	235	138.0	9.7	126.1	29.9
Cougar Dam	PWR	CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	5	99	135	117.4	15.1	28.4	19.5

*Fish that were missing heads are not included in length and weight calculations.

24-Hour Post Collection Holding Trial

A total of 23 Chinook captured in the RSTs, 4 fish from the PWR RST and 19 from the RO RST, were held for ~24 hours in holding tanks and then evaluated for survival rates. In total, 2 of the fish (8.7%) held during this period died during holding. 0 of the 0 PWR RST captured fish (0.0%) died during holding and 2 of the 19 RO RST captured fish (10.5%) died during holding.

Injuries and Copepod Infection

Partial descaling <20% was observed on 15 of the 20 Chinook collected at the RO RST (75.0%). Descaling >20% was observed on 4 of the Chinook (20.0%). There were 16 fish with bodily injuries (80.0%) and 1 had eye injuries (5.0%). 20 fish had copepods present in the branchial cavity (100.0%) and 12 had copepods present on fins (60.0%). 4 fish displayed Gas Bubble Disease (three level 1 and one level 2) (20.0%). There was 1 chinook mortality collected in the RO RST (5.0%).

Partial descaling <20% was observed on 4 of the 5 Chinook collected at the PWR RST (80.0%). Descaling >20% was observed on 1 of the Chinook (20.0%). There were 5 fish with bodily injuries (100.0%) and 1 had eye injuries (20.0%). 5 fish had copepods present in the branchial cavity (100.0%) and 4 had copepods present on fins (80.0%). 0 fish displayed Gas Bubble Disease (0.0%). There was 1 chinook mortality collected in the PWR RST (20.0%). Data is summarized below in Table 13. A summary of injuries observed during the reporting period, and for the duration of the season are provided in Appendix A.

Table 13. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Cougar Dam).

Site	Route	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Cougar	RO	20	15	4	16	1	20	12	1
Cougar	PWR	5	4	1	5	1	5	4	1

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

For the reporting period, scales and DNA were collected from 25 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

PIT Tags

No Spring Chinook were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Non-Target Species

A total of 7 non-target fish were captured during the reporting period; the data is summarized below in Table 9. Adipose clipped Chinook captured were from previous TE releases. They are not ODFW PIT tagged fish.

Table 9. Summary of Non-target Species (Cougar Dam).

Species	RO Capture	RO Mortality	PWR Capture	PWR Mortality	Season Total Capture	Season Total Mortality
Brook Lamprey	0	0	0	0	3	0
Bluegill	0	0	0	0	2	0
Bull Trout	0	0	0	0	1	0
Chinook (AD clipped)	0	0	0	0	46	14
Chinook (Adult)	0	0	0	0	1	0
Crappie	0	0	0	0	1	1
Cutthroat	2	0	0	0	75	3
Dace	0	0	0	0	2502	8
Largescale Sucker	0	0	0	0	55	0
Mountain Whitefish	0	0	1	1	52	3
Northern Pikeminnow	0	0	0	0	2	0
<i>O. mykiss</i>	5	0	0	0	319	3
Sculpin	0	0	0	0	207	4
Smallmouth Bass	0	0	0	0	3	0
Spotted Bass	0	0	0	0	4	0
Unknown	0	0	0	0	21	2
Totals	7	0	1	1	3294	38

Stream Statistics

Basic stream statistics at the Cougar Dam site were calculated from data downloaded from U.S. Geological Survey stream gauge numbers 14159410 and 14181500. Gauge height (feet) is the only metric provided at gauge 14159410. Total dissolved gas saturation data was received from gauge 14181500, 500 meters downstream of the trap. During the reporting period, daily maximum values for instantaneous gauge height ranged from 1,250.8 to 1,253.8 feet (mean: 1,251.5 feet). Figure 18 shows instantaneous gauge height.

Total dissolved gas saturation ranged from 102 to 115% (mean: 108.4%). Figure 19 shows total dissolved gas saturation.

Stream temperatures were recorded every 2 hours for the length of the report period for the RO and PWR RST's (Figure 20 and 21 respectively). Temperature probes for the RO and PWR RST operated normally throughout this reporting period.

Flows through the Powerhouse and RO during the reporting period averaged 75.7 and 587.0 cubic feet per second (cfs) respectively (Figure 22). Catch per unit of effort (CPUE) data are summarized in Table 10. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 10. Summary of salmonid CPUE, Cougar Dam.

Description	Chinook	
	RO (5ft)	PWR (8ft)
Catch	20	5
Effort (hrs)	380.5	47.0
CPUE (fish/hr)	0.053	0.106

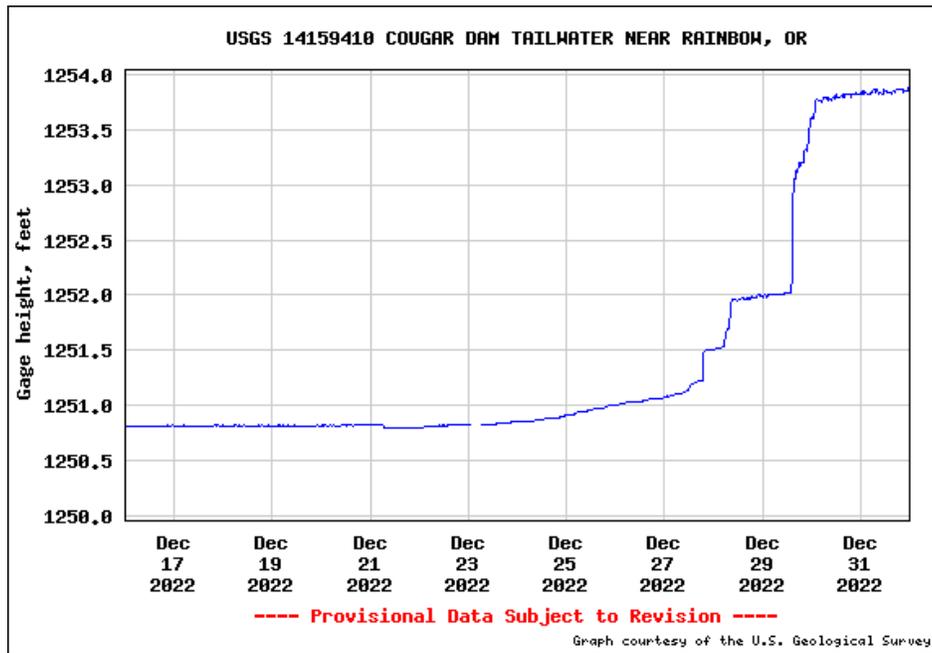


Figure 18. Gauge Height (feet); below Cougar Dam, South Fork McKenzie River

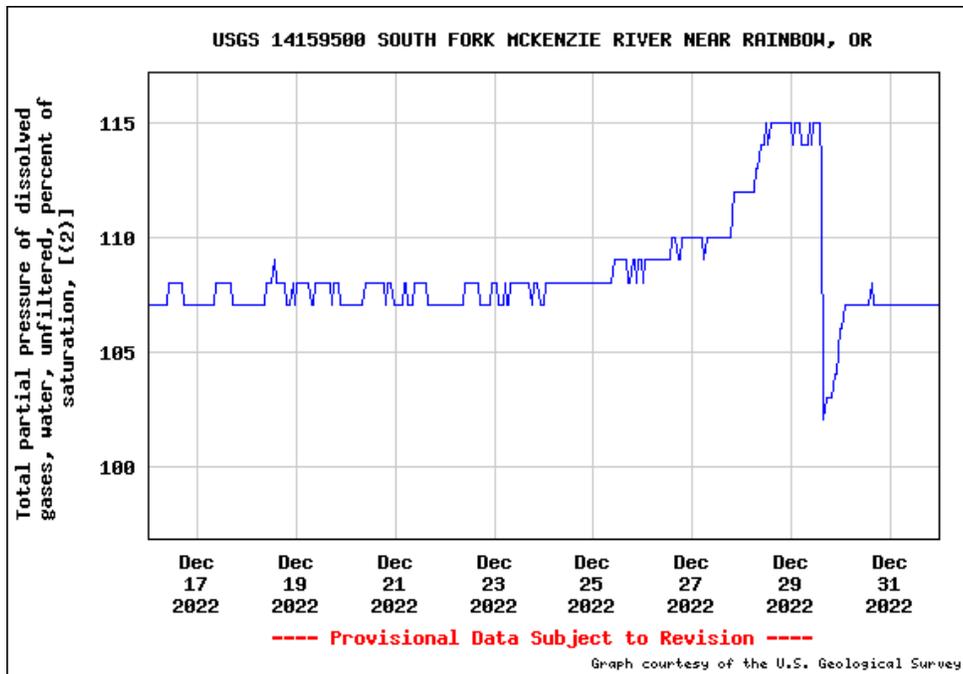


Figure 19. Total Dissolved Gas Saturation (%); below Cougar Dam, South Fork McKenzie River

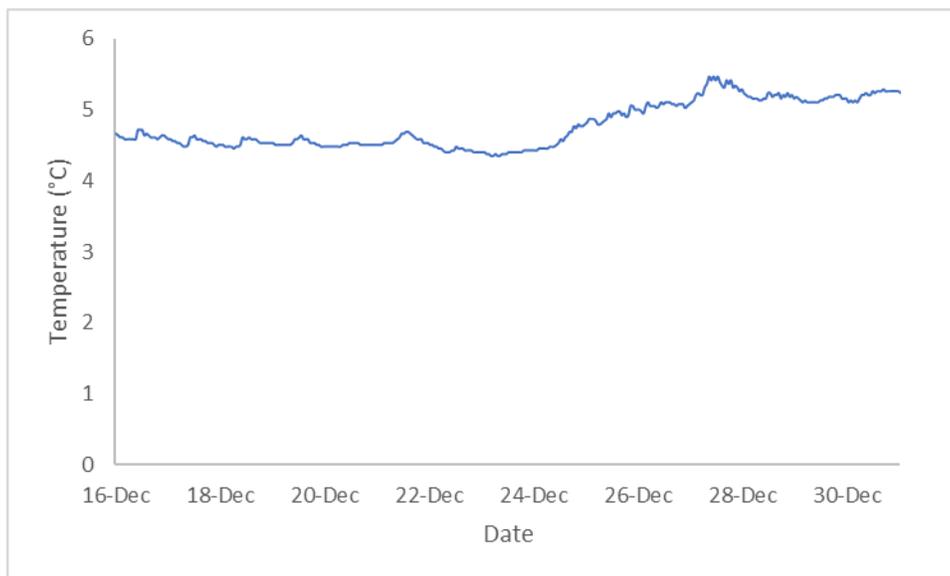


Figure 20. Temperature at RO RST (Cougar Dam)

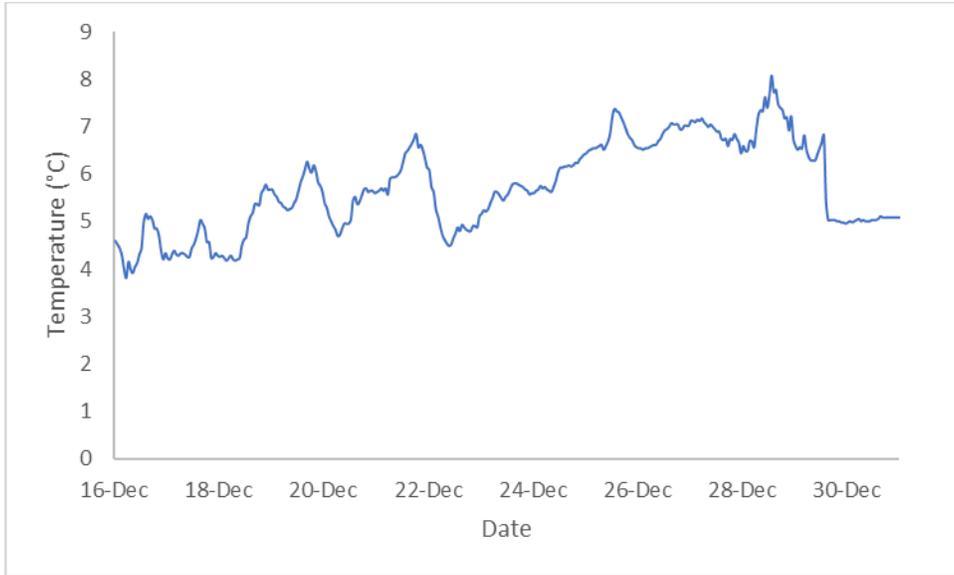


Figure 21. Temperature at PWR RST (Cougar Dam)

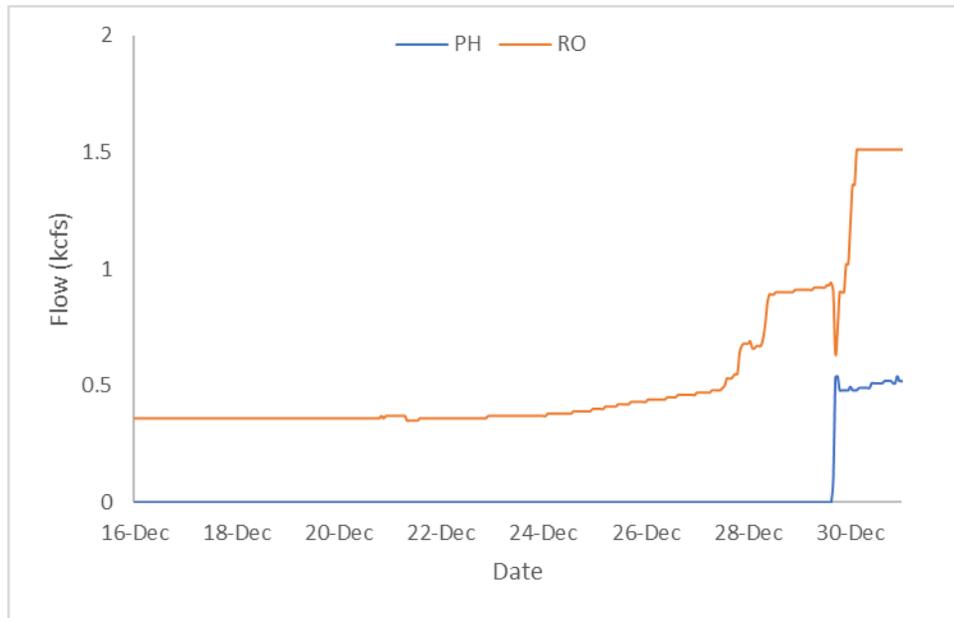


Figure 22. Hourly Flows PWR vs. RO (Cougar Dam)

Fall Creek Dam Tailrace

The reporting period began December 16th and ended December 31st. 0 Chinook salmon were captured during the 16-day sampling period (Figure 23). Sediment has filled the channel where the RST operates making it necessary to storm sample the trap so as not to create hazardous conditions for captured fish. The trap performed storm sampling 6.7% of the days during this reporting period. The trap could not be lowered the rest of the period as the sediment prevented the cone from being able to be lowered into the sampling position. Table 11 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Fall Creek Dam Tailrace site to-date and Figure 24 shows length frequency data to-date.

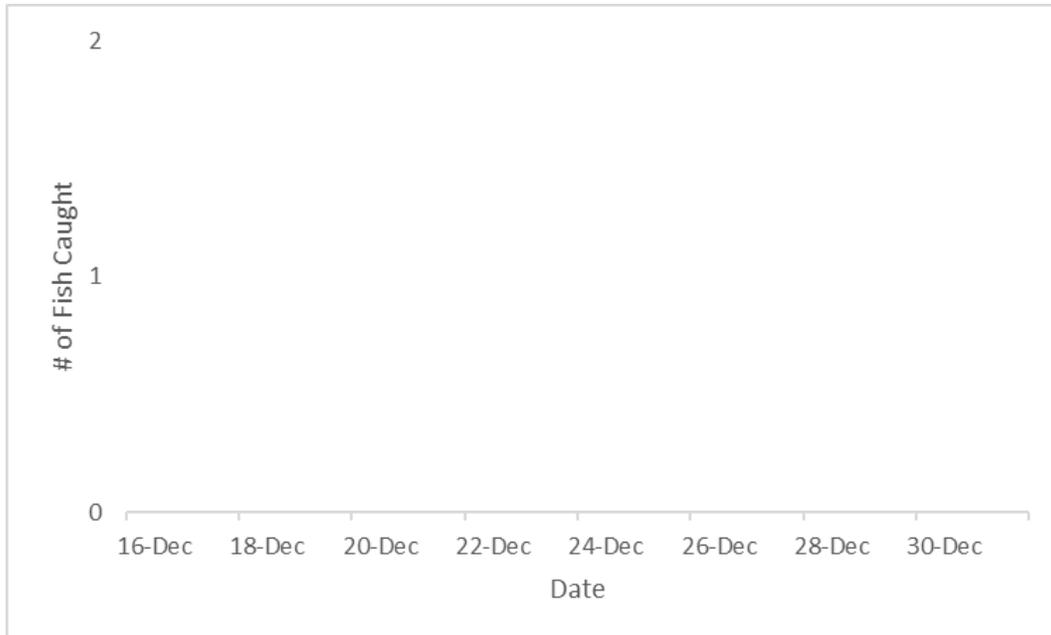


Figure 23. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Fall Creek Dam Tailrace)

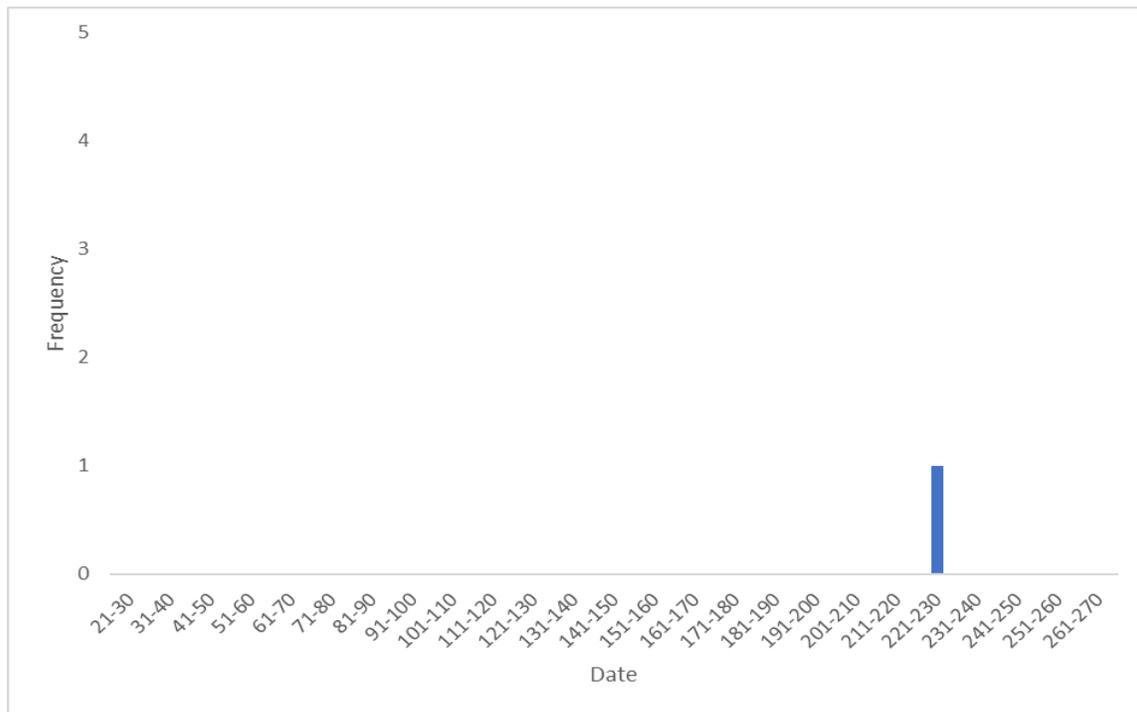


Figure 24. Length Frequency of Juvenile Chinook Sampled Season To-Date (Fall Creek Dam Tailrace)

Table 11. Descriptive Statistics of Target Species Captured at Fall Creek Dam Tailrace, Season To-Date and for the Reporting Period

To-Date										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Dam	RO	CHS	Smolt	1	230	230	230.0	141.1	141.1	141.1
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Dam	RO	CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A

24-Hour Post Collection Holding Trial

0 Spring Chinook was captured during the current reporting period and held for 24 hours. 0 Chinook (0.0%) died in holding.

Injuries and Copepod Infection

0 Chinook were captured during this reporting period. 0 fish displayed descaling >20% (0.0%) and 0 fish had bodily injuries (0.0%). 0 fish had copepods in the branchial cavity (0.0%). There were no mortalities. The data is summarized in Table 12. To date injury data is listed in Appendix A.

Table 12. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Fall Creek)

Site	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Fall Creek Dam	0	0	0	0	0	0	0	0

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

Scales and DNA were collected from 0 of the Chinook captured. The rest of the captured fish were under the minimum fork length threshold and samples were not collected (less than 45 mm fork length for DNA and less than 50 mm fork length for scales).

PIT Tags

No Spring Chinook were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Trapping Efficiency

A total of 500 juvenile hatchery Chinook (sub yearlings) were adipose clipped, Bismarck Brown dyed, and released on 07/13/2022 upstream of the Fall Creek Dam Tailrace RO channel trap site. A total of 0 fish were recaptured in the 8 ft trap. Trapping efficiency was 0%.

Fall Creek Dam	Release #	Recapture #	Capture Efficiency
RO	500	0	0% (0/500)

Non-Target Species

1 non-target fish were captured at the Fall Creek Dam Tailrace site during the reporting period; the data is summarized below in Table 13.

Table 13. Summary of Non-target Species (Fall Creek Dam Tailrace)

Species	8ft Capture	8ft Mortality	Season Total	Season Total Mortality
Bluegill	0	0	1	0
Brook Lamprey	0	0	19	0
Bullhead Catfish	0	0	384	149
Bull Trout	0	0	0	0
Chinook (clipped)	0	0	2	0
Crappie	0	0	1	0
Cutthroat Trout	0	0	39	1
Dace	0	0	3224	190
Mosquitofish	0	0	113	6
Peamouth	0	0	15	1
Northern Pikeminnow	0	0	2	0
Red-Sided Shiner	0	0	12	0
Sculpin	0	0	10	1
Spotted Bass	0	0	0	0
Largescale Sucker	0	0	121	18
Pacific Lamprey	0	0	4	0
Mountain Whitefish	0	0	0	0
<i>O. mykiss</i>	1	0	248	2
Unknown	0	0	5	1
Totals	1	0	4200	369

Stream Statistics

Basic stream statistics at the site were calculated from data downloaded from U.S. Geological Survey stream gage numbers 14151000 and 1415000. Instantaneous discharge (cfs) data was collected from gage 1415100. Dissolved oxygen (mg/L) concentration data was received from gage 1415000, 1.2 rkms downstream of the trap. During the reporting period, daily maximum values for instantaneous discharge ranged from 206.0 cfs to 2,030.0 cfs (mean: 1,015.8 cfs). The gage station did not record discharge between December 23 at 23:15 to December 27 at 9:10. Figure 25 shows instantaneous discharge.

Dissolved oxygen concentrations were not available for the duration of the reporting period. No data has been recorded from the stream gage after October 19, 2022 at 12:00.

Stream temperatures were recorded using temperature probes for the Fall Creek Dam Tailrace RST site during this reporting period. The temperature probe operated normally during this period (Figure 26).

Flows In and Out of reservoir during the reporting period averaged 960.4 cfs and 904.0 cfs respectively (Figure 27).

Catch per unit of effort (CPUE) data are summarized in Table 14. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B

Table 14. Summary of Chinook CPUE, Fall Creek Dam Tailrace

Description	Chinook
	(8 ft)
Catch	0
Effort (hrs)	6.2
CPUE (fish/hr)	0

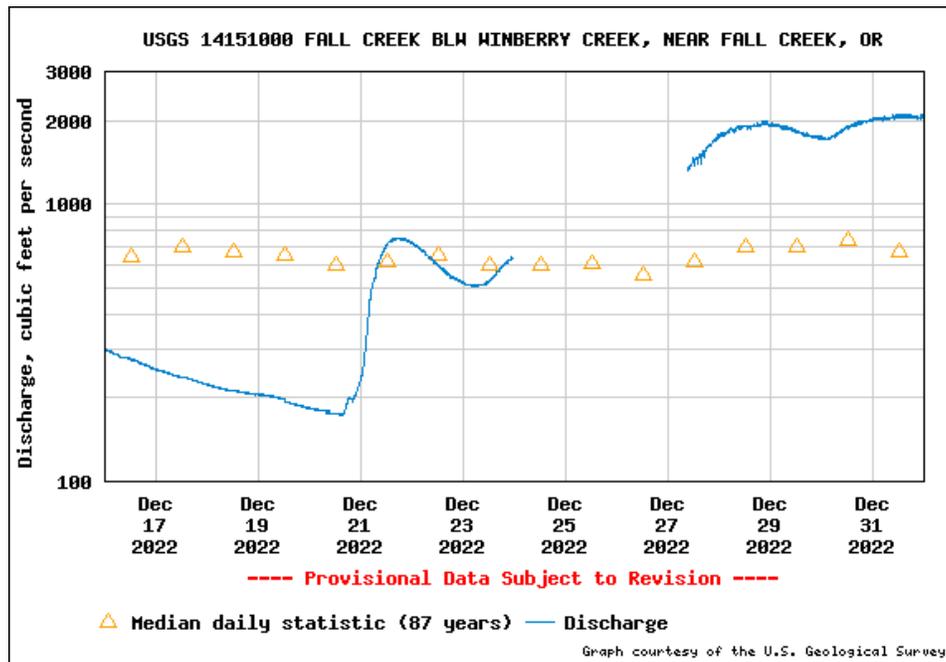


Figure 25. Discharge (cfs); Fall Creek Below Winberry Creek, Near Fall Creek, OR

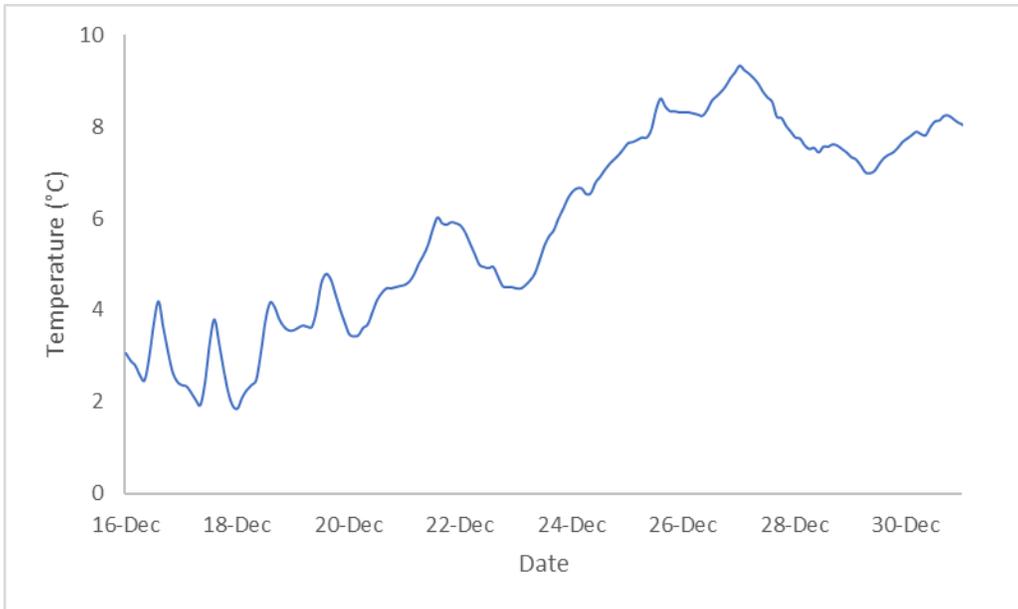


Figure 26. Temperature at RST (Fall Creek Dam Tailrace)

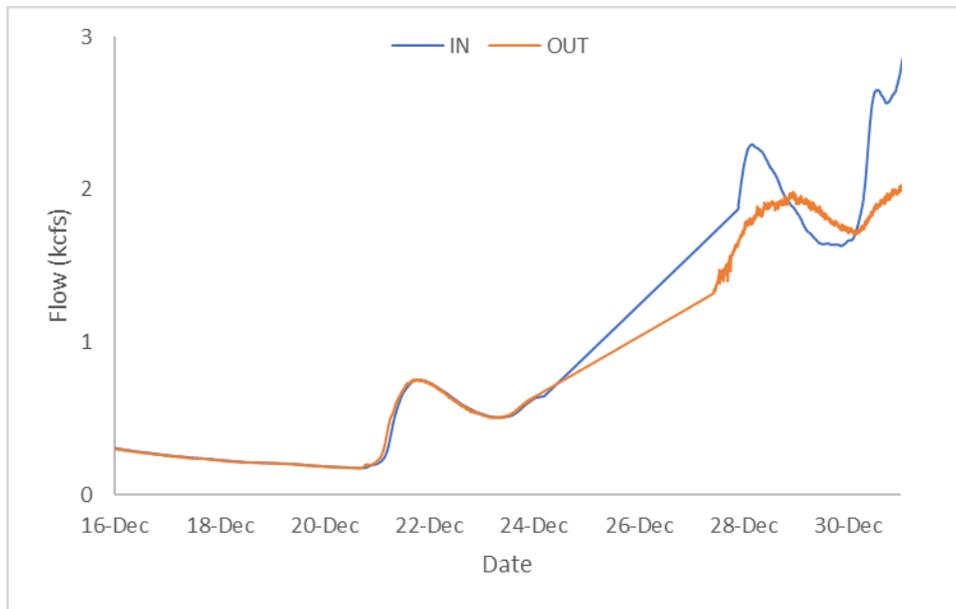
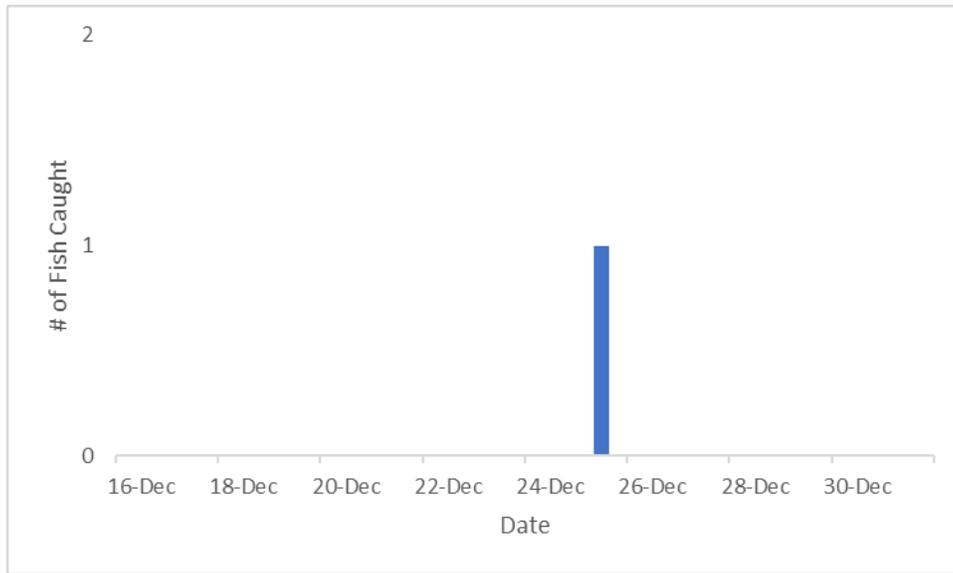


Figure 27. Hourly Flows PWR vs. RO (Fall Creek Tailrace)

Middle Fork Willamette– Dexter Dam

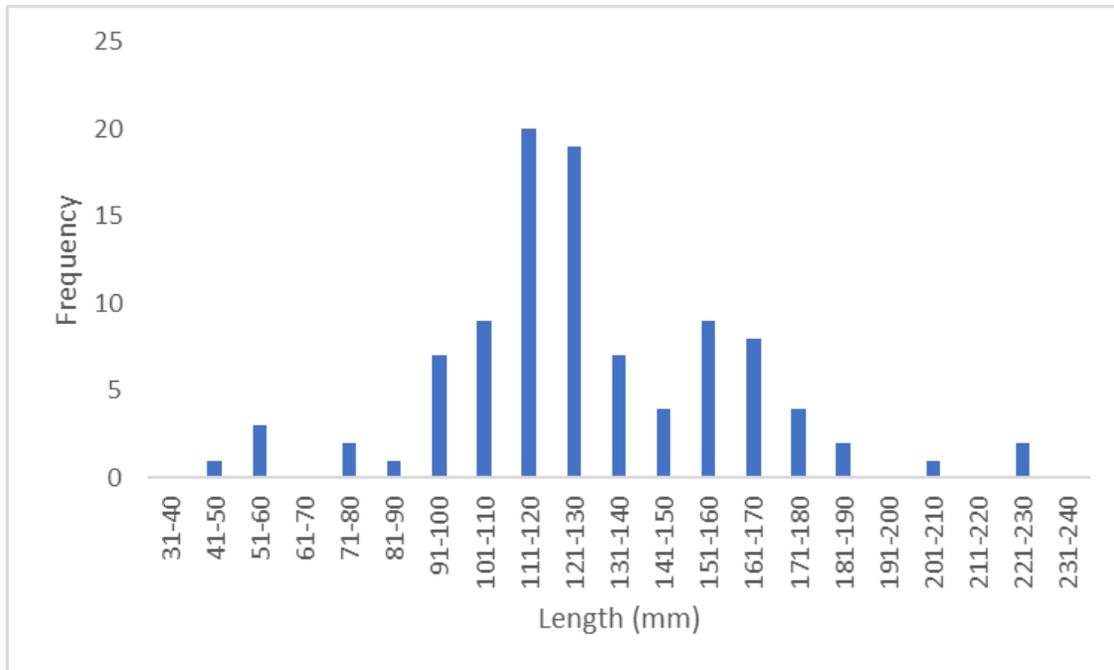
Target Species

This reporting period began on December 16th and ended on December 31st. There was 1 Chinook salmon (CHS) captured during the 16-day sampling period. Sampling duration was 100% for the 5 ft RST. Table 15 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Dexter Dam site to-date and for the reporting period. Figure 28 shows the daily capture numbers for Chinook and Figure 29 shows length frequency data to-date.



*Recaptured fish for trapping efficiency trials not included.

Figure 28. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Dexter Dam)



*Figure does not include fish without heads or fish used for trapping efficiency trials.

Figure 29. Length Frequency of Juvenile Chinook Sampled Season To-Date (Dexter Dam)

Table 15. Descriptive Statistics of Target Species Captured at the Dexter Dam RST Season To-Date

To-Date (Since March 07, 2022)										
Site	Trap	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Dexter Dam	5 ft	CHS	Fry	3	46	55	51.3	1.4	1.4	1.4
		CHS	Parr	18	51	159	101.3	2.1	48.3	12.8
		CHS	Smolt	78	95	226	138.3	9.3	162.3	29.3

December 16-31, 2022										
Site	Trap	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Dexter Dam	5 ft	CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	1	226	226	226.0	162.3	162.3	162.3

*Fish that were missing heads are not included in length and weight calculations.

Trapping Efficiency

A total of 1010 juvenile hatchery Chinook (sub-yearlings) adipose clipped, upper caudal clipped and released on 12/06/2022 below Dexter Dam. Fish were released in small groups into powerhouse flow to

evaluate the traps efficiency capturing fish passing through the powerhouse. 10 fish were recaptured in the 5-foot RST for an efficiency of 1.0%.

Dexter Dam	Release #	Recapture #	Capture Efficiency
Spill	N/A	N/A	N/A
Powerhouse	1010	10	1.0% (10/1010)

24-Hour Post Collection Holding Trial

1 Spring Chinook was captured during the current reporting period and held for 24 hours. 1 Chinook (100.0%) died in holding.

Injuries and Copepod Infection

1 Chinook was captured during this reporting period. Partial descaling <20% was observed in 1 of the 1 Chinook captured (100.0%) and 0 displayed descaling >20% (0.0%). 1 displayed body injury (100.0%) and 0 Chinook had eye injury (0.0%). 1 Chinook had copepods present in the branchial cavity (100.0%) and 1 had copepods on fins (100.0%). 1 displayed gas bubble disease (one level 1) (100.0%). There were 0 mortalities this reporting period (0.0%). Injuries are displayed in Table 16. To date injury data can be found in Appendix A.

Table 16. Number of Descaled, Bodily/Eye Injured, Copepod Infected and dead Chinook Salmon for Sampling Period (Dexter Dam).

Site	Route	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Dexter Dam	PWR	1	1	0	1	0	1	1	0

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

For the reporting period, scales and DNA were collected from 1 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling.

PIT Tags

No Spring Chinook were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Non-Target Species

10 non-target species fish were captured during the reporting period; the data is summarized below in Table 17. Dexter Fish Facility releases adipose clipped Chinook near our trapping site. Adipose clipped Chinook caught in our trap are being counted as non-target fish to provide better clarity on data concerning run of river Chinook.

Table 17. Summary of Non-target Species (Dexter Dam).

Species	Capture	Mortality	Season Total	Season Total Mortality
Bass	0	0	99	1
Bluegill	0	0	11	1
Chinook (clipped)	1	0	360	7
Chinook (adult)	0	0	2	2
Crappie	5	0	102	5
Cutthroat	0	0	3	0
Dace	0	0	31	6
<i>O. mykiss</i>	0	0	17	0
<i>O. mykiss</i> (clipped)	0	0	34	2
Pikeminnow	0	0	1	0
Red-Sided Shiner	0	0	3	0
Sculpin	3	0	479	15
Largescale Sucker	1	0	5	1
Unknown	0	0	14	4
Totals	10	0	1163	44

Stream Statistics

Basic stream statistics at the Dexter Dam site were calculated from data downloaded from the U.S. Geological Survey stream gauge numbers 14149510 and 14150000. Gauge height (feet) is the only metric provided at gauge 14149510. Total dissolved gas saturation data was received from gauge 14150000, 4.75 rkms downstream of the trap. During the reporting period, daily maximum values for instantaneous gauge height ranged from 637.5 feet to 638.9 feet (mean: 638.0 feet). Figure 30 shows instantaneous gauge height.

Total dissolved gas saturation ranged from 99 to 105% (mean: 100.8%) during the reporting period. Figure 31 shows total dissolved gas saturation.

Stream temperatures were recorded every two hours using a temperature probe at the Dexter Dam RST site during this reporting period. Temperature probes operated normally, and the data is shown below in Figure 32.

Flows through the Powerhouse and Spill during the reporting period averaged 2,360.4 and 23.6 cubic feet per second (cfs) respectively (Figure 33). Catch per unit of effort (CPUE) data are summarized in Table 18. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 18. Summary of salmonid CPUE, Dexter Dam.

	Chinook
Description	8 ft
Catch	1
Effort (hrs)	385.7
CPUE (fish/hr)	0.003

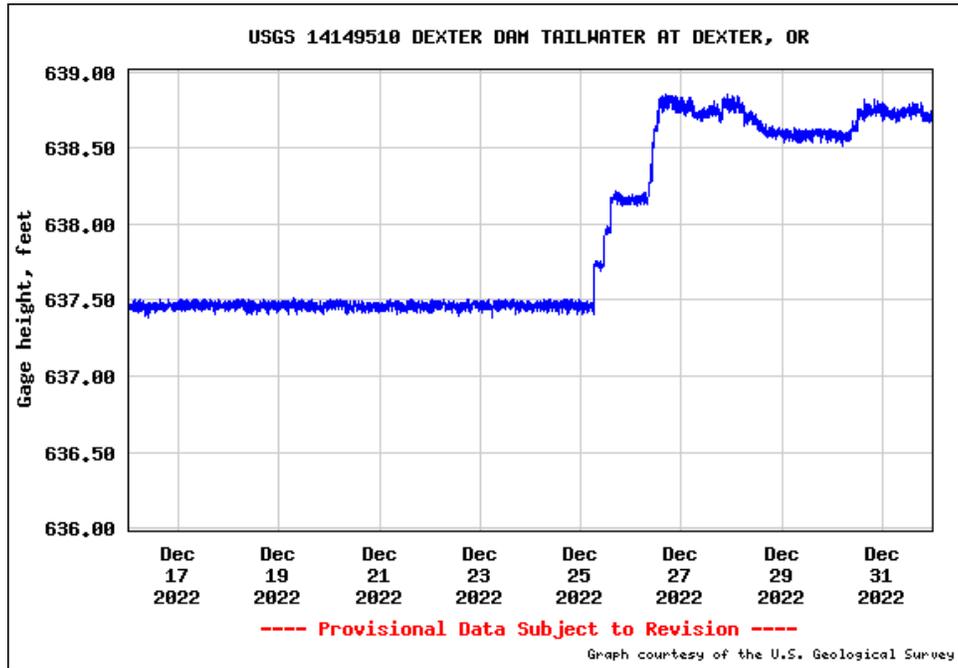


Figure 30. Gauge Height (feet); below Dexter Dam, Middle Fork Willamette

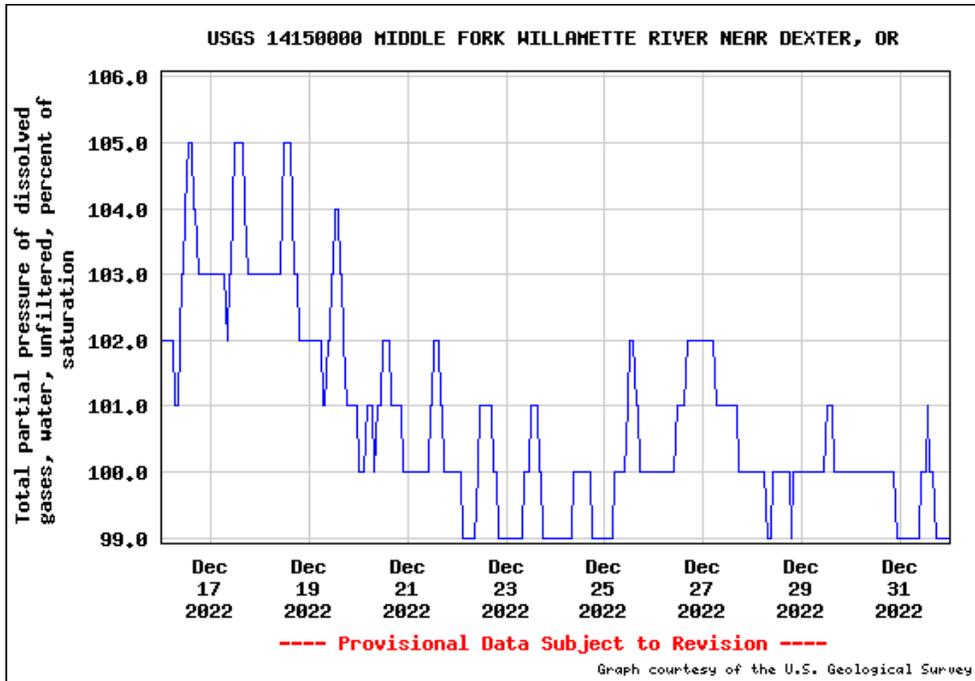


Figure 31. Total Dissolved Gas Saturation (%); Middle Fork Willamette River, Near Dexter, OR

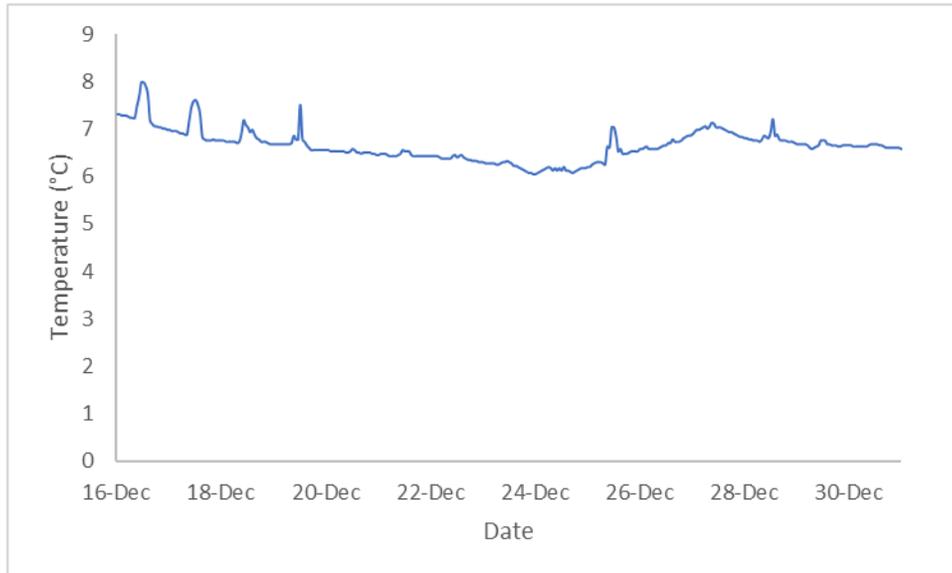


Figure 32. Temperature at RST (Dexter Dam)

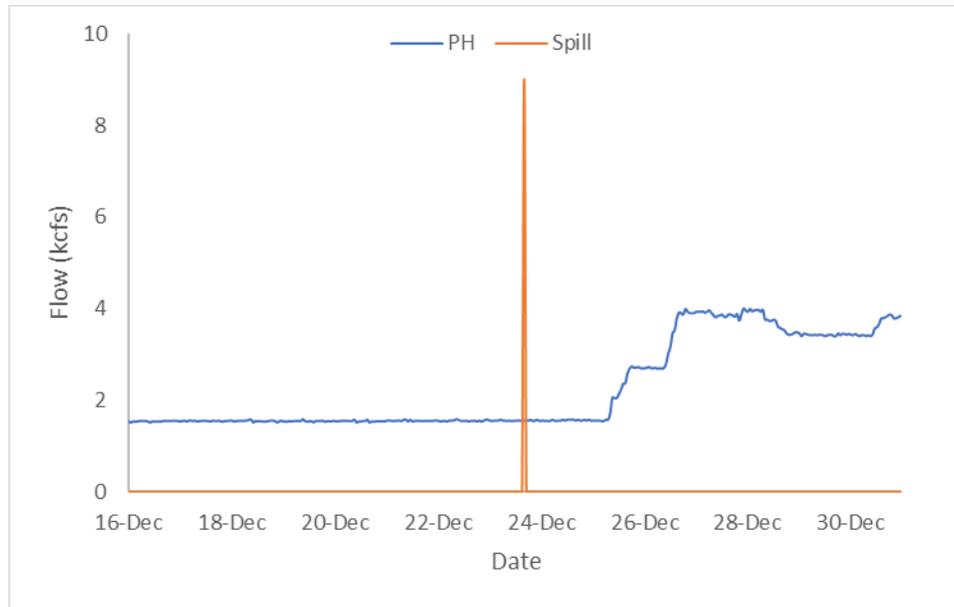


Figure 33. Hourly Flows PWR vs. Spill (Dexter Dam)

Middle Fork Willamette – Lookout Dam Tailrace

Target Species

The reporting period began December 16th and ended on December 31st. 1 Chinook salmon was captured during the 16-day sampling period (Figure 34). The traps were operated 100.0% of the reporting period. Table 19 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Lookout Point Dam Tailrace site to-date and Figure 35 shows length frequency data to-date.

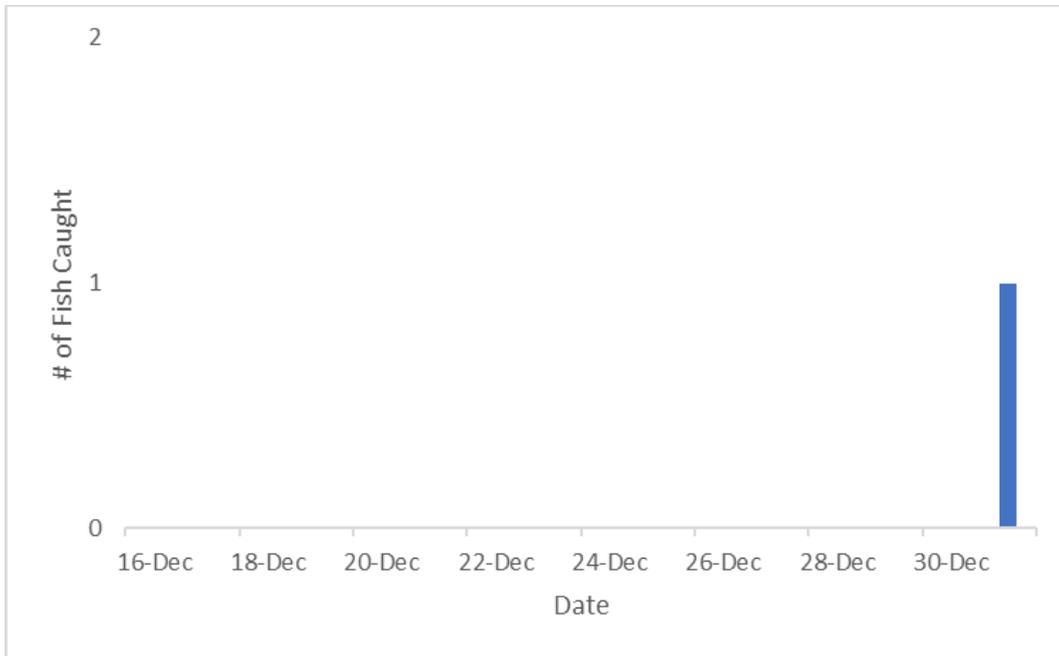


Figure 34. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Lookout Point Dam Tailrace)

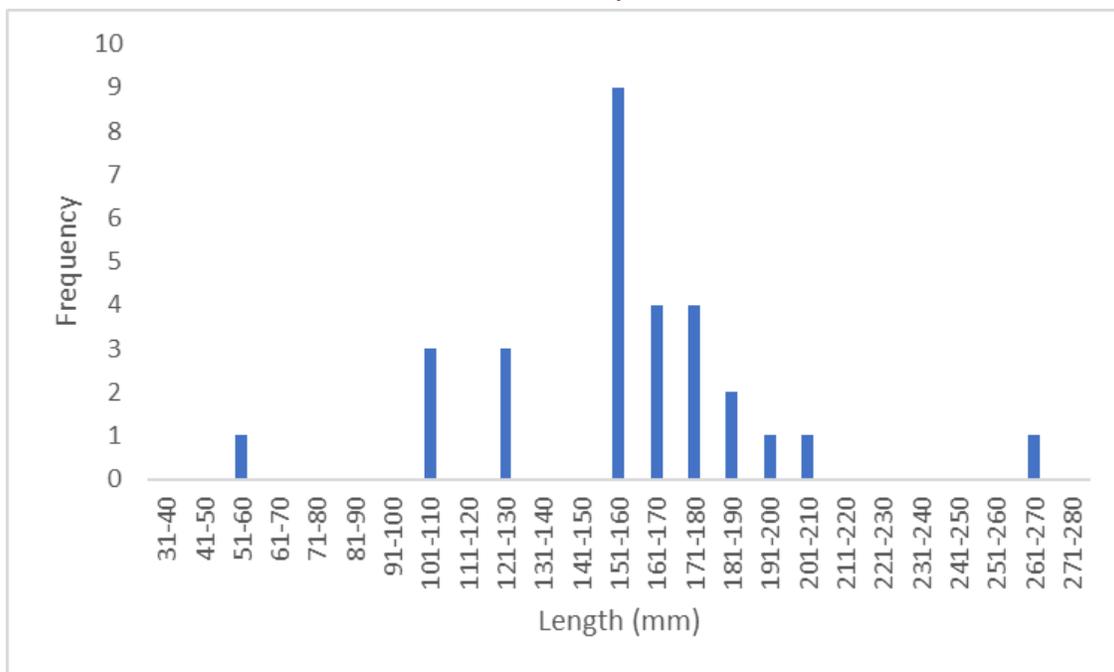


Figure 35. Length Frequency of Juvenile Chinook Sampled Season To-Date (Lookout Point Dam Tailrace)

Table 19. Descriptive Statistics of Target Species Captured at Lookout Point Dam Tailrace, Season To-Date and for the Reporting Period

To-Date (Since March 15, 2022)										
Site	\Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Dam	PH 1	CHS	Smolt	25	112	266	150.3	15.0	108.9	40.6
		CHS	Parr	3	84	107	94.3	3.8	10.5	6.5
		CHS	Fry	0	0	0	0	0	0	0
	PH 2	CHS	Smolt	9	95	141	120.6	8.4	32.3	19.7
		CHS	Parr	4	58	108	86.0	2.2	13.4	6.7
		CHS	Fry	0	0	0	0	0	0	0
	Spill	CHS	Smolt	32	94	194	133.8	7.6	63.0	27.2
		CHS	Parr	6	77	126	96.5	5.4	26.1	12.1
		CHS	Fry	0	0	0	0	0	0	0
December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Dam	PH 1	CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
	PH 2	CHS	Smolt	1	128	128	128.0	18.3	18.3	18.3
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
	Spill	CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A

*Some fry are too small to accurately weigh and are omitted from the above tables.

24-Hour Post Collection Holding Trial

The 1 Chinook captured in the RSTs was not held during this reporting period due to flow conditions and safety concerns. 0 fish were held from the PWR RST and 0 fish were held from the Spill RST. 0 hold fish died from the PWR RSTs (0 from PH 1 and 0 from PH 2) (0.0%). 0 of the fish from Spill RST died during holding (0.0%).

Trapping Efficiency

A total of 1,013 juvenile hatchery Chinook (parr) were bismarck brown dyed and adipose clipped, right ventral fin clipped and released on 04/13/2022 below Lookout Point Dam. Fish were released in small groups directly into powerhouse flow at 17:00 to 19:00. 2 fish were recaptured in the PH 1 RST for an

efficiency of 0.2%. 1 Lookout Point Dam trap efficiency fish was captured downstream in the Dexter RST on 4/15/2022.

Mt. Hood Environmental staff noted that fish appeared to be in good condition upon retrieval from the hatchery but did note some descaling and fin damage present as is common among hatchery fish of this age.

Lookout Dam	Release #	Recapture #	Capture Efficiency
Powerhouse	1,013	2	0.2% (2/1,013)

Injuries and Copepod Infection

There were 0 Chinook captured in the Spill Channel RST. Partial descaling <20% was observed on 0 of 0 Chinook collected at the Spill RST (0.0%), and descaling >20% was observed on 0 of the Chinook collected (0.0%). 0 displayed body injuries (0.0%) and 0 had eye injuries (0.0%). None of the Spill RST Chinook had copepods present in the branchial cavity (0.0%) and 0 had copepods present on fins (0.0%). 0 of the fish captured in the Spill RST displayed Gas Bubble Disease (0.0%).

There was 1 Chinook captured in the Powerhouse channel RSTs. Partial descaling <20% was observed on 1 of the 1 Chinook collected at the PWR RSTs (100.0%). Descaling >20% was observed on 0 of the Chinook collected (0.0%). 1 PWR RST fish had bodily injury (100.0%) and 0 had eye injuries (0.0%). 0 of the fish had copepods present in the branchial cavity (0.0%) and 0 had copepods present on fins (0.0%). 0 fish displayed Gas Bubble Disease (0.0%). There were 0 chinook mortality collected in the Spill RST (0.0%) and 0 in the PWR RST (0.0%). Injuries are displayed in Table 20. To date injury data can be found in Appendix A.

Table 20. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Lookout Point Dam Tailrace).

Site	Route	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Lookout Point Dam Tailrace	PWR	1	1	0	1	0	0	0	0
	Spill	0	0	0	0	0	0	0	0

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

For the reporting period, scales and DNA were collected from 1 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling.

PIT Tags

No Spring Chinook were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Non-Target Species

39,490 non-target species were captured during the reporting period; the data is summarized below in Table 21.

Table 21. Summary of Non-target Species (Lookout Point Dam Tailrace).

Species	PWR Capture	PWR Mortality	Spill Capture	Spill Mortality	Season Total	Season Total Mortality
Bass Unknown	0	0	0	0	4969	3664
Bluegill	13	4	0	0	76	14
Bullhead	0	0	0	0	4	2
Chinook (clipped)	4	1	1	0	9	1
Crappie	39112	22744	339	68	89389	51053
Cutthroat	0	0	0	0	1	0
Dace	0	0	0	0	7	0
Largemouth Bass	3	0	0	0	4	0
Smallmouth Bass	0	0	0	0	5	4
Spotted Bass	1	0	0	0	2	0
Largescale Sucker	1	1	0	0	29	16
Northern Pikeminnow	0	0	0	0	59	10
<i>O. mykiss</i>	0	0	0	0	8	1
<i>O. mykiss</i> (clipped)	0	0	0	0	2	1
Red-Sided Shiner	0	0	0	0	3	0
Sculpin	9	0	7	0	144	12
Walleye	0	0	0	0	13	3
Unknown	0	0	0	0	4	2
Totals	39143	22750	347	68	94728	54783

Stream Statistics

Basic stream statistics at Lookout Dam Tailrace site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14149010. Total dissolved gas saturation or dissolved oxygen concentration measurements are not available at this stream gauge site, or any nearby stream gauges. Gauge height (feet) is the only metric provided at this gauge. During the reporting period, daily maximum values for instantaneous gauge height ranged from 692.0 feet to 694.0 feet (mean: 693.1 feet). Figure 36 shows instantaneous gauge height.

Stream temperatures were recorded every two hours using a temperature probe at the Lookout Dam RST site during this reporting period. Temperature probes operated normally, and the data is shown below in (figures 37 and 38).

Flows through the Powerhouse and Spill during the reporting period averaged 2,233.4 and 97.4 cubic feet per second (cfs) respectively (Figure 39). Catch per unit of effort (CPUE) data are summarized in Table 22. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 22. Summary of Chinook CPUE at Lookout Point Dam Tailrace.

Description	Chinook		
	PH 1	PH 2	Spill
Catch	0	1	0
Effort (hrs)	379.3	379.1	378.9
CPUE (fish/hr)	0	0.003	0

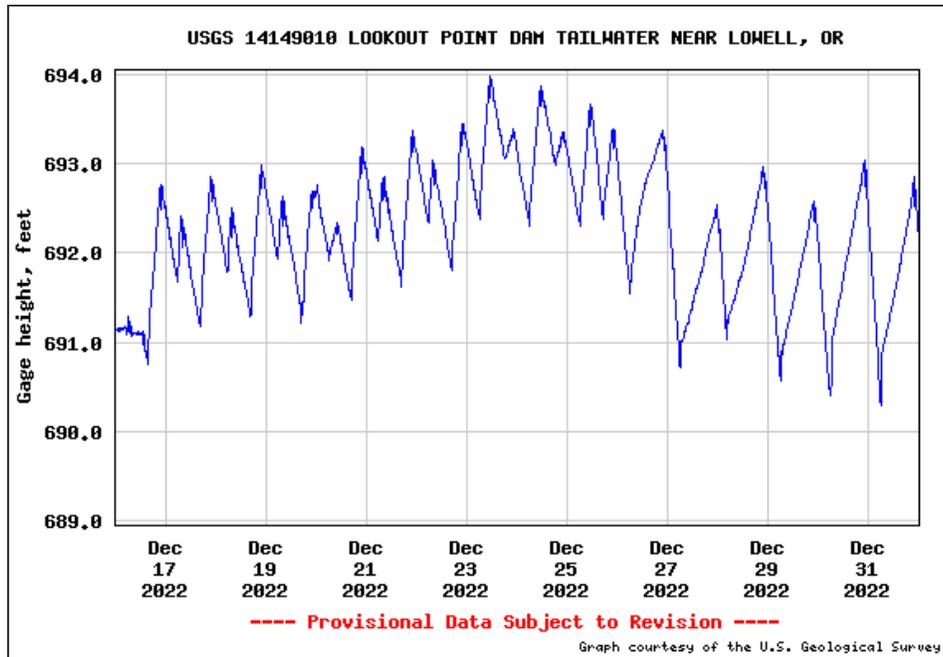


Figure 36. Gauge Height (feet); below Lookout Dam

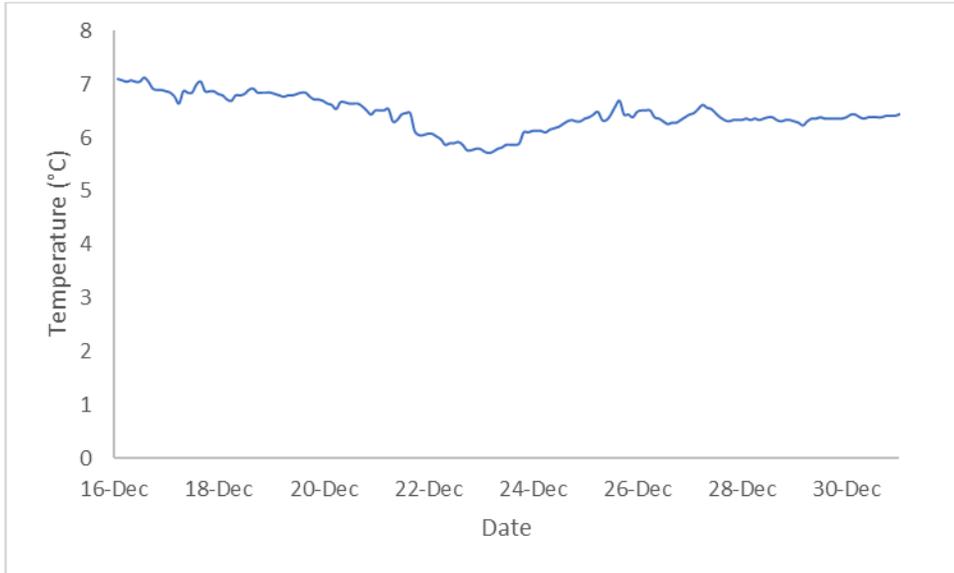


Figure 37. Temperature at RST (Lookout Dam PWR)

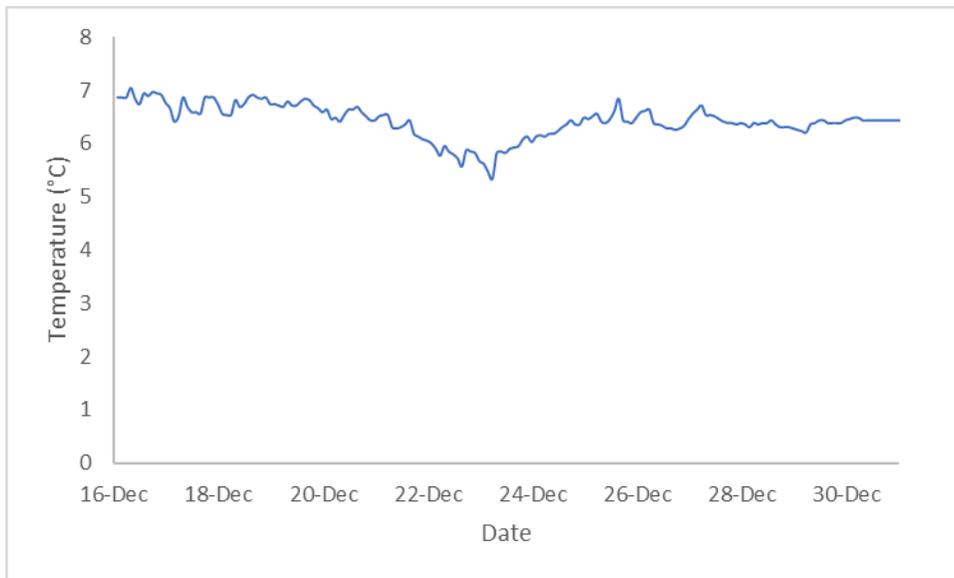


Figure 38. Temperature at RST (Lookout Dam Spill)

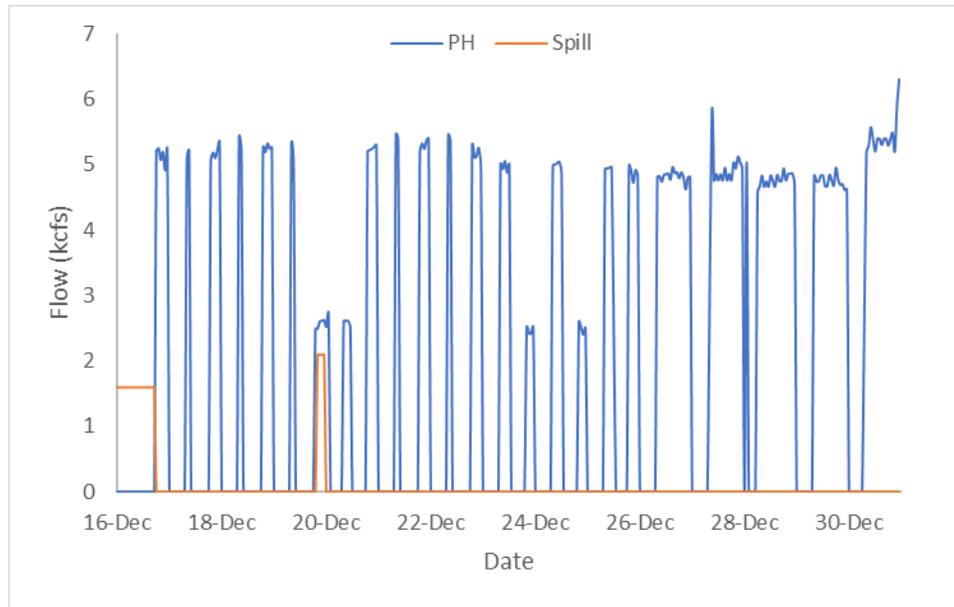


Figure 39. Hourly Flows PWR vs. Spill (Lookout Dam Tailrace)

Middle Fork Willamette – Lookout Point Head of Reservoir

Target Species

The reporting period began December 16th and ended on December 31st. 2 Chinook salmon were captured during the 16-day sampling period (Figure 40). The 5 ft RST was raised on 12/26/2022 due to high flow and high debris in the trap. The trap was not safe to sample for the rest of the reporting period. The trap was operated 66.7% of the reporting period. Table 23 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Middle Fork Willamette - Lookout Point Head of Reservoir site to-date and Figure 41 shows length frequency data to-date.

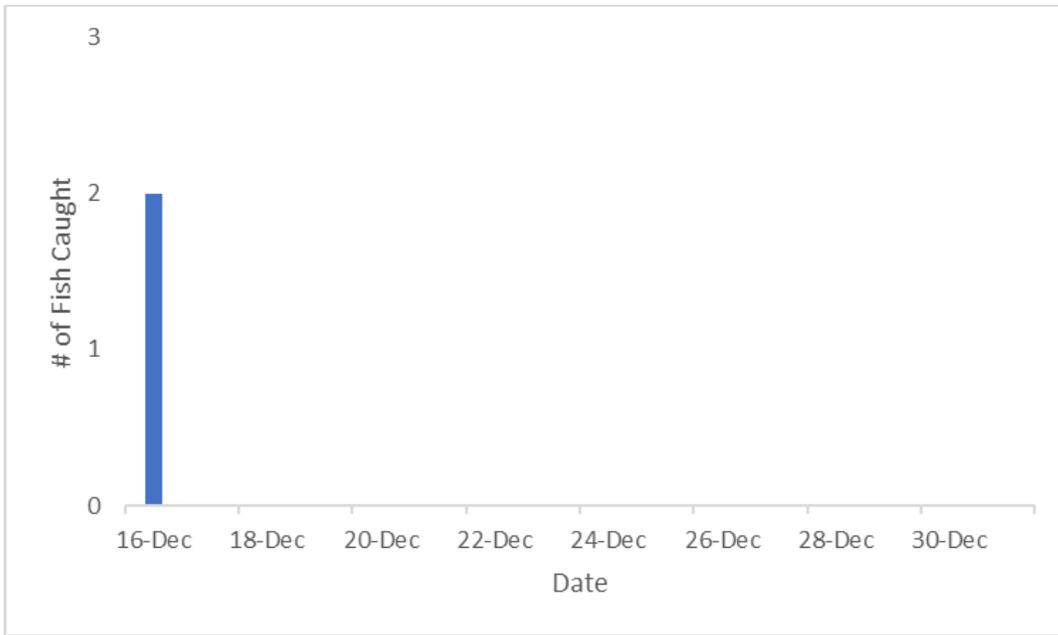


Figure 40. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Lookout Point Head of Reservoir)

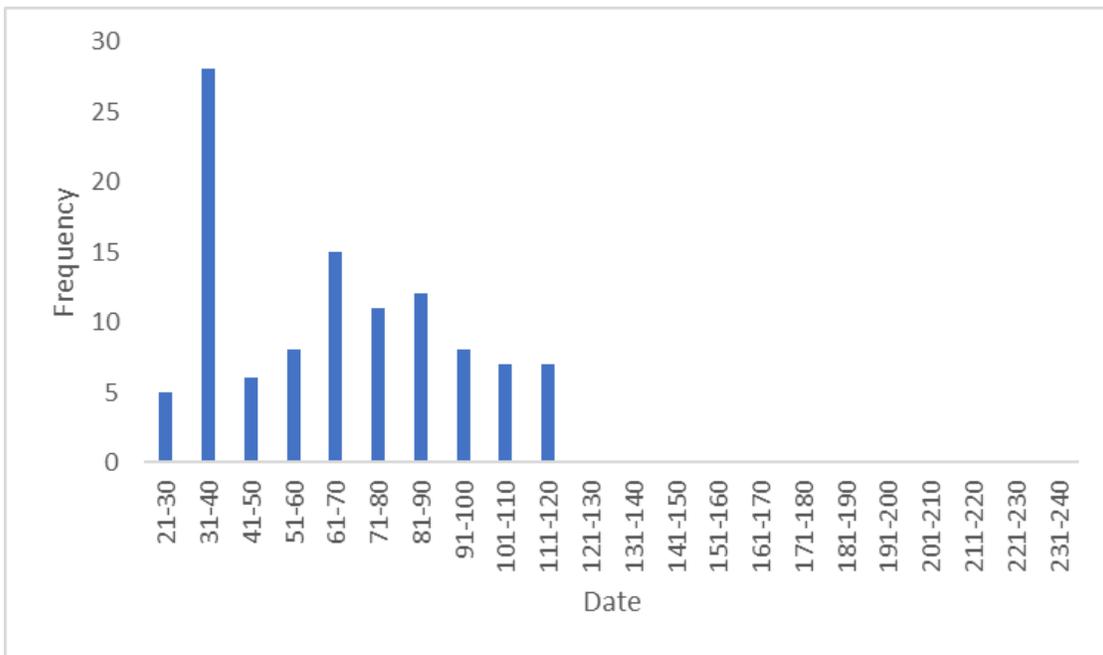


Figure 41. Length Frequency of Juvenile Chinook Sampled Season To-Date (Lookout Point Head of Reservoir)

Table 23. Descriptive Statistics of Target Species Captured at Lookout Point Head of Reservoir, Season To-Date and for the Reporting Period

To-Date										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Head of Reservoir	5 ft	CHS	Smolt	6	97	118	108.4	10.2	18.2	15.4
		CHS	Parr	62	59	119	81.3	1.0	19.8	6.3
		CHS	Fry	41	28	69	37.2	N/A	N/A	N/A
December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Head of Reservoir	5 ft	CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	2	103	119	111.0	12.1	17.2	14.7
		CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A

*Some fry are too small to accurately weigh and are omitted from the above tables.

Trapping Efficiency

A total of 510 juvenile hatchery Chinook (sub-yearlings) were bismarck brown dyed and adipose clipped and released on 12/12/2022 above the Lookout Point Head of Reservoir trap. Fish were released in small groups to evaluate the traps' efficiency capturing fish migrating downstream. 0 fish were recaptured in the 5-ft RST for an efficiency of 0.0%.

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
12/12/2022	510	0	0.0% (0/510)

Injuries and Copepod Infection

There were 2 Chinook captured during this reporting period. 0 had partial descaling <20% (0.0%) and 0 had body injuries (0.0%). There were 0 mortalities (0.0%). Injury data for the reporting period is shown in table 24. To date data can be found in Appendix A.

Table 24. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Lookout Point Head of Reservoir).

Site	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Lookout Point Head of Reservoir	2	0	0	0	0	0	0	0

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

Scales and DNA were collected from 2 Chinook captured for the reporting period.

PIT Tags

2 Spring Chinook were PIT tagged during this reporting period. Refer to Appendix D for further information regarding PIT tags during this reporting period.

VIE Marking

Visual Implant Elastomer (VIE) trials commenced at the Lookout Point Head of Reservoir site on 6/25/2022. VIE tag color and locations are changed every reporting period to distinctly mark groups of fish by capture date. Since then, 4 Chinook have been VIE marked to the left of the dorsal fin with fluorescent elastomer. No fish with VIE marks have been detected at downstream RST sites to date.

Date Tagged	VIE Color	# Tagged	# Recaptured to Date
6/25/2022-7/15/2022	Yellow	3	0
7/16/2022-7/31/2022	Red	1	0

Non-Target Species

2 non-target species were captured during the reporting period; the data is summarized below in Table 35.

Table 35. Summary of Non-target Species (Lookout Point Head of Reservoir).

Species	5ft Capture	5ft Mortality	Season Total	Season Total Mortality
Bass Unknown	0	0	4	1
Bluegill	0	0	3	0
Chinook (clipped)	0	0	28	0
Cutthroat Trout	0	0	10	0
Dace	1	0	134	0
Lamprey	0	0	2	0
Largescale Sucker	0	0	17	1
Mountain Whitefish	0	0	3	0
Northern Pikeminnow	0	0	24	0
<i>O. mykiss</i>	1	0	91	3
<i>O. mykiss</i> (clipped)	0	0	2	0
Peamouth	0	0	1	0
Pumpkinseed	0	0	1	1
Red-Sided Shiner	0	0	2	0
Sculpin	0	0	30	7
Spotted Bass	0	0	1	0
Smallmouth Bass	0	0	8	0
Unknown	0	0	16	0
Totals	2	0	377	13

Stream Statistics

Basic stream statistics for the Lookout Point Head of Reservoir RST site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14148000. During the reporting period, daily maximum values for instantaneous discharge ranged from 1,390.0 cfs to 9,490.0 cfs (mean: 4,140.6 cfs). Figure 42 shows instantaneous discharge.

Stream temperatures were recorded every two hours using a temperature probe at the Lookout Point Head of Reservoir RST site during this reporting period. The probe operated normally during this period. (Figure 43).

Flows into Lookout Point Reservoir averaged 3,500.5 cfs (Figure 44). Catch per unit of effort (CPUE) data are summarized in Table 26. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 26. Summary of Chinook CPUE at Lookout Point Head of Reservoir.

	Chinook
Description	5 ft
Catch	2
Effort (hrs)	238.5
CPUE (fish/hr)	0.008

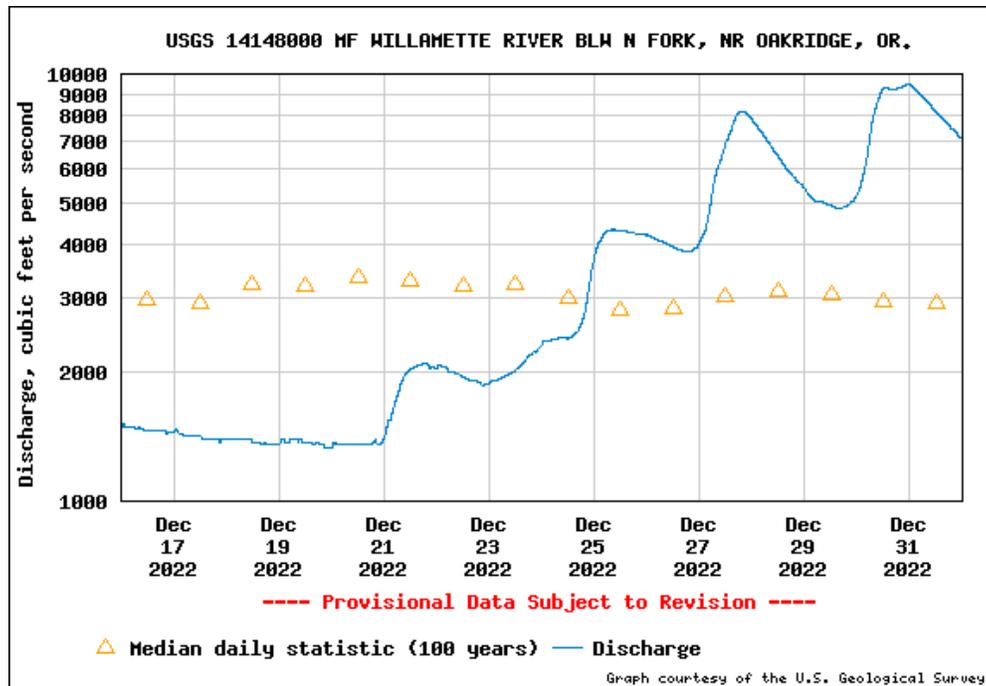


Figure 42. Discharge (cfs); above Lookout Point Reservoir, Below Oakridge, OR

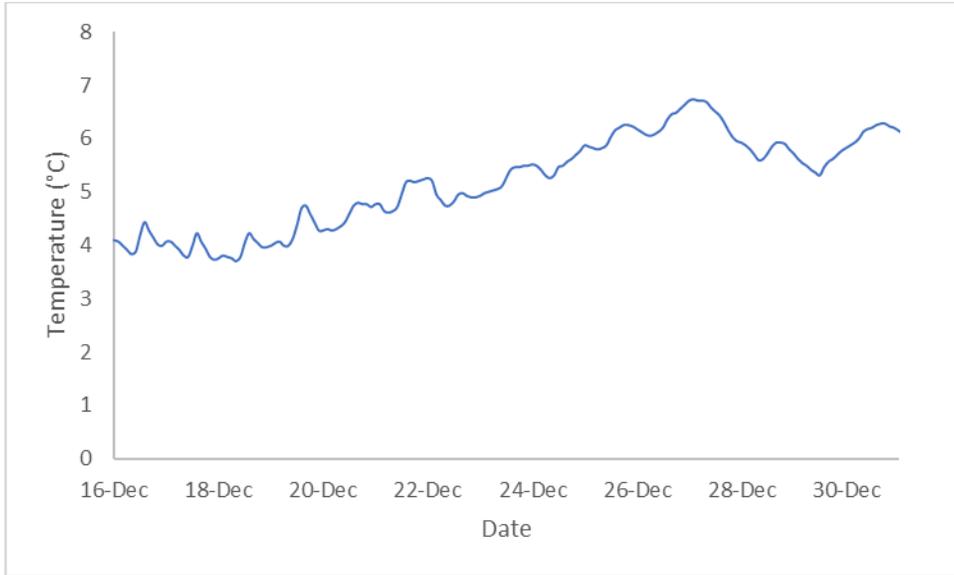


Figure 43. Temperature at RST (Lookout Point Head of Reservoir)

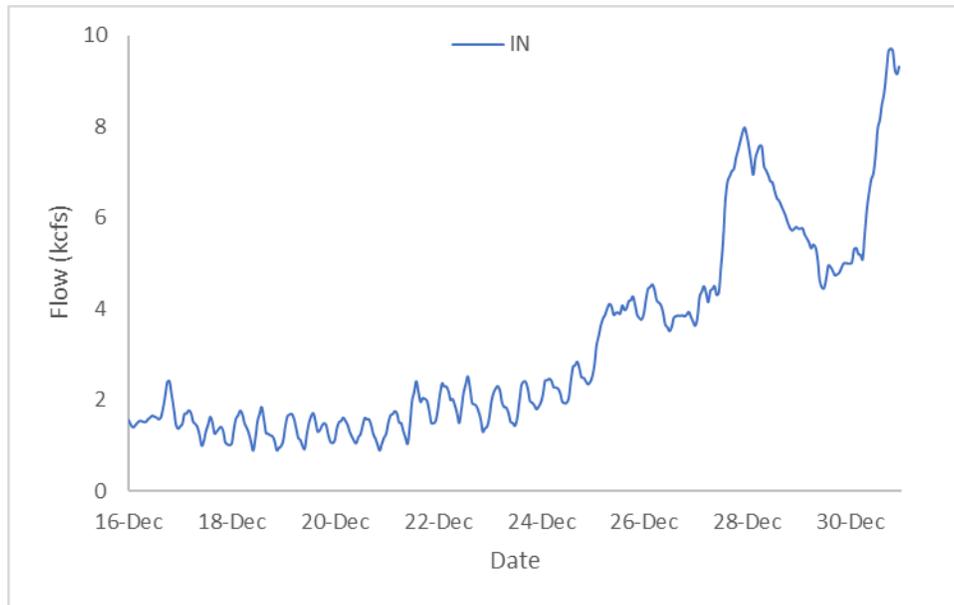


Figure 44. Hourly Flows (Lookout Point Head of Reservoir site)

Middle Fork Willamette – Hills Creek Dam

Target Species

This reporting period began on December 16th and ended on December 31st. There were 23 Chinook salmon (CHS) captured during the 16-day sampling period (Figure 45). Sampling durations were 100% for both the RO RST and Powerhouse RST. Table 27 provides life stage, length, and weight data for all Chinook salmon that have been caught at the Hills Creek Dam site to-date and Figure 54 shows length frequency data to-date.

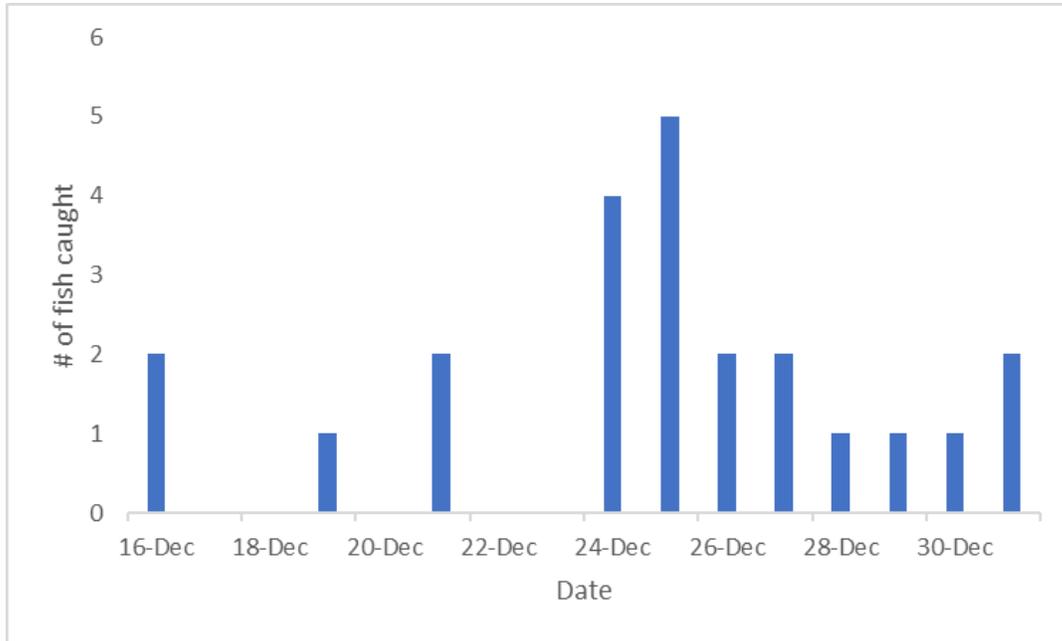
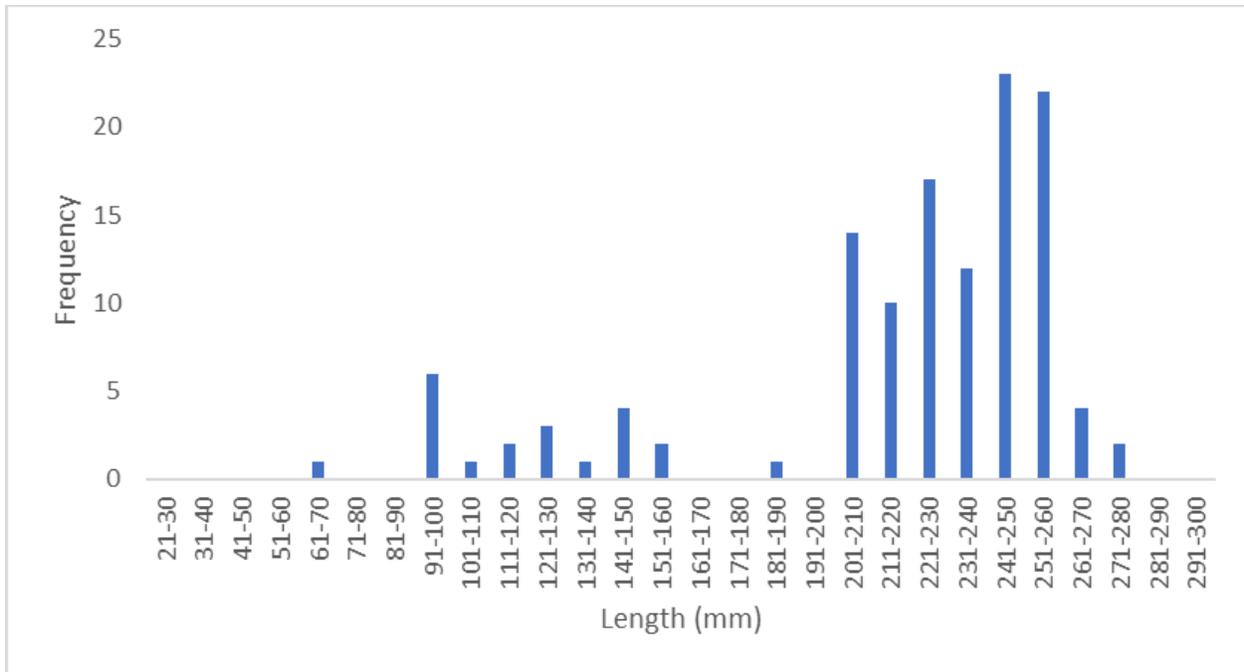


Figure 45. Chinook Captured Per Day 12/16/2022 to 12/31/2022 (Hills Creek Dam)



*Figure does not include fish without heads or fish used for trapping efficiency

Figure 46. Length Frequency of Juvenile Chinook Sampled Season To-Date (Hills Creek Dam)

24-Hour Post Collection Holding Trial

8 Chinook captured in the RSTs were held during this reporting period. 5 fish were held from the PWR RST and 3 fish were held from the RO RST. 0 hold fish died from the PWR RST (0.0%). 0 of the fish from RO RST died during holding (0.0%).

Trapping Efficiency

2 trapping efficiency trials have been conducted at Hills Creek Dam during this reporting period. The first being on 12/07/2022 and the second being on 12/13/2022.

During the first Trapping Efficiency trial, a total of 514 juvenile Chinook (parr) were dyed, clipped and released on 12/07/2022 below Hills Creek PWR to evaluate the efficiency of the screw traps. A total of 29 fish were recaptured in the 8 ft PWR trap. A total of 3 chinook released in the PWR route were captured in the 5ft RO trap. Trapping efficiency was 5.6% for the PWR RST and 0.6% for the RO RST.

Hills Creek Dam (12/07/2022)	Release #	Recapture #	Capture Efficiency
PWR Route	514	29	5.6% (29/514)
RO Trap	514 in PWR	3	0.6% (3/514)

*Live fish captured at the PWR trap are released just downstream of the PWR trap, upstream of the RO trap and therefore retained in the capture efficiency estimates for the RO Trap if they arrive in the lower trap.

*Any dead fish captured at the PWR trap are excluded from the RO trap capture efficiency estimate as they are not alive at time of re-release.

During the second Trapping Efficiency trial, a total of 516 juvenile Chinook (parr) were dyed, clipped and released on 12/13/2022 below the Hills Creek RO to evaluate the efficiency of the screw trap. A total of 1 fish was recaptured in the 5 ft RO trap. The efficiency of the RO trap was 0.2%.

Hills Creek Dam (12/13/2022)	Release #	Recapture #	Capture Efficiency
RO Route	516	1	0.2% (1/516)

*Live fish captured at the PWR trap are released just downstream of the PWR trap, upstream of the RO trap and therefore retained in the capture efficiency estimates for the RO Trap if they arrive in the lower trap.

*Any dead fish captured at the PWR trap are excluded from the RO trap capture efficiency estimate as they are not alive at time of re-release.

Table 27. Descriptive Statistics of Target Species Captured at Hills Creek Dam Season To-Date and for the Reporting Period

To-Date										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek	RO	CHS	Parr	6	90.0	141.0	110.7	7.4	23.4	13.3
		CHS	Smolt	78	137.0	275.0	231.8	27.4	192.3	142.6
Hills Creek	PWR	CHS	Parr	7	69.0	127.0	98.1	3.7	24.5	11.2
		CHS	Smolt	49	128.0	280.0	225.9	26.2	245.5	136.3

*Fish that were missing heads are not included in length and weight calculations. One fish was a head only and could not be assigned a life stage.

December 16-31, 2022										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek	RO	CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	6	222	275	241.2	105.5	189.6	146.6
Hills Creek	PWR	CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	17	204	280	236.3	108.1	245.5	159.0

Injuries and Copepod Infection

There were 6 Chinook captured in the RO RST. Partial descaling <20% was observed on 4 of 6 Chinook collected at the RO RST (66.7%), and descaling >20% was observed on 2 of the Chinook collected (33.3%). 6 displayed body injuries (100.0%) and 1 had eye injuries (16.7%). 6 of the RO RST Chinook had copepods present in the branchial cavity (100.0%) and 4 had copepods present on fins (66.7%). There were 3 mortalities (50.0%). 1 of the fish captured in the Spill RST displayed Gas Bubble Disease (one level 1) (16.7%).

There were 17 Chinook captured in the Powerhouse channel RST. Partial descaling <20% was observed on 4 of the 17 Chinook collected at the PWR RSTs (23.5%). Descaling >20% was observed on 10 of the Chinook collected (58.8%). 17 PWR RST fish had bodily injury (100.0%) and 4 had eye injuries (23.5%). 17 of the fish had copepods present in the branchial cavity (100.0%) and 13 had copepods present on fins (76.5%). 9 fish displayed Gas Bubble Disease (eight level 1 and one level 2) (52.9%). There were 12 chinook mortalities collected in the PH RST (70.6%).

Injuries are displayed in Table 28. To date injury data can be found in Appendix A.

Table 28. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Hills Creek Dam)

Site	Route	# CHS Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities
Hills Creek	RO	6	4	2	6	1	6	4	3
Hills Creek	PWR	17	4	10	17	4	17	13	12

*DSC=Descaled, COP=Copepods, B.C.=Branchial Cavity

Collected DNA and Scale Samples

For the reporting period, scales and DNA were collected from 22 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or did not have a body.

PIT Tags

No Spring Chinook were PIT tagged during this reporting period. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged so as to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

Non-Target Species

A total of 96 non-target fish were captured at Hills Creek during the reporting period; the data is summarized below in Table 29.

Table 29. Summary of Non-target Species (Hills Creek Dam).

Species	RO Capture	RO Mortality	PWR Capture	PWR Mortality	Season Total	Season Total Mortality
Bass Unknown	4	2	6	3	32	18
Bluegill	13	5	30	25	160	82
Brook Lamprey	0	0	0	0	2	0
Bullhead Catfish	0	0	0	0	2	0
Bull Trout	0	0	0	0	1	0
Crappie	6	0	15	13	112	64
Cutthroat	1	1	0	0	1	1
Dace	0	0	0	0	5	0
Red-Sided Shiner	0	0	0	0	26	5
Sculpin	0	0	0	0	85	1
Spotted Bass	3	0	7	4	70	61
Smallmouth Bass	0	0	4	4	11	10
Largescale Sucker	0	0	2	1	5	2
Mountain Whitefish	0	0	0	0	1	1
Northern Pikeminnow	0	0	0	0	2	0
<i>O. mykiss</i>	0	0	5	2	83	24
Unknown	0	0	0	0	14	2
Totals	27	8	69	52	612	271

Stream Statistics

Basic stream statistics at the Hills Creek site were calculated from data downloaded from the U.S. Geological Survey stream gauge numbers 14145110 and 14145500. Gauge height (feet) is the only metric provided at this gauge. Total dissolved gas saturation data was received from gauge 14145500, 1.4 rkms downstream of the trap. During the reporting period, daily maximum values for instantaneous gauge height ranged from 1,224.7 feet to 1,226.5 feet (mean: 1,225.2 feet). Figure 47 shows instantaneous gauge height.

Total dissolved gas saturation ranged from 95 to 104% (mean: 97.8%) during the reporting period. Figure 48 shows total dissolved gas saturation.

Stream temperatures were recorded every 2 hours for both the RO RST and the PWR RST (Figures 49 and 50). The probes operated normally throughout the reporting period.

Flows through the PWR and RO during the reporting period averaged 790.1 and 116.2 cfs respectively (Figure 51). Catch per unit of effort (CPUE) data are summarized in Table 30. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

Table 30. Summary of Chinook CPUE, Hills Creek Dam.

Description	Chinook	
	RO (5ft)	PWR (8ft)
Catch	6	17
Effort (hrs)	380.2	380.5
CPUE (fish/hr)	0.016	0.045

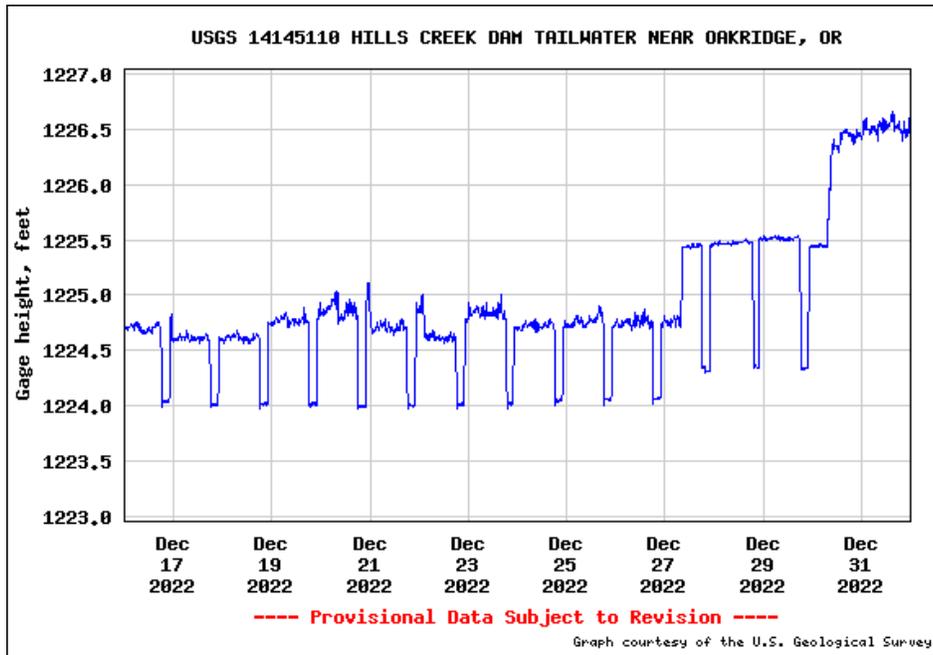


Figure 47. Gauge Height (feet); below Hills Creek Dam PWR - Middle Fork Willamette River

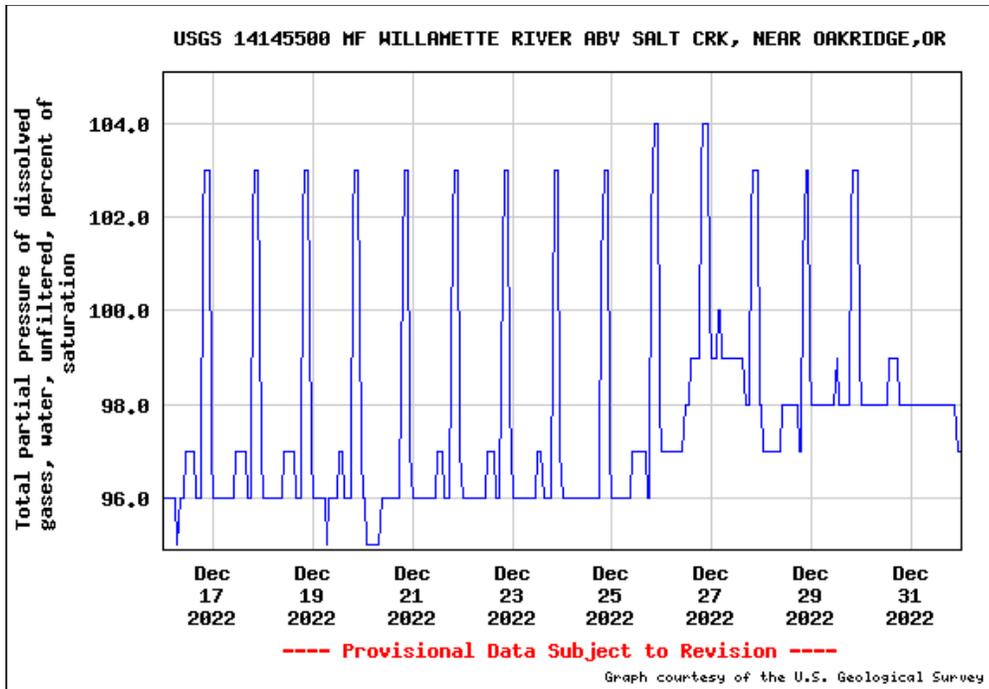


Figure 48. Total Dissolved Gas Saturation (%); below Hills Creek Dam – Middle Fork Willamette River

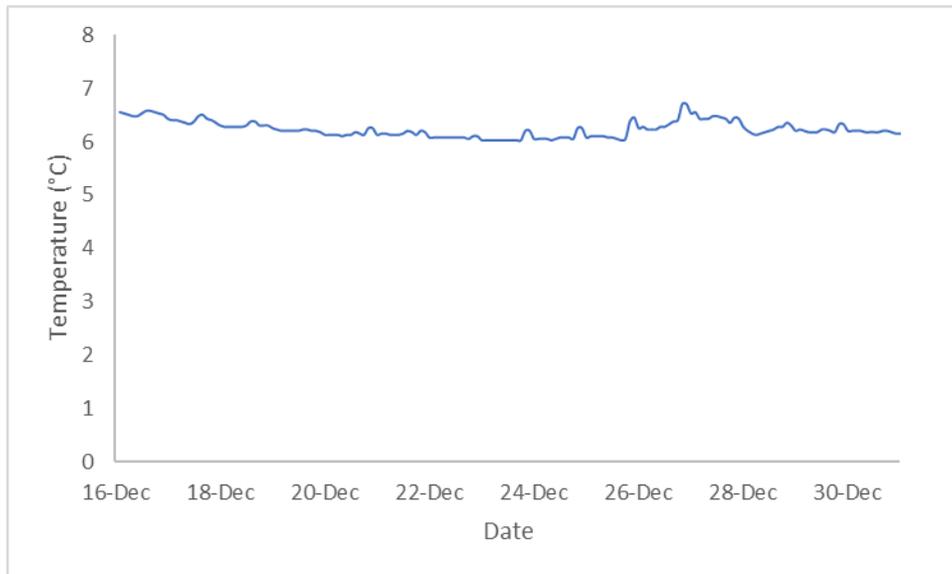


Figure 49. Temperature at RO RST (Hills Creek Dam)

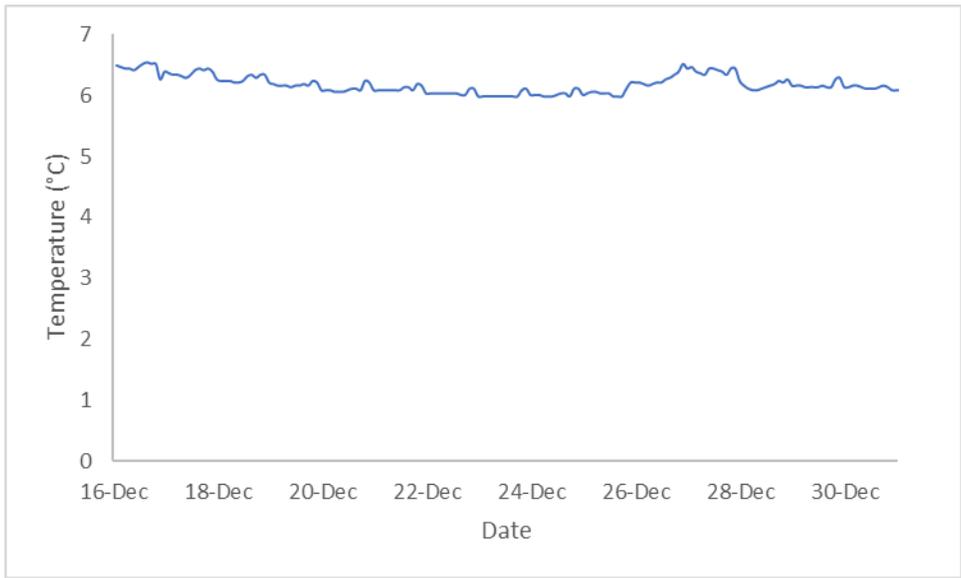


Figure 50. Temperature at Powerhouse RST (Hills Creek Dam)

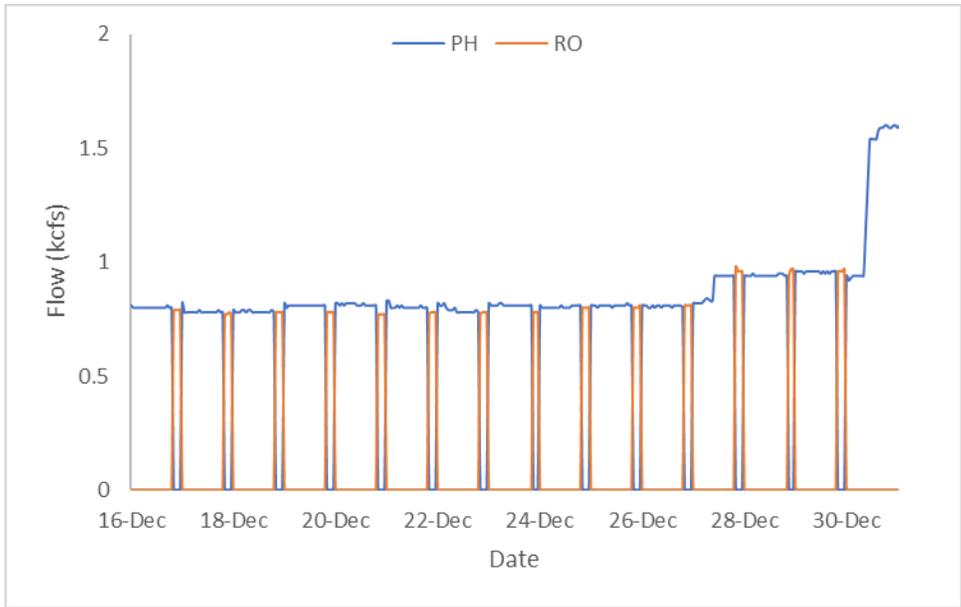


Figure 51. Hourly Flows PWR vs. RO (Hills Creek Dam)

Issues Encountered

Fall Creek Dam Tailrace experienced an influx of detritus and sediment from the reservoir on 12/01/2022. Sediment deposits in sampling channel are too high to allow the cone of the trap to drop into the sampling position. A large flow event is needed to flush debris out of channel and make it fishable again. A major rain event caused high flow and high debris at the Lookout Point Head of Reservoir site. It was raised on 12/26/2022 due to high water and logs in the trap.

Upcoming USACE Support Services

USACE Crane Support will be needed to install traps at Green Peter Dam and Big Cliff Dam in January 2023.

Appendix A

Chinook (CHS) To Date

Chinook Injuries to-date																								
Site/Trap/Life Stage	Total Fish	MUNK	DS>2	BLO	EYB	FUN	BKD	COP	DS>2	PRD	FID	HBO	BO	HO	BVT	HBP	BRU	TEA	OPD	HIN	FVB	POP	GBD	
Big Cliff Dam	1254		784	9	88	5	1	974	289	4	668	5	12	5	41	8	83	43	158	80	83	15	49	
8 ft	1254		784	9	88	5	1	974	289	4	668	5	12	5	41	8	83	43	158	80	83	15	49	
Adult	1		1								1						1	1	1		1			
Parr	27		6		1	1		15	3		6					2			1					
Smolt	1215		777	9	86	4		959	285	4	660	5	12	3	41	6	81	42	155	79	82	14	49	
Unknown	2													2								1		
Fry	9				1		1		1		1						1		1	1				
Foster Dam HOR	128		53		1			2			28													
5 ft	128		53		1			2			28													
Parr	44		31					2			12													
Smolt	29		21								16													
Fry	55		1		1																			
Cougar Dam	2995	10	1592	35	275	13	3	2201	689	3	1497	3	7	2	90	33	153	68	295	103	217	17	443	
RO	1802		1075	30	242	10	3	1628	568	3	1186	3	2		56	31	126	38	242	82	154	13	439	
Parr	197		102	5	32	2		130	50		96				4	1	8	2	13	12	4	1	19	
Smolt	1584		973	25	207	8	3	1498	517	3	1089	3	2		52	30	117	36	228	68	150	12	420	
Fry	21				3				1		1						1		1	2				
PH	1193	10	517	5	33	3		573	121		311		5	2	34	2	27	30	53	21	63	4	4	
Parr	266		146		11	1		104	25		67		1		5		3	5	11	6	5			
Smolt	543		369	5	18	2		469	90		239		4		28	2	22	18	39	12	58	1	4	
Unknown	2													2										
Fry	382	10	2		4				6		5				1		2	7	3	3		3		
Cougar Dam HOR	710	3	93			1		10	4	3	56						1	6	8	7	1	1		
5 ft	710	3	93			1		10	4	3	56						1	6	8	7	1	1		
Parr	178		90			1		10	4	2	48						1	6	1	1	1			
Smolt	4		1																					
Fry	528	3	2							1	8									7	6		1	
Fall Creek Dam Tail.	1								1		1							1						
8 ft	1								1		1							1						
Smolt	1								1		1							1						
Fall Creek HOR	7		3					2			1													
8 ft	7		3					2			1													
Parr	2		2					1			1													
Smolt	5		1					1																
Dexter Dam Tail.	99		60		6			12	23		46				1		3	4	6	6	5		21	
5 ft	99		60		6			12	23		46				1		3	4	6	6	5		21	
Parr	18		6		3			2	6		8							2	3	2			6	
Smolt	78		54		3			10	17		37				1		3	2	3	4	5		15	
Fry	3										1													

Chinook (CHS) To Date - Continued

Chinook Injuries to-date (Cont.)																							
Site/Trap/Life Stage	Total Fish	MUNK	DS<2	BLO	EYB	FUN	BKD	COP	DS>2	PRD	FID	HBO	BO	HO	BVT	HBP	BRU	TEA	OPD	HIN	FVB	POP	GBD
Lookout Dam Tail.	79		42	1	15	1		14	28		45				2	2	9	1	15	9	6		8
PH 1	28		11	1	7			7	14		19				2	2	6		8	2	1		2
Parr	3				1				2		2					1	1		1				
Smolt	25		11	1	6			7	12		17				2	1	5		7	2	1		2
PH 2	13		11		3			2	2		10						1	1	2	4	1		
Parr	4		4		3				1		4						1	1	1	3			
Smolt	9		7					2	1		6								1	1	1		
Spill	38		20		5	1		5	12		16						2		5	3	4		6
Parr	6		1						3		1												
Smolt	32		19		5	1		5	9		15						2		5	3	4		6
Lookout Point HOR	109		35					2			15						1		1				
5 ft	109		35					2			15						1		1				
Parr	62		30					1			10						1		1				
Smolt	6		4					1			3												
Fry	41		1								2												
Hills Creek Dam	140	1	70	1	19			115	58		60	1	10	2	43	8	12	6	21	9	11	2	16
RO	84	1	43		8			70	33		33		6		26	6	6	2	14	6	4	2	5
Parr	6		1					1															
Smolt	78	1	42		8			69	33		33		6		26	6	5	2	14	6	4	2	5
PH	56		27	1	11			45	25		27	1	4	2	17	2	6	4	7	3	7		11
Parr	7		4					1	1							1				1			
Smolt	49		23	1	11			44	24		27	1	4	2	17	1	6	4	7	2	7		11

Chinook (CHS) During Reporting Period

Chinook Injuries During Reporting Period (12-16-2022 to 12-31-2022)																							
Site/Trap/Life Stage	Total Fish	MUNK	DS<2	BLO	EYB	FUN	BKD	COP	DS>2	PRD	FID	HBO	BO	HO	BVT	HBP	BRU	TEA	OPD	HIN	FVB	POP	GBD
Big Cliff Dam	17		11		3			15	6		12		1		1		2		4	1	1		
8 ft	17		11		3			15	6		12		1		1		2		4	1	1		
Smolt	17		11		3			15	6		12		1		1		2		4	1	1		
Cougar Dam	25		19		2	1		25	5		20				1		1	2	8		2		4
PH	5		4		1			5	1		5								1	4		1	
Smolt	5		4		1			5	1		5								1	4		1	
RO	20		15		1	1		20	4		15				1		1	1	4		1		4
Parr	1		1			1		1															
Smolt	19		14		1			19	4		15				1		1	1	4		1		4
Dexter Dam Tail.	1		1					1													1		1
5 ft	1		1					1													1		1
Smolt	1		1					1													1		1
Lookout Dam Tail.	1		1								1												
PH 2	1		1								1												
Smolt	1		1								1												
Lookout Point HOR	2																						
5 ft	2																						
Parr	2																						
Hills Creek Dam	23		8	1	5			23	14		21	1	2	1	10		4	3	9	3	5	1	10
PH	17		4	1	4			17	12		15	1	2	1	10		4	3	6	1	4		9
Smolt	17		4	1	4			17	12		15	1	2	1	10		4	3	6	1	4		9
RO	6		4		1			6	2		6								3	2	1	1	1
Smolt	6		4		1			6	2		6								3	2	1	1	1

Steelhead (O. mykiss) To Date

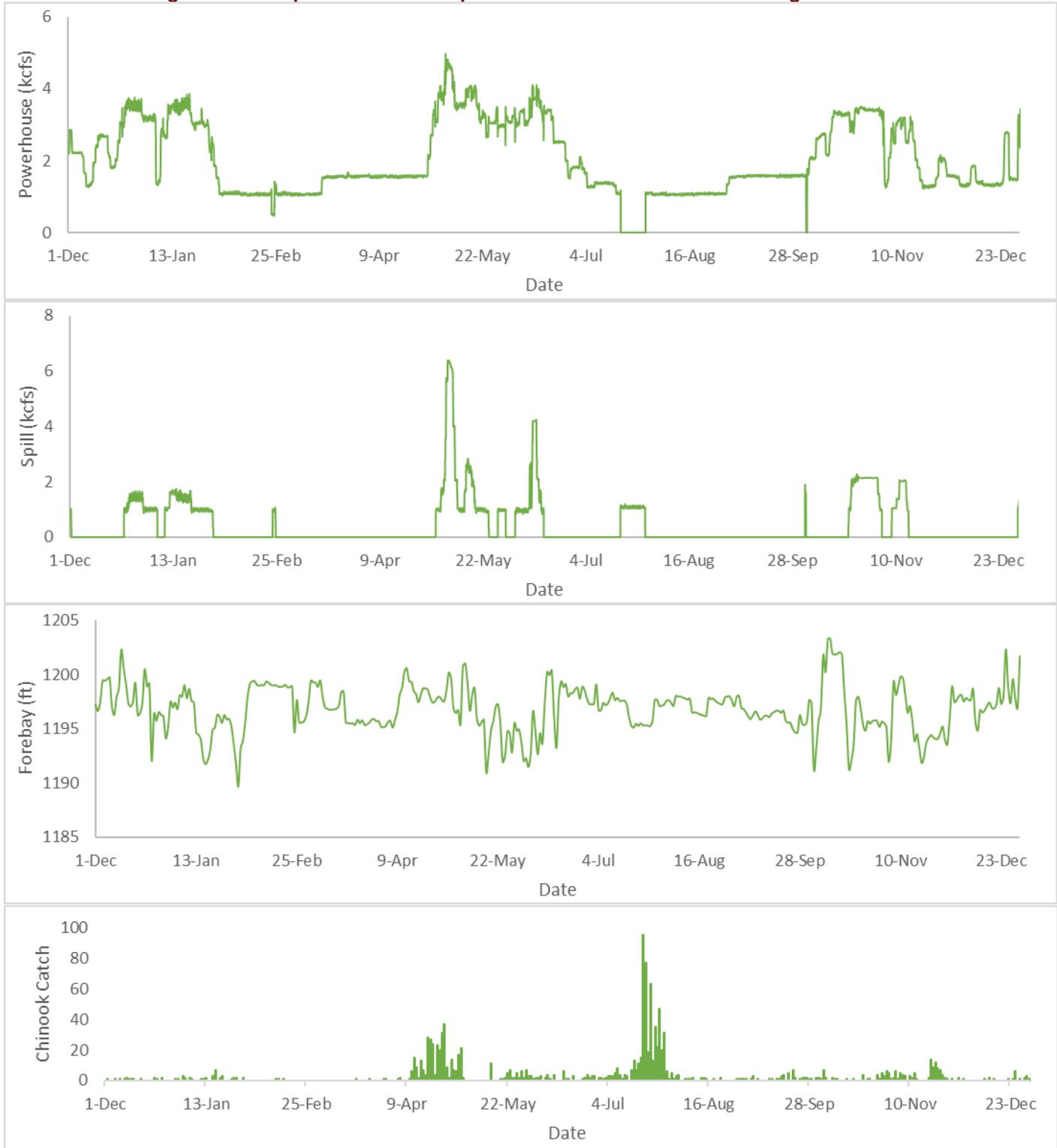
		O. mykiss Injuries To Date																						
Site/Trap/Life Stage	Total Fish	MUNK	DS<2	BLO	EYB	FUN	BKD	COP	DS>2	PRD	FID	HBO	BO	HO	BVT	HBP	BRU	TEA	OPD	HIN	FVB	POP	GBD	
Big Cliff Dam	107	1	36	4	2	3		27	10		39		1		2		8	3	9	9	3		7	
8 ft	107	1	36	4	2	3		27	10		39		1		2		8	3	9	9	3		7	
Adult	1								1		1		1											
Parr	45	1	11	4	1	1					14						2		1	1	1		1	
Smolt	33		22		1	2		27	9		23				2		5	3	8	8	2		6	
Fry	28		3								1						1							
Green Peter Tail.	6		3		1			1	2		4						4		1	1			5	
8 ft	6		3		1			1	2		4						4		1	1			5	
Smolt	6		3		1			1	2		4						4		1	1			5	
Foster Dam HOR	224		69		1	2		2		2	64						3	1	2	1	1	1		
5 ft	224		69		1	2		2		2	64						3	1	2	1	1	1		
Adult	7		1								2													
Parr	110		32		1	2		1			36						3		2		1	1		
Smolt	76		36					1		2	26							1		1				
Fry	31																							

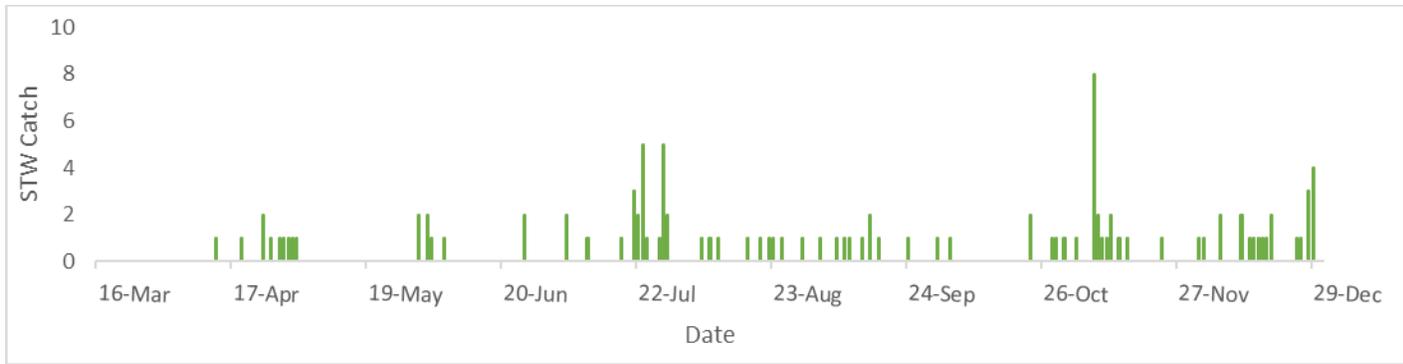
Steelhead (O. mykiss) During Reporting Period

		O. mykiss Injuries During Reporting Period (12-16-2022 to 12-31-2022)																					
Site/Trap/Life Stage	Total Fish	MUNK	DS<2	BLO	EYB	FUN	BKD	COP	DS>2	PRD	FID	HBO	BO	HO	BVT	HBP	BRU	TEA	OPD	HIN	FVB	POP	GBD
Big Cliff Dam	14		9			1		12	4		12				1		2		2	2	2		3
8 ft	14		9			1		12	4		12				1		2		2	2	2		3
Parr	2		1								1						1						
Smolt	12		8			1		12	4		11				1		1		2	2	2		3

Appendix B

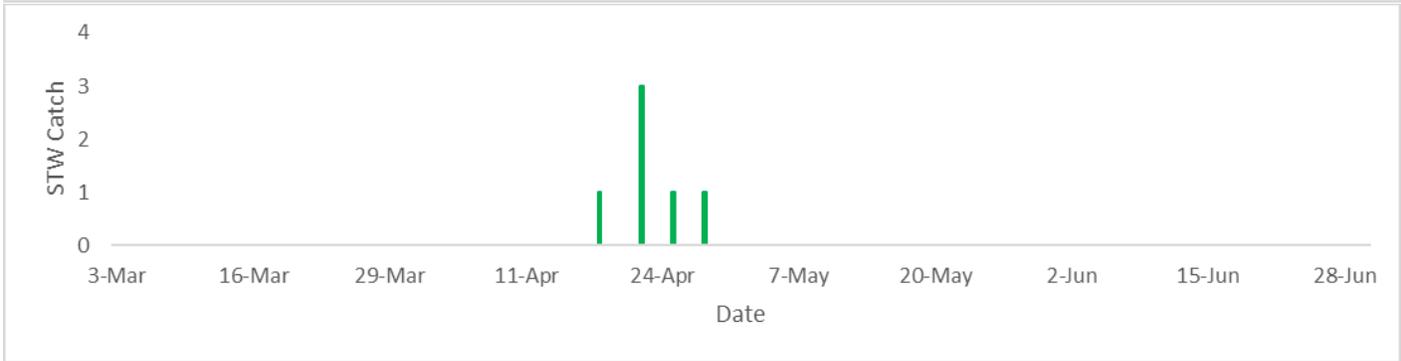
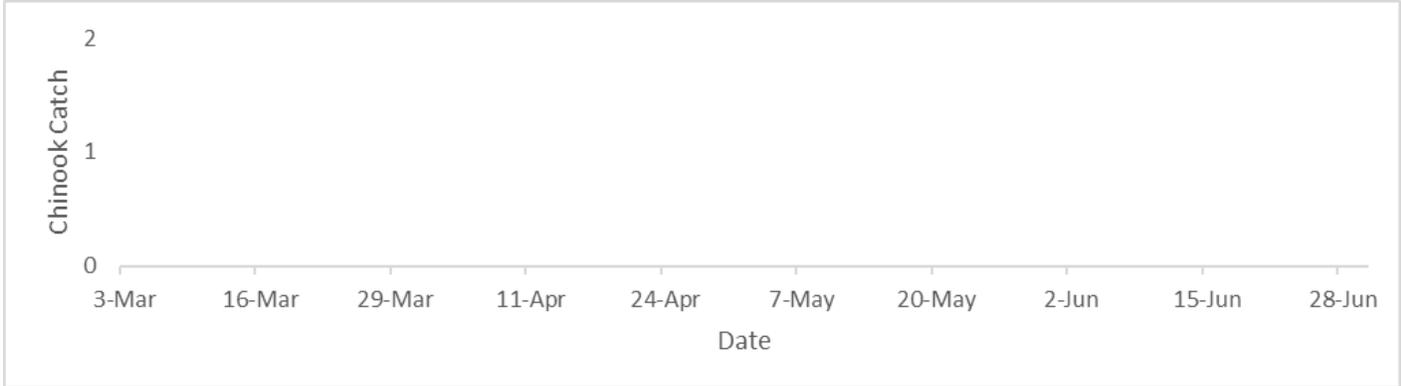
Big Cliff Dam Operational and Capture Data Since Start of Monitoring



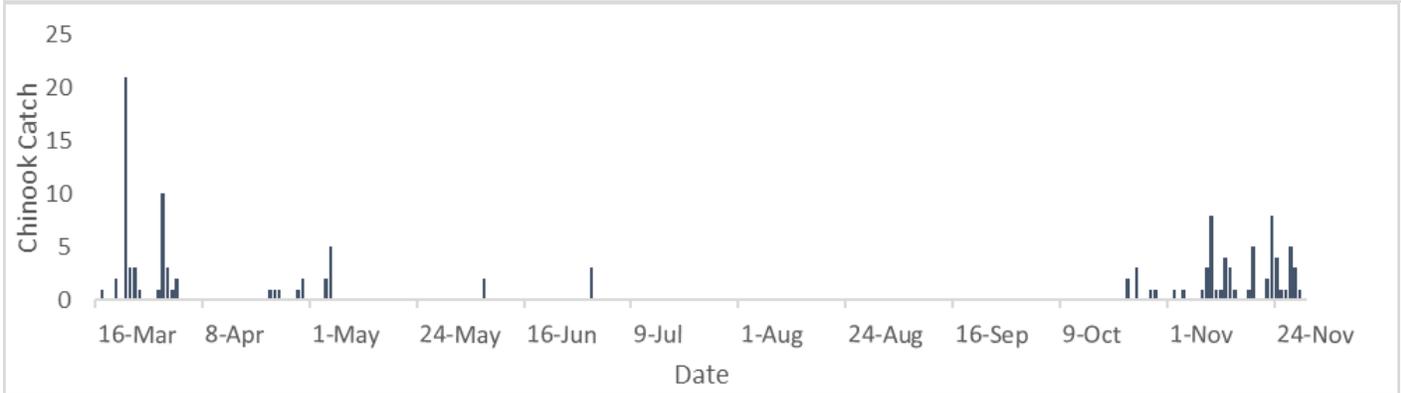
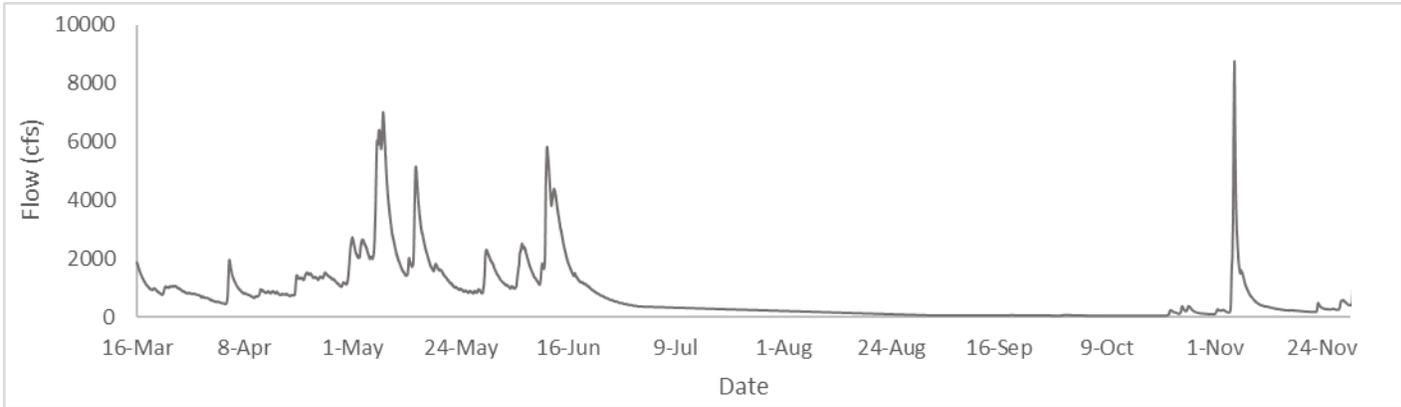


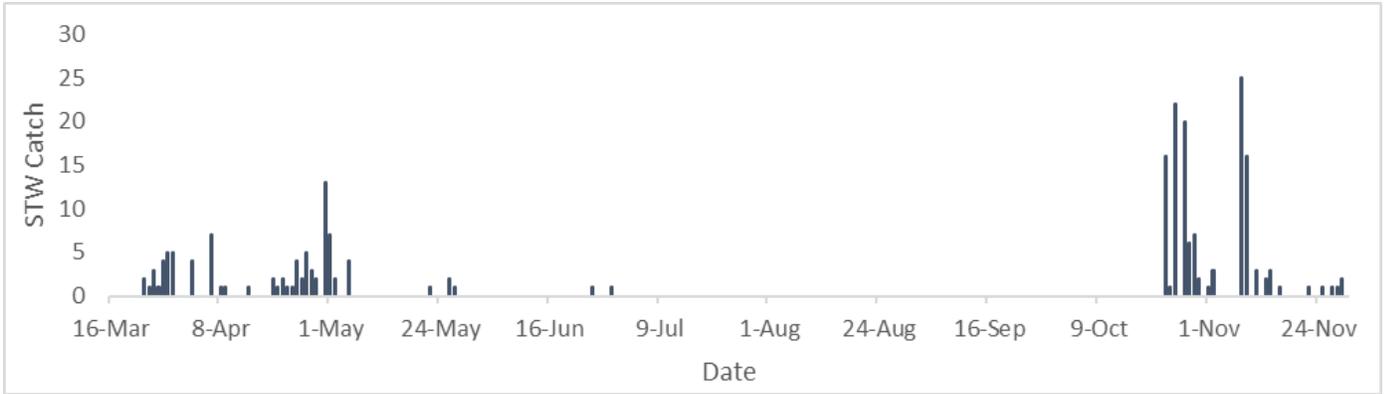
Green Peter Dam Operational and Green Peter Tailrace- Middle Santiam River Capture Data Since Start of Monitoring



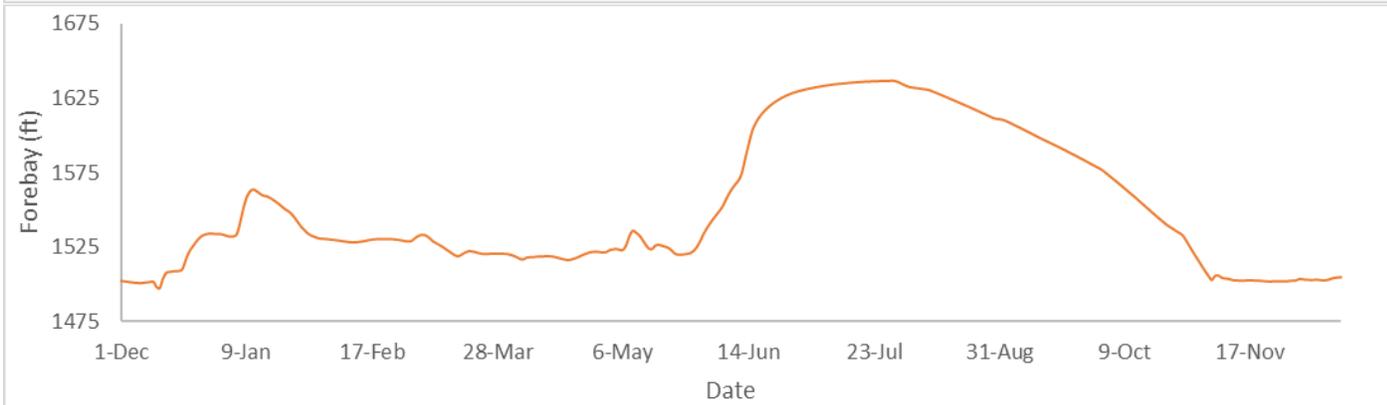
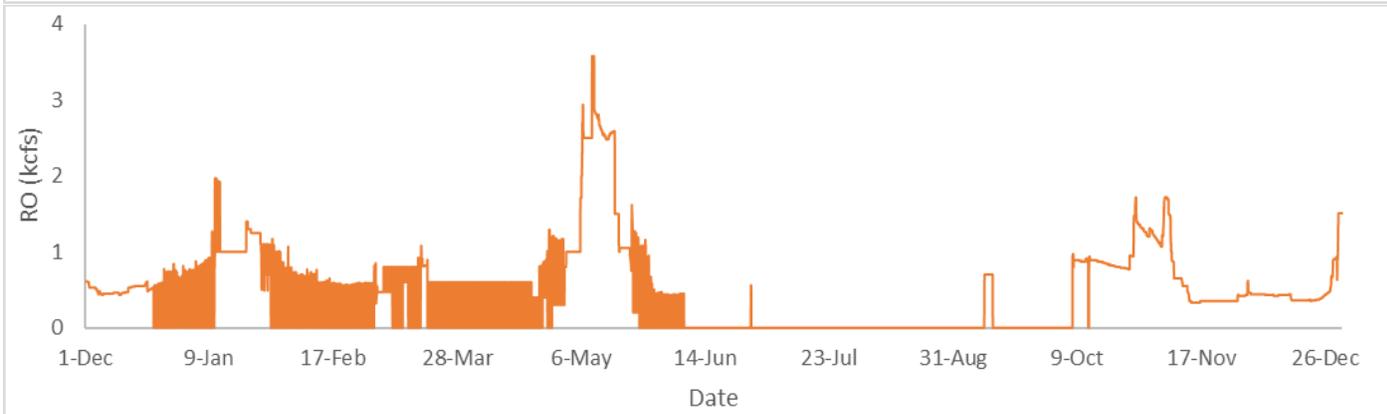
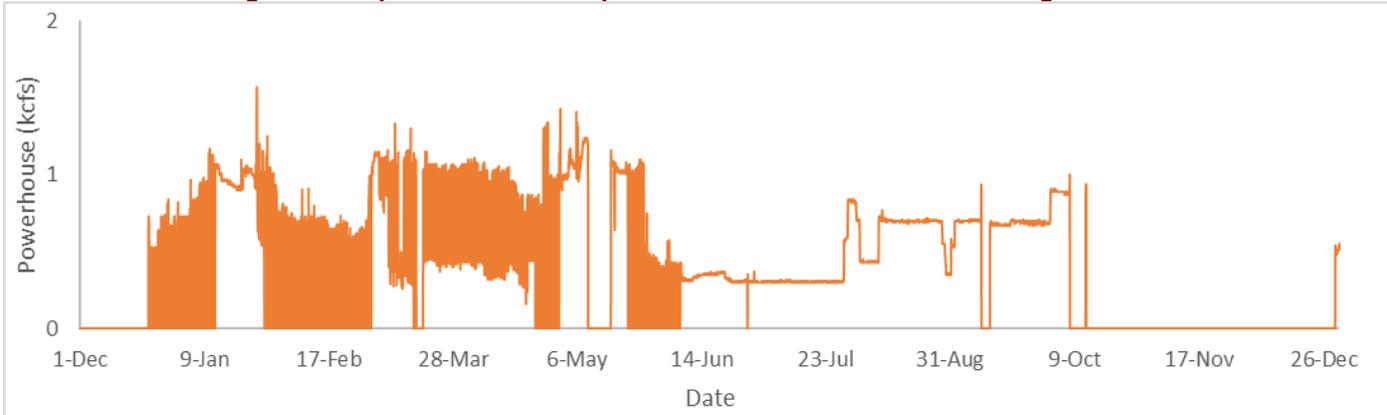


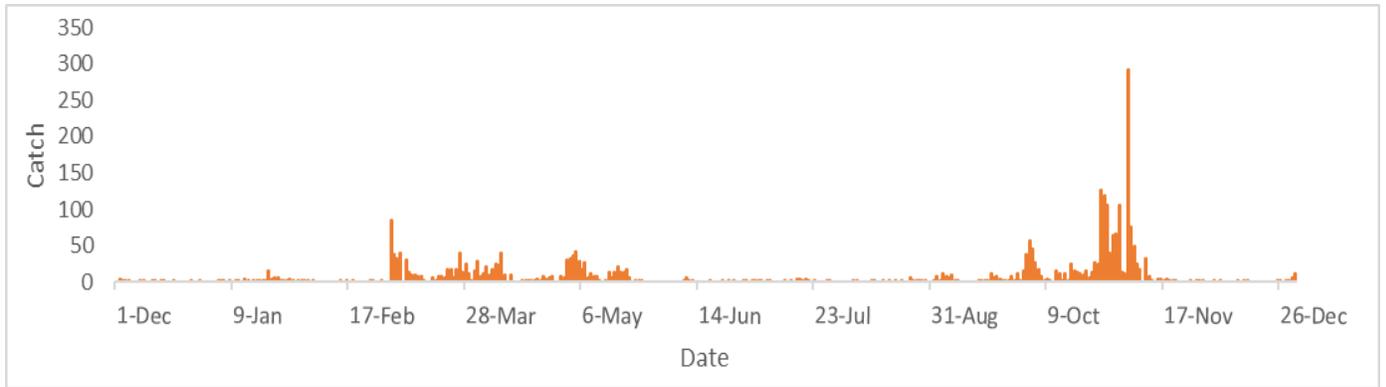
South Santiam River Above Foster Dam Discharge and Foster Dam Head of Reservoir Capture Data



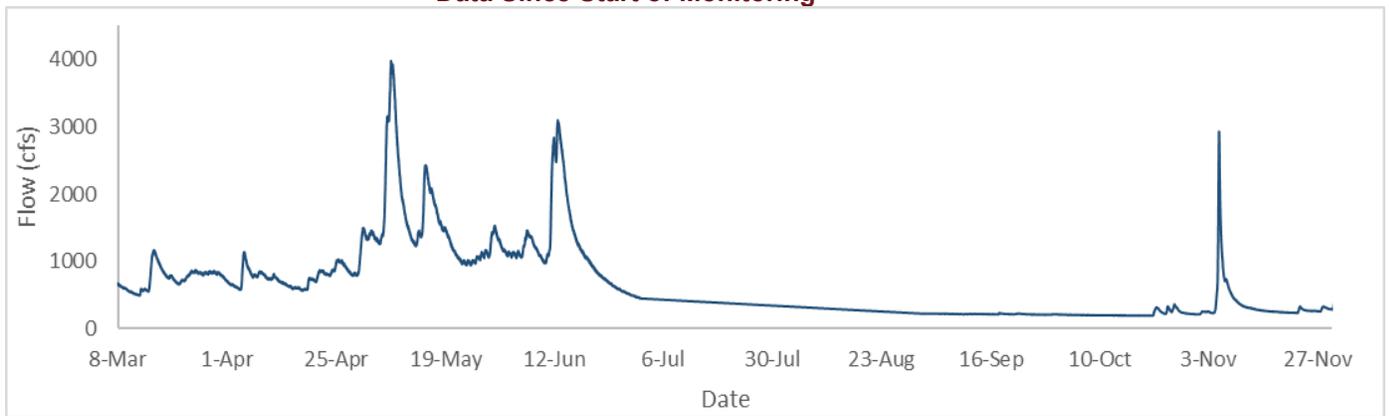


Cougar Dam Operational and Capture Data Since Start of Monitoring

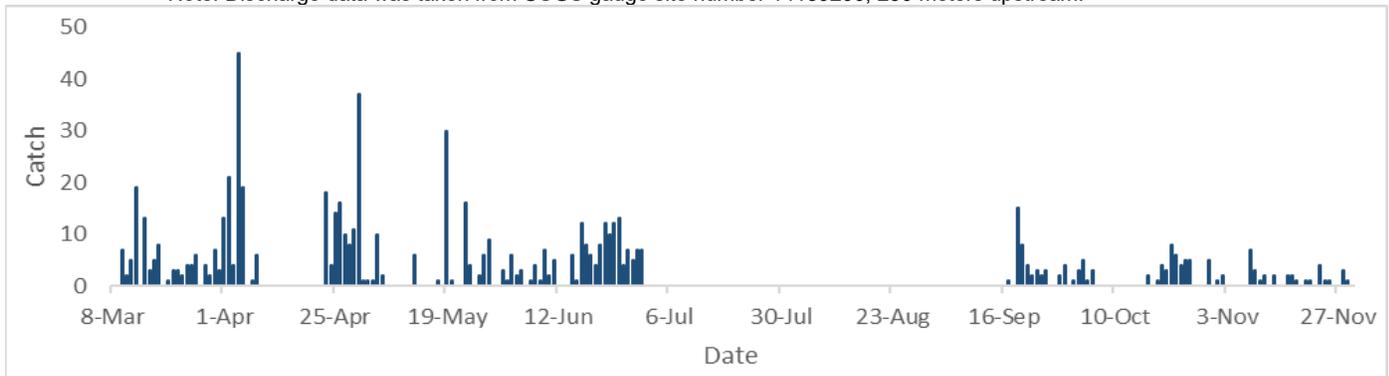




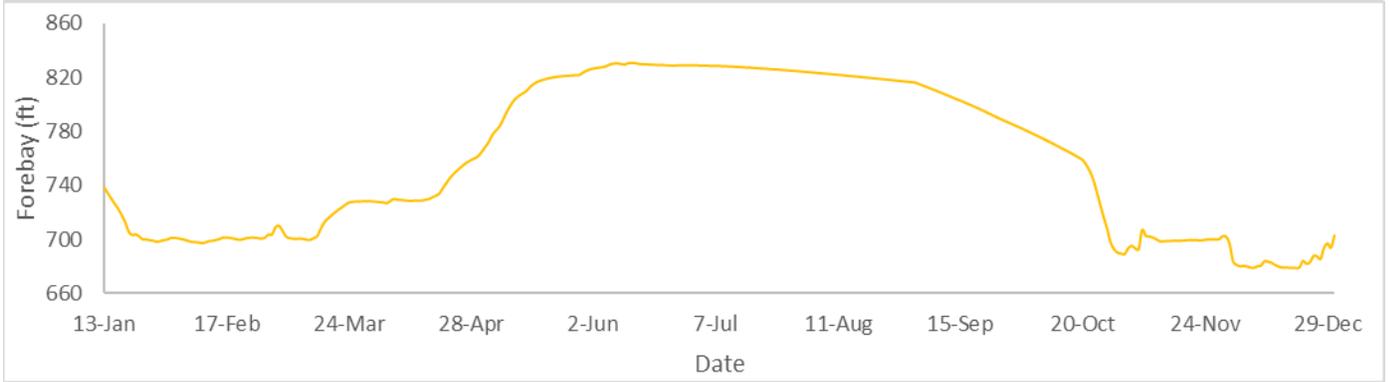
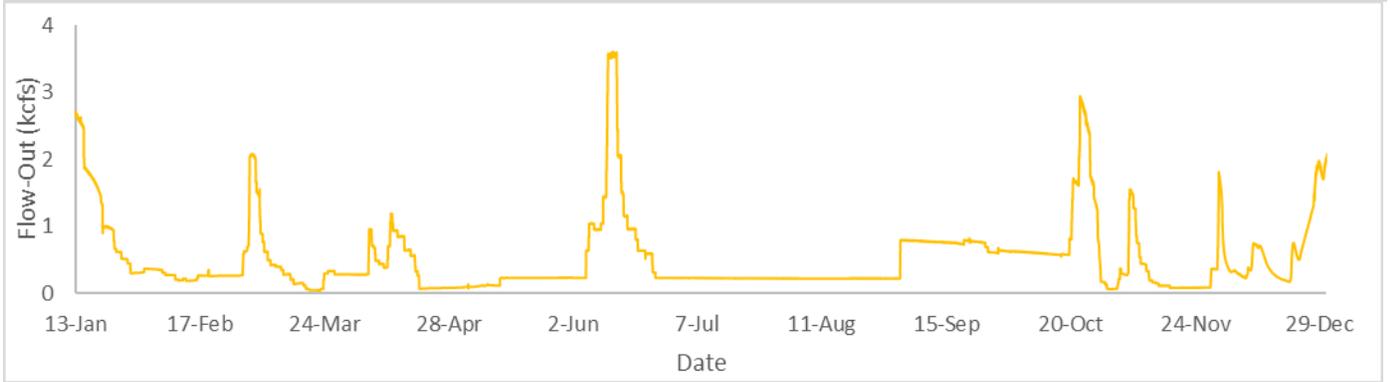
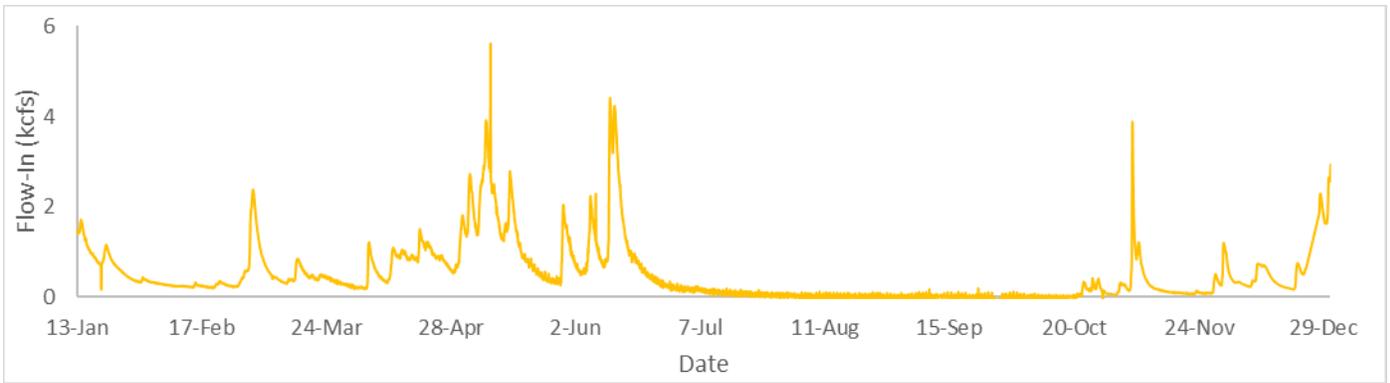
South Fork McKenzie above Cougar Dam Discharge and Cougar Dam Head of Reservoir Capture Data Since Start of Monitoring



Note: Discharge data was taken from USGS gauge site number 14159200, 250 meters upstream.



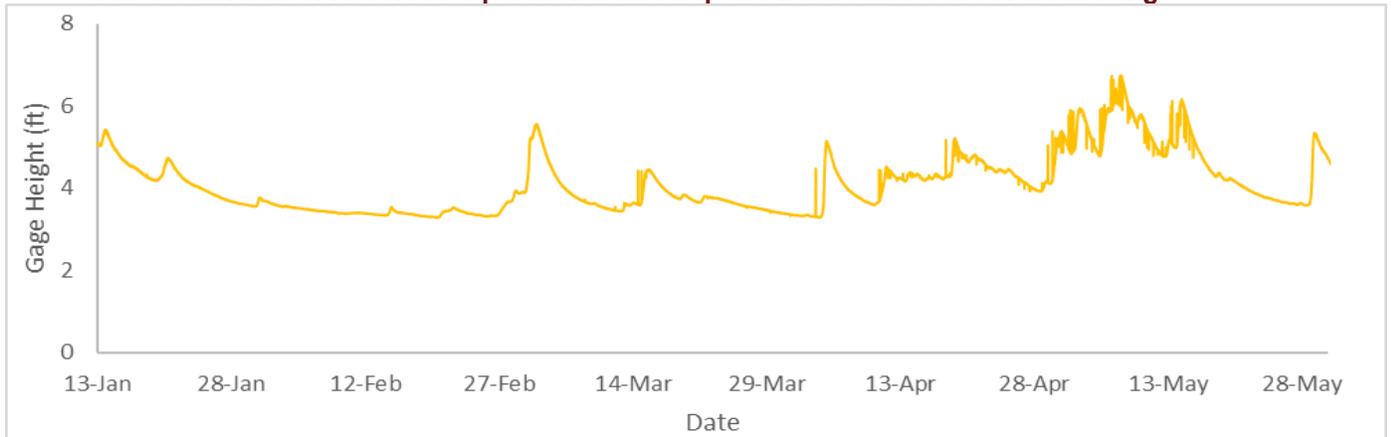
Fall Creek Dam Tailrace Operational and Capture Data Since Start of Monitoring



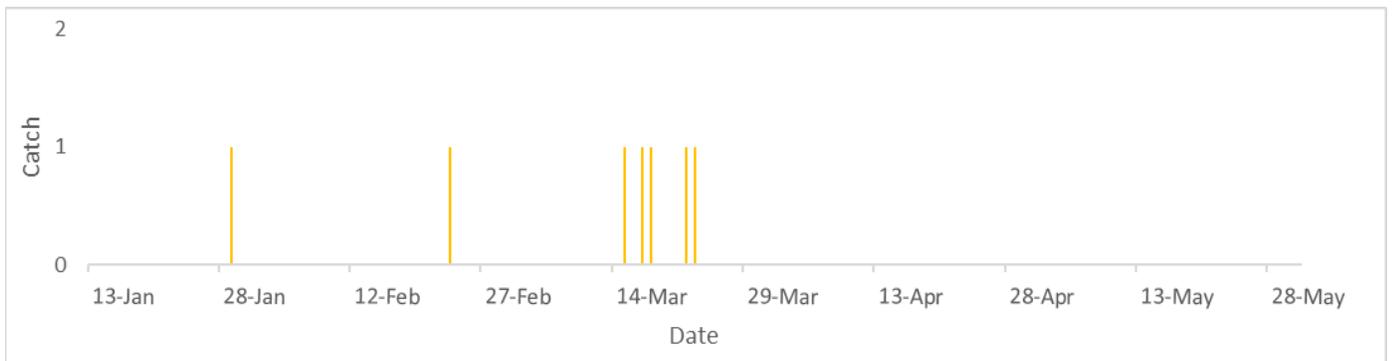
Note: Operational data was being tracked for Fall Creek Head of Reservoir site prior to initiation of Fall Creek Dam monitoring.



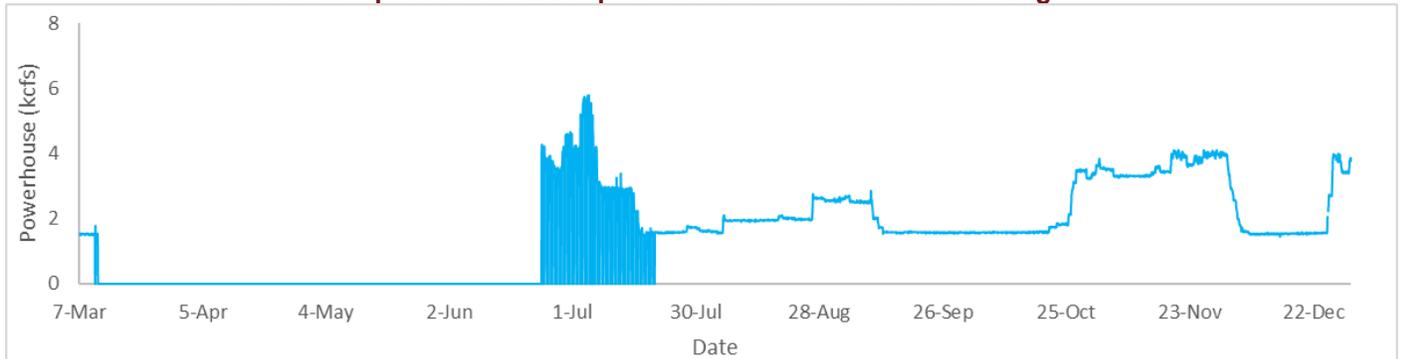
Fall Creek Head of Reservoir Operational and Capture Data Since Start of Monitoring

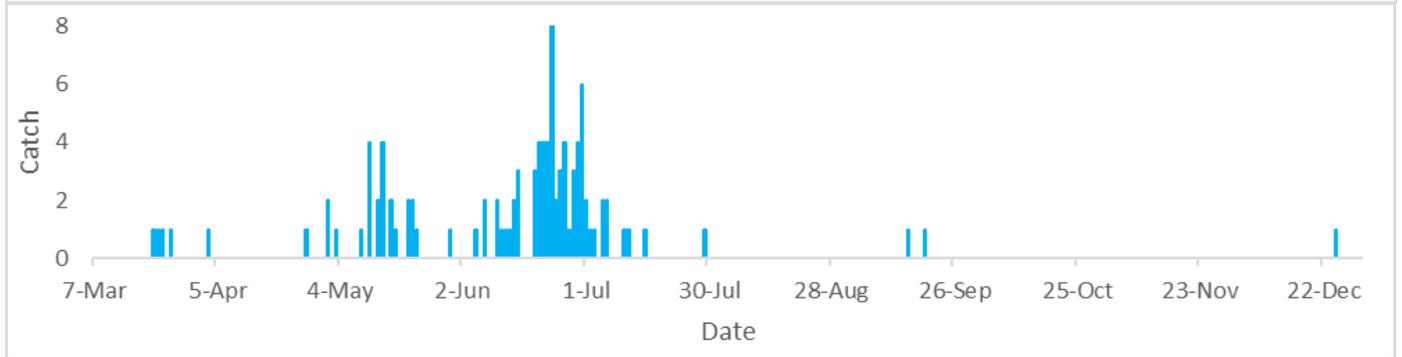
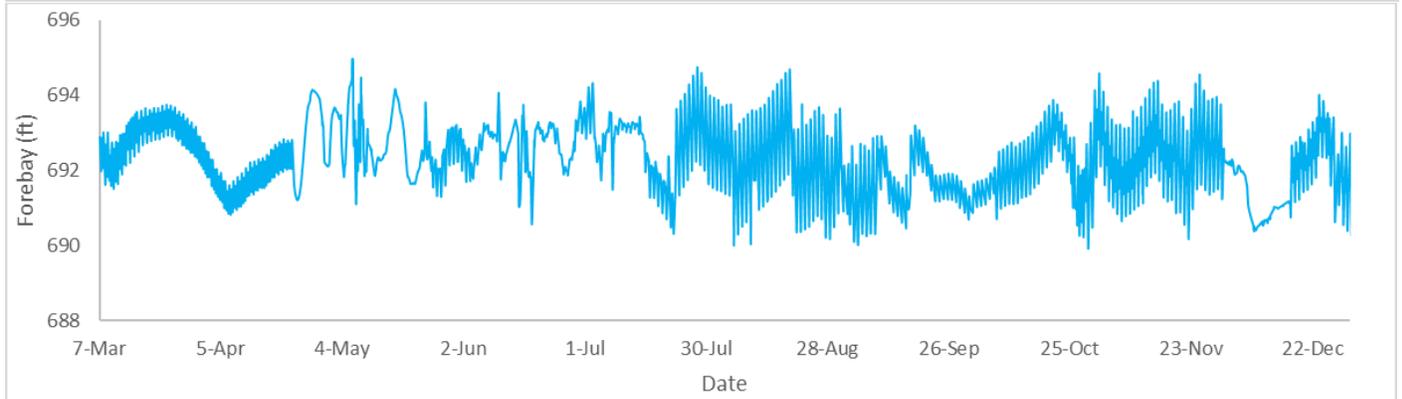
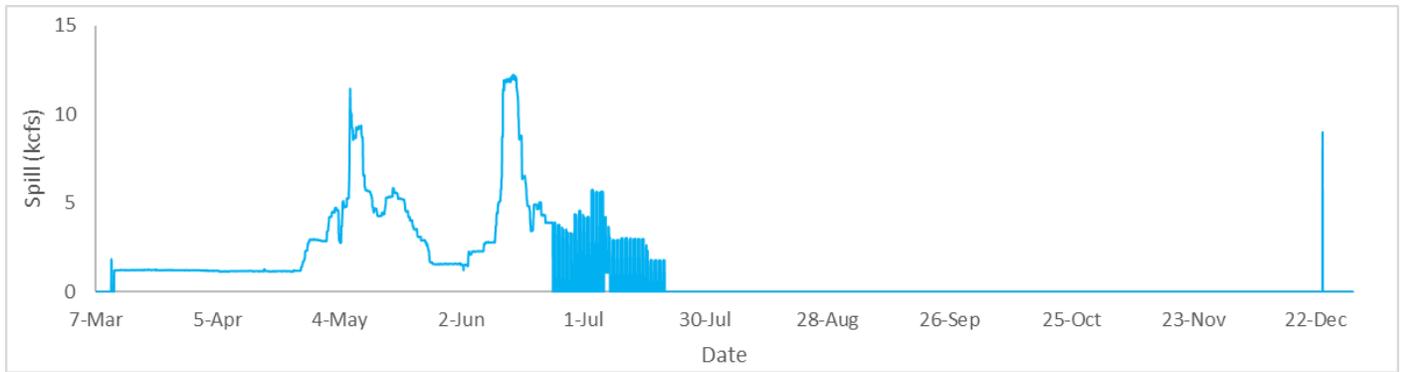


Note: Gauge height data was taken from USGS stream gauge number 14150290, 1.2 rkms downstream.

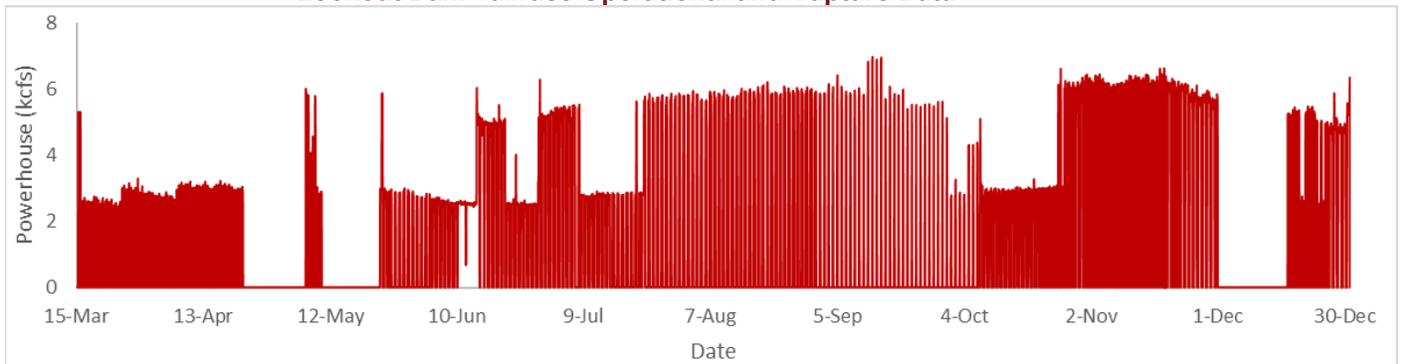


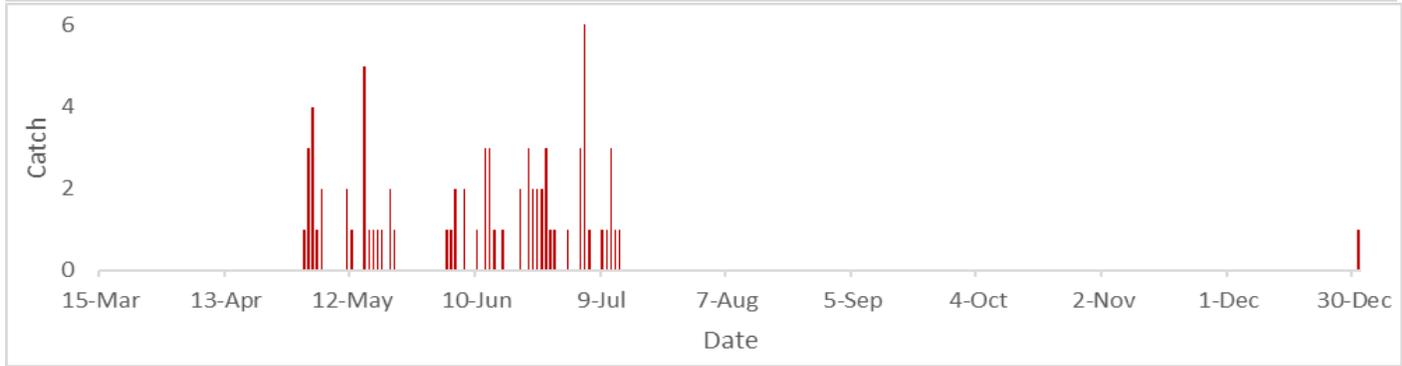
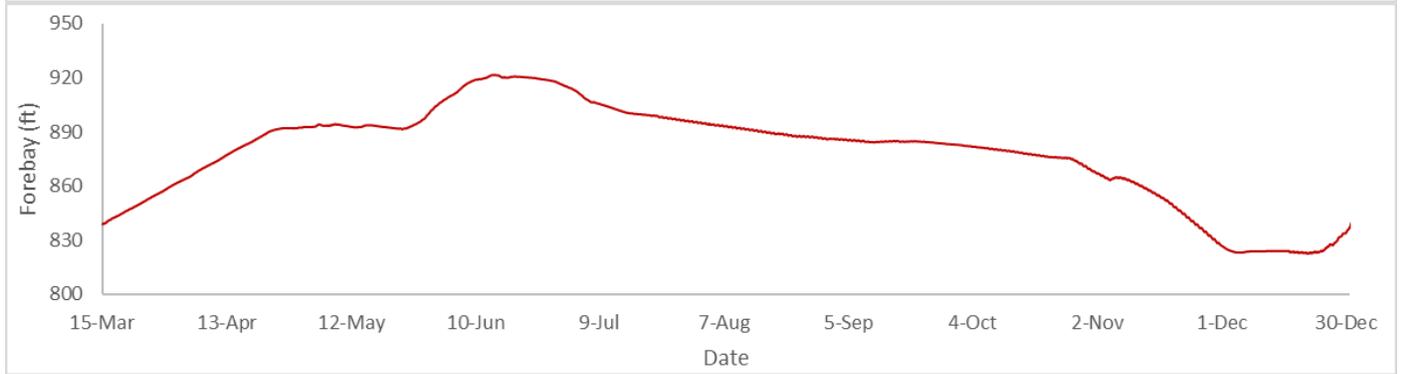
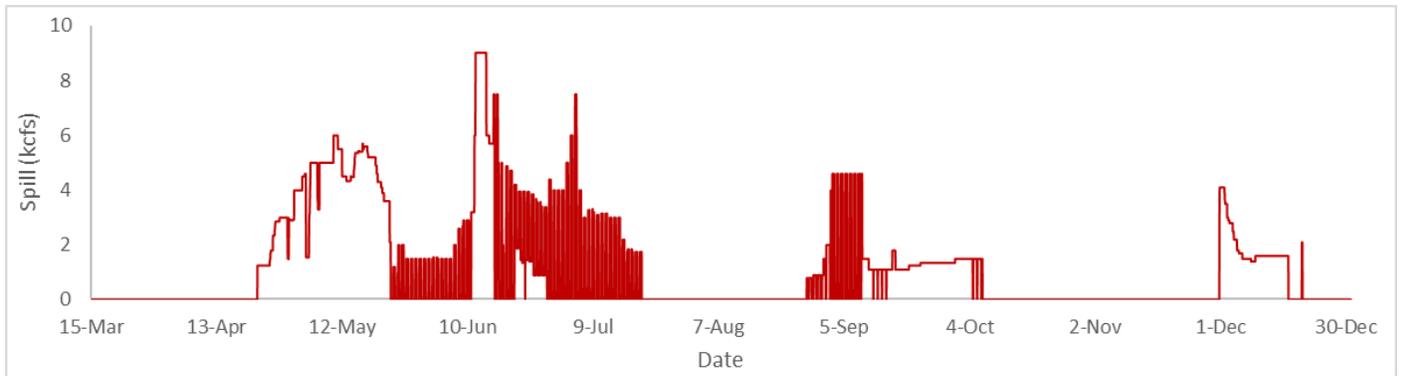
Dexter Dam Operational and Capture Data Since Start of Monitoring



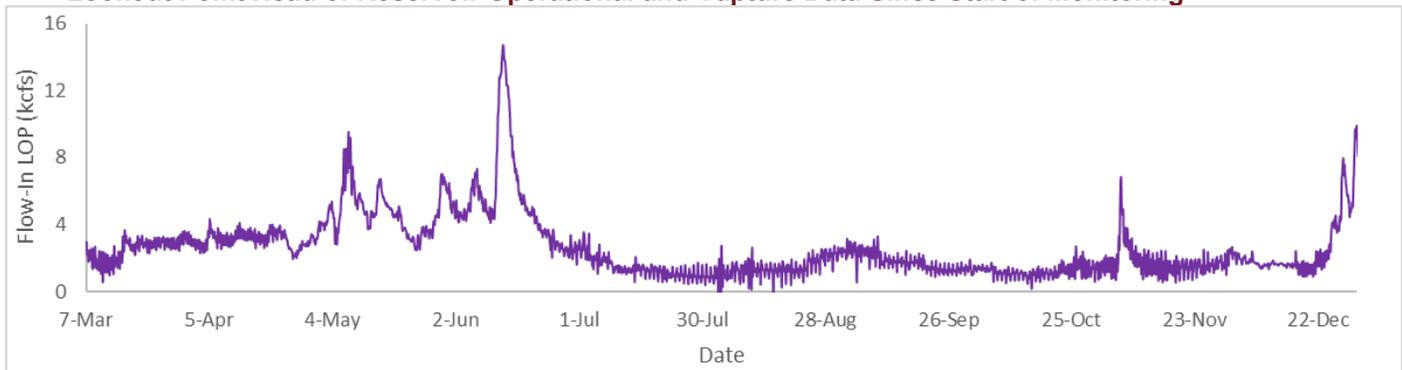


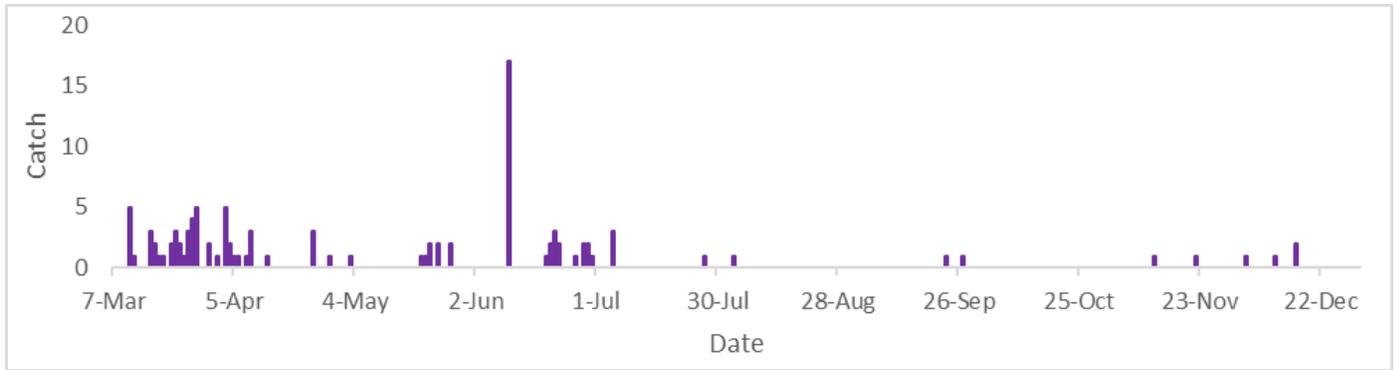
Lookout Dam Tailrace Operational and Capture Data



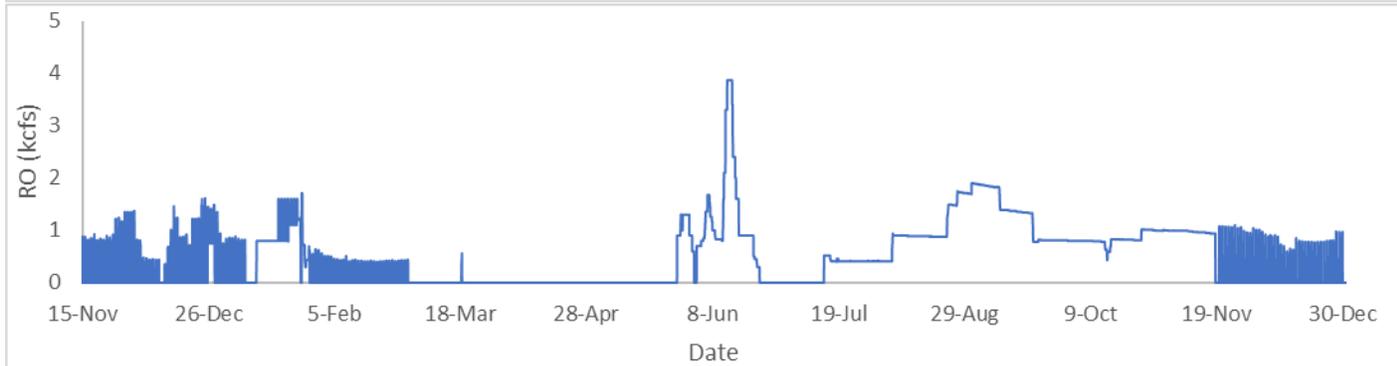
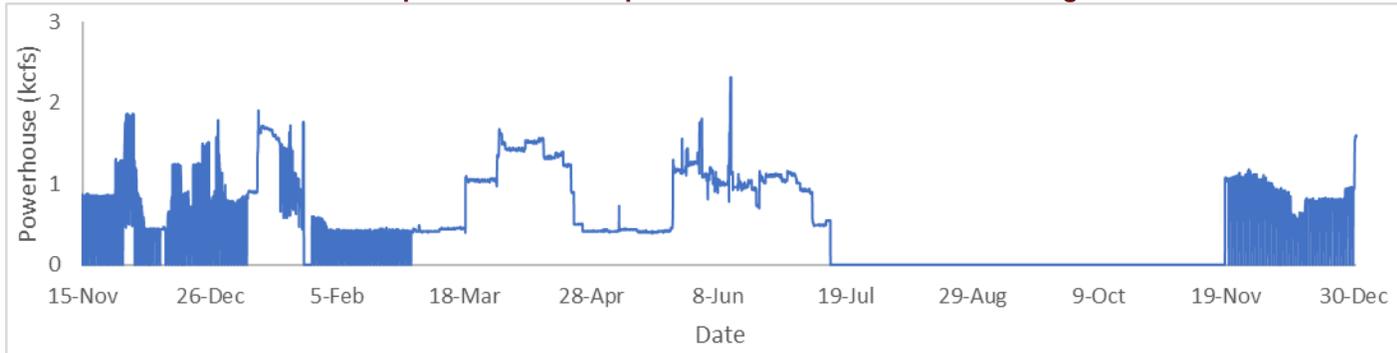


Lookout Point Head of Reservoir Operational and Capture Data Since Start of Monitoring





Hills Creek Dam Operational and Capture Data Since Start of Monitoring





Appendix C

Big Cliff Dam 12/14/2022	Release #	Recapture #	Capture Efficiency
8ft Trap	502	54	10.8% (54/502)

Cougar Dam (12/13/2022)	Release #	Recapture #	Capture Efficiency
RO Route	506	42	8.3% (42/506)

Hills Creek Dam	Release #	Recapture #	Capture Efficiency
PH Route	596	20	3.36% (20/596)
RO Trap	RO Route- 605	13	2.15% (13/605)
	PH Route- 592	5	0.84% (5/592)

Cougar Dam	Release #	Recapture #	Capture Efficiency
PH Route	405	40	9.88% (40/405)
RO Route	410	28	6.83% (28/410)

Dexter Dam	Release #	Recapture #	Capture Efficiency
Spill	988	2	0.2% (2/988)
Powerhouse	N/A	N/A	N/A

Green Peter Dam Tailrace- Middle Santiam	Release #	Recapture #	Capture Efficiency
8ft Trap	643	4	0.62% (4/643)

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	996	40	4.01% (40/996)

Cougar Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5ft trap	806	41	5.1% (41/806)

Cougar Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5ft trap	515	7	1.4% (7/515)

Cougar Dam	Release #	Recapture #	Capture Efficiency
PH Route	357	62	17.37% (62/357)
RO Route	378	21	5.56% (21/378)

Dexter Dam	Release #	Recapture #	Capture Efficiency
Spill	1000	43	4.3% (43/1000)
Powerhouse	N/A	N/A	N/A

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
04/05/2022	993	53	5.3% (53/993)
04/14/2022	989	19	1.9% (19/989)

Fall Creek Dam	Release #	Recapture #	Capture Efficiency
RO	518	11	2.1% (11/518)

Fall Creek Dam	Release #	Recapture #	Capture Efficiency
RO	513	0	0% (0/513)

Cougar Dam	Release #	Recapture #	Capture Efficiency
RO Route	993	63	6.34% (63/993)

Dexter Dam	Release #	Recapture #	Capture Efficiency
Spill	1019	67	6.6% (67/1,019)
Powerhouse	N/A	N/A	N/A

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
05/24/2022	1007	125	12.4% (125/1007)

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	1000	21	2.1% (21/1000)

Cougar Dam	Release #	Recapture #	Capture Efficiency
PH Route	500	148	29.6% (148/500)

Cougar Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5ft trap	551	56	10.2% (56/551)

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	1000	92	9.2% (92/1000)

Cougar Dam	Release #	Recapture #	Capture Efficiency
PH Route	501	31	6.2% (31/501)

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8 ft Trap	500	14	2.8% (14/500)

Foster Dam Head of Reservoir- South Santiam	Release #	Recapture #	Capture Efficiency
5 ft Trap	1063	0	0% (0/1063)

Dexter Dam	Release #	Recapture #	Capture Efficiency
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Spill	N/A	N/A	N/A
Powerhouse	981	1	0.1% (1/981)

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
07/20/2022	1005	9	0.9% (9/1005)

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8ft Trap	549	40	7.3% (40/549)

Foster Dam Head of Reservoir- South Santiam	Release #	Recapture #	Capture Efficiency
5 ft Trap	1006	263	26.1% (263/1006)

Foster Dam Head of Reservoir- South Santiam	Release #	Recapture #	Capture Efficiency
5 ft Trap	1007	68	6.8% (68/1007)

Cougar Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5ft trap	721	33	4.6% (33/721)

Dexter Dam	Release #	Recapture #	Capture Efficiency
Spill	N/A	N/A	N/A
Powerhouse	775	1	0.1% (1/775)

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
10/27/2022	506	9	1.8% (9/506)

Cougar Dam (10/14/2022)	Release #	Recapture #	Capture Efficiency
RO Route	442	48	10.9% (48/442)

Big Cliff Dam (11/16/2022)	Release #	Recapture #	Capture Efficiency
8ft Trap	509	15	2.9% (15/509)

Foster Dam Head of Reservoir- South Santiam (11/15/2022)	Release #	Recapture #	Capture Efficiency
5 ft Trap	1009	55	5.5% (55/1009)

Foster Dam Head of Reservoir- South Santiam (11/22/2022)	Release #	Recapture #	Capture Efficiency
5 ft Trap	933	163	17.5% (163/933)

Cougar Dam Head of Reservoir (11/16/2022)	Release #	Recapture #	Capture Efficiency
5ft trap	719	29	4.0% (29/719)

Cougar Dam Head of Reservoir 11/23/2022	Release #	Recapture #	Capture Efficiency
5ft trap	752	51	6.8% (51/752)

Cougar Dam Head of Reservoir (11/29/2022)	Release #	Recapture #	Capture Efficiency
5ft trap	620	48	7.7% (48/620)

Cougar Dam (11/22/2022)	Release #	Recapture #	Capture Efficiency
RO Route	504	24	4.8% (24/504)

Dexter Dam (11/17/2022)	Release #	Recapture #	Capture Efficiency
Spill	N/A	N/A	N/A
Powerhouse	991	4	0.4% (4/991)

Lookout Point Head of Reservoir	Release #	Recapture #	Capture Efficiency
11/17/2022	510	0	0.0% (0/510)

Hills Creek Dam (2/16/2022)	Release #	Recapture #	Capture Efficiency
PWR Route	600	12	2.0% (12/600)
RO Trap	593	19	3.2% (19/593)

*Live fish captured at the PWR trap are released just downstream of the PWR trap, upstream of the RO trap and therefore retained in the capture efficiency estimates for the RO Trap if they arrive in the lower trap.

*Any dead fish captured at the PWR trap are excluded from the RO trap capture efficiency estimate as they are not alive at time of re-release.

Hills Creek Dam (2/25/2022)	Release #	Recapture #	Capture Efficiency
PWR Route	604	6	0.99% (6/604)
RO Trap	625	7	1.12% (7/625)

*Live fish captured at the PWR trap are released just downstream of the PWR trap, upstream of the RO trap and therefore retained in the capture efficiency estimates for the RO Trap if they arrive in the lower trap.

*Any dead fish captured at the PWR trap are excluded from the RO trap capture efficiency estimate as they are not alive at time of re-release.

Run of River Trapping Efficiency

Foster Dam Head of Reservoir- South Santiam To-Date	Release #	Recapture #
Chinook	78	11
Winter Steelhead	193	17

Cougar Dam 10/15/2022-10/31/2022	Release #	Recapture #
PH	126	8
RO	20	1

Cougar Dam 11/1/2022-11/15/2022	Release #	Recapture #
PH	0	0
RO	464	22

Cougar Dam 11/16/2022-11/30/2022	Release #	Recapture #
PH	0	0
RO	25	1

Foster Dam Head of Reservoir- South Santiam 11/16/2022 to 11/30/2022	Release #	Recapture #
Chinook	32	7
Winter Steelhead	7	1

Appendix D

Summary of Project PIT Tagged Fish for Reporting Period

Site	Trap	# of PIT Tagged Fish
Big Cliff Dam	8 ft	0
Foster Dam Head of Reservoir- South Santiam	5 ft	0
Cougar Dam	PWR	0
Cougar Dam	RO	0

Cougar Dam Head of Reservoir	5 ft	0
Green Peter Tailrace- Middle Santiam	8 ft	0
Dexter Dam Tailrace	5 ft	0
Lookout Point Head of Reservoir	5 ft	2
Lookout Dam Tailrace	Spill	0
Lookout Dam Tailrace	PWR	0
Hills Creek Dam Tailrace	PWR	0
Hills Creek Dam Tailrace	RO	0

To Date Summary of Captured Fish Containing PIT Tags

Site	Trap	PIT Tag #	Date	Species
Cougar Dam	RO	3DD.0077780789	1/8/2022	Chinook
Cougar Dam	RO	384.36F2B2C55F	1/14/2022	Chinook
Cougar Dam	PH	3DD.003DA4DC74	3/3/2022	Chinook
Cougar Dam	PH	3DD.003E14CA70	3/4/2022	Chinook
Cougar Dam	PH	384.36F2B2C5D2	3/4/2022	Chinook
Cougar Dam	PH	3DD.003E14CC20	3/5/2022	Chinook
Cougar Dam	PH	3DD.003E14C9D6	3/6/2022	Chinook
Cougar Dam	PH	3DD.003E14CD8D	3/8/2022	Chinook
Cougar Dam	RO	3DD.003BD59645	4/7/2022	Chinook
Cougar Dam	PH	3DD.003BD21883	7/23/2022	O. mykiss
Cougar Dam	PH	3DD.003BD21883	7/26/2022	O. mykiss
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1849	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE22CE	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AAF	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1885	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE24AD	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2293	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26D4	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2422	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AB1	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE227B	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE22B9	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE24D6	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE22B8	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE223A	9/23/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18C0	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1965	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE224D	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE242B	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2464	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE244B	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2443	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26F9	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2449	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2519	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2517	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AF3	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18D2	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18E3	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE185B	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE223F	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE270D	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16F5	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2284	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE175F	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2252	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE223B	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE240E	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26D0	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2253	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2489	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE244E	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE190D	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18D8	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AC4	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE176A	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1917	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AEF	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE192E	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2266	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1916	9/23/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16D7	9/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2216	9/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1741	9/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AFB	9/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16BC	9/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26CC	9/27/2022	Chinook
Cougar Dam	PH	3DD.003BEE22C0	10/4/2022	Chinook
Cougar Dam	PH	3DD.003BEE2C55	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE192F	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE241F	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2711	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26FE	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18AA	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE22C8	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1933	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE224B	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2474	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE170A	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16F8	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2291	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1953	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE226B	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1757	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2506	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE225E	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18D4	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1857	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2418	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18B6	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2492	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18EA	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26BE	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE172B	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2713	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26C4	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1706	10/6/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18CA	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2AA7	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18E2	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18F0	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE26EA	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE176B	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1957	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE226D	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1901	10/6/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE18B5	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16D3	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16EC	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE186E	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE23FC	10/7/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1910	10/8/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE192B	10/9/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16C5	10/10/2022	Chinook
Cougar Dam	RO	3DD.003BEE2494	10/26/2022	Chinook
Cougar Dam	RO	3DD.003BEE2482	10/26/2022	Chinook
Cougar Dam	RO	3DD.003BEE29DE	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE17FB	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE181A	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE242F	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE1837	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE1828	10/29/2022	Chinook
Cougar Dam	RO	3DD.003BD226D3	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE29F6	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE29FB	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BD226A9	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BD226D5	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BD226DE	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE29F2	10/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE264C	10/31/2022	Chinook
Cougar Dam	RO	3DD.003BEE2483	10/31/2022	Chinook
Cougar Dam	RO	3DD.003BEE2213	10/31/2022	Chinook
Cougar Dam	RO	3DD.003BEE2A13	10/28/2022	Chinook

Cougar Dam	RO	3DD.003BEE1928	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE24D7	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE26D4	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE2A19	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE2C5E	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE2C57	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE2C57	10/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE2A34	10/28/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	384.3515E4B149	10/16/2022	Bull Trout
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE2C4C	10/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE16FD	10/26/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1651	10/25/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1676	10/25/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE167B	10/25/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1678	10/25/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE167D	10/25/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1684	10/28/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1674	10/28/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE166C	10/28/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1691	10/28/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE17F5	10/30/2022	O. mykiss
Cougar Dam	RO	3DD.003BD39723	11/1/2022	Chinook
Cougar Dam	RO	3DD.003BD3974B	11/1/2022	Chinook
Cougar Dam	RO	3DD.003BD39734	11/1/2022	Chinook
Cougar Dam	RO	3DD.003BEE1CEA	11/2/2022	Chinook
Cougar Dam	RO	3DD.003BEE1CB0	11/2/2022	Chinook
Cougar Dam	RO	3DD.003BEE172A	11/2/2022	Chinook
Cougar Dam	RO	3DD.003BEE2AF1	11/2/2022	Chinook
Cougar Dam	RO	3DD.003BEE1CA9	11/2/2022	Chinook
Cougar Dam	RO	3DD.003BD23008	11/3/2022	Chinook
Cougar Dam	RO	3DD.003BEE2485	11/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE26F1	11/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE1939	11/5/2022	Chinook
Cougar Dam	RO	3DD.003BD23012	11/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE174C	11/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE1DD4	11/6/2022	Chinook

Cougar Dam	RO	3DD.003BD2275D	11/8/2022	Chinook
Cougar Dam	RO	3DD.003BD22794	11/8/2022	Chinook
Cougar Dam	RO	3DD.003BD22792	11/8/2022	Chinook
Cougar Dam	RO	3DD.003BD2276F	11/8/2022	Chinook
Cougar Dam	RO	3DD.003BEE1DE9	11/11/2022	Chinook
Cougar Dam	RO	3DD.003BD22797	11/12/2022	Chinook
Cougar Dam	RO	3DD.003BEE22AB	11/12/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12B9	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0DE6	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F51	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0BFC	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1474	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12BB	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12DC	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F62	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE07FC	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE147E	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BRR1319	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1311	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0AAB	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C58	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE127E	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B97	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B75	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0705	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0DBE	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0AC4	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0BA3	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1323	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C82	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.033BEE0AA2	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F79	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE127A	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15FD	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B4B	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1616	11/11/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C72	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0FC8	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12C5	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BD39634	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BD39610	11/11/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE7640	11/12/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE17E8	11/2/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD226AE	11/2/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD22787	11/9/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD2272F	11/10/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD22734	11/10/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD39710	11/11/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1DF7	11/14/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE2A9E	11/3/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE2A44	11/3/2022	Chinook
Cougar Dam	RO	3DD.003BEE148E	11/22/2022	Chinook
Cougar Dam	RO	3DD.003BD39636	11/27/2022	Chinook
Cougar Dam	RO	3DD.003BEE097E	11/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE0E8E	11/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE1512	11/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE08A8	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D9F	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE081F	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F27	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F92	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C1A	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1206	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C47	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12EE	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EA3	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE152D	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08A8	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0ABB	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0DEC	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0AE2	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C2C	11/17/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B38	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C96	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15AE	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE085D	11/17/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0DD7	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12A9	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0AD8	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1005	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B29	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1522	11/18/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE093F	11/19/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE12BE	11/20/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0AA6	11/20/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A9E	11/23/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE09B3	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14EF	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D2E	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CF5	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C14	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D22	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F1B	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08B7	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A51	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B3F	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CD5	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0921	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E7C	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE09A7	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE092C	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1260	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F18	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A5B	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0787	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E7E	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E6E	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08AB	11/24/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A6B	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EC1	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EFC	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE123B	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F20	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1503	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15AF	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D7F	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A78	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E91	11/24/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E95	11/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08B7	11/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE076B	11/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E3A	11/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0BF5	11/25/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15FF	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08CE	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0744	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CEF	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F3D	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14D9	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CBC	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D45	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C16	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E75	11/26/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08EF	11/27/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B8E	11/29/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE09C2	11/29/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EAC	11/29/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CFD	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1587	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08B3	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0CA7	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B72	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0F07	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15AA	11/30/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A6E	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1501	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0BBD	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE120E	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0B48	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1205	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1591	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14E4	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0748	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE091C	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D71	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A50	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14CB	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE09BB	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D05	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE09A6	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0902	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0732	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0BC0	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D0F	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE08F0	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14E6	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0D84	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE079A	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0782	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE07B0	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE07AC	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE161B	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0C0D	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE14C3	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0768	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E4F	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE1258	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EA1	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0EFF	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0E4A	11/30/2022	Chinook

Cougar Dam Head of Reservoir	5 ft	3DD.003BEE152B	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE0A66	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE121B	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE15D7	11/30/2022	Chinook
Cougar Dam Head of Reservoir	5 ft	3DD.003BEE121A	11/30/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1E10	11/17/2022	O. mykiss
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1E1A	11/19/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1E1C	11/20/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BEE1DD8	11/23/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD39729	11/24/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD396C0	11/25/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD225BD	11/28/2022	Chinook
Foster Dam Head of Reservoir- South Santiam River	5 ft	3DD.003BD2258E	11/29/2022	Chinook
Cougar Dam	RO	3DD.003BEE0E75	12/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE0E23	12/5/2022	Chinook
Cougar Dam	RO	3DD.003BEE0AD7	12/11/2022	Chinook
Cougar Dam	RO	3DD.003BEE0A1D	12/14/2022	Chinook
Cougar Dam	RO	3DD.003BEE0AAC	12/26/2022	Chinook
Cougar Dam	RO	3DD.003BEE0AB5	12/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE0A7A	12/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE0DF3	12/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE1252	12/28/2022	Chinook
Cougar Dam	RO	3DD.003BEE08C8	12/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE07A8	12/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE12C3	12/30/2022	Chinook
Cougar Dam	RO	3DD.003BEE0A77	12/30/2022	Chinook
Cougar Dam	PH	3DD.003BEE18A0	12/31/2022	Chinook
Cougar Dam	PH	3DD.003BEE0D83	12/31/2022	Chinook

List of EAS PIT Tagged Fish for Reporting Period

Site	Trap	PIT Tag #	Date	Species
Lookout Point Head of Reservoir	5 ft	3DD.003BEE1E04	12/16/2022	Chinook
Lookout Point Head of Reservoir	5 ft	3DD.003BEE1DF2	12/16/2022	Chinook