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Prepared by: Cameron Blair & Rachel Ellison, Environmental Assessment Services, LLC

Report February 1 to February 15, 2025  
Period:

Re: CRAMER FISH SCIENCES – WILLAMETTE VALLEY FISH PASSAGE MONITORING  
VIA ROTARY SCREW TRAPS

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## Project Schedule

**Table 1. Project Schedule**

Site	Task	Start	End	Days
Breitenbush River	Operation	2/01/2025	6/30/2025	150
	Trap Install	1/23/2025	1/23/2025	1
Detroit Head of Reservoir- North Santiam	Operation	2/01/2025	6/30/2025	150
	Trap Install	1/25/2025	1/25/2025	1
	Trap Efficiency Trial (827 fish)	2/12/2025	2/12/2025	1
Big Cliff Dam Tailrace	Operation	1/01/2025	6/30/2025	180
	Trap Efficiency Trial (500 fish)	1/21/2025	1/21/2025	1
	Trap Efficiency Trial (500 fish)	2/12/2025	2/12/2025	1
Green Peter Head of Reservoir- Middle Santiam	Operation	2/01/2025	6/30/2025	150
	Trap Efficiency Trial (2,001 fish)	2/10/2025	2/10/2025	1
Green Peter Dam Tailrace	Operation	1/01/2025	6/30/2025	180
	Trap Efficiency Trial (1,000 fish)	1/21/2025	1/21/2025	1
Foster Dam Head of Reservoir- South Santiam	Operation	2/01/2025	6/30/2025	150
	Trap Install	1/24/2025	1/24/2025	1
	Trap Efficiency Trial (1,000 fish)	2/3/2025	2/3/2025	1
Cougar Head of Reservoir	Operation	2/01/2025	6/30/2025	150
	Trap Install	1/26/2025	1/26/2025	1
Cougar Dam	Operation	1/01/2025	6/30/2025	180
Fall Creek Head of Reservoir	Operation	1/01/2025	6/30/2025	180
Fall Creek Dam Tailrace	Operation	1/01/2025	7/15/2025	196
Hills Creek Head of Reservoir- Middle Fork Willamette	Operation	2/01/2025	6/30/2025	150
	Trap Install	1/21/2025	1/21/2025	1
Hills Creek Dam Tailrace	Operation	1/01/2025	6/30/2025	180
Lookout Point Head of Reservoir- Middle Fork Willamette	Operation	1/01/2025	6/30/2025	150
Lookout Dam Tailrace	Operation	1/1/2025	6/30/2025	150
Dexter Dam Tailrace	Operation	1/01/2025	6/30/2025	150

**Table 2. Sampling Dates for Reporting Period**

Site	Sampling Period Start	Reporting Period Start	Reporting Period End	Days Sampled This Report	Total Days Sampled
Breitenbush River	2/1/2025	2/1/2025	2/15/2025	15	30
Detroit Head of Reservoir- North Santiam	2/1/2025	2/1/2025	2/15/2025	15	30
Big Cliff Dam Tailrace	1/1/2025	2/1/2025	2/15/2025	15	47
Green Peter Head of Reservoir- Middle Santiam	2/1/2025	2/1/2025	2/15/2025	13	13
Green Peter Dam Tailrace	1/1/2025	2/1/2025	2/15/2025	13	30
Foster Dam Head of Reservoir- South Santiam	2/1/2025	2/1/2025	2/15/2025	13	13
Cougar Head of Reservoir	2/1/2025	2/1/2025	2/15/2025	12	12
Cougar Dam Tailrace PH	1/1/2025	2/1/2025	2/15/2025	13	44
Cougar Dam Tailrace RO	1/1/2025	2/1/2025	2/15/2025	13	44
Fall Creek Head of Reservoir	1/1/2025	2/1/2025	2/15/2025	13	39
Fall Creek Dam Tailrace	1/1/2025	2/1/2025	2/15/2025	13	44
Hills Creek Head of Reservoir- Middle Fork Willamette	2/1/2025	2/1/2025	2/15/2025	13	13
Hills Creek Dam Tailrace PH	1/1/2025	2/1/2025	2/15/2025	13	44
Hills Creek Dam Tailrace RO	1/1/2025	2/1/2025	2/15/2025	13	44
Lookout Point Head of Reservoir- Middle Fork Willamette	1/1/2025	2/1/2025	2/15/2025	12	22
Lookout Dam Tailrace PH	1/1/2025	2/1/2025	2/15/2025	13	26
Lookout Dam Tailrace Spill	1/1/2025	2/1/2025	2/15/2025	13	26
Dexter Dam Tailrace	1/1/2025	2/1/2025	2/15/2025	11	42

**Table 3. Willamette Valley Rotary Screw Trap Monitoring Catch Summary**

Site	Species	Catch (Reporting Period)	Recaptures (Reporting Period)	Total Catch
Breitenbush River	CHS	96	1	96
Breitenbush River	STW	2	0	2
Detroit Head of Reservoir- North Santiam	CHS	87	92	87
Detroit Head of Reservoir- North Santiam	STW	0	0	0
Big Cliff Dam Tailrace	CHS	10	84	37
Big Cliff Dam Tailrace	STW	2	0	2
Green Peter Head of Reservoir- Middle Santiam	CHS	132	9	132
Green Peter Head of Reservoir- Middle Santiam	STW	0	0	0
Green Peter Dam Tailrace	CHS	0	0	21
Green Peter Dam Tailrace	STW	0	0	0
Foster Dam Head of Reservoir- South Santiam	CHS	7	15	7
Foster Dam Head of Reservoir- South Santiam	STW	1	0	1
Cougar Head of Reservoir	CHS	1	0	1
Cougar Dam Tailrace	CHS	3	0	15
Fall Creek Head of Reservoir	CHS	4	0	5
Fall Creek Dam Tailrace	CHS	4	0	17
Hills Creek Head of Reservoir- Middle Fork Willamette	CHS	0	0	0
Hills Creek Dam Tailrace	CHS	0	0	1
Lookout Point Head of Reservoir- Middle Fork Willamette	CHS	0	0	2
Lookout Point Dam	CHS	0	0	0
Dexter Dam Tailrace	CHS	0	0	0

## Summary of Rotary Screw Trap Data

Rotary screw traps were operated at the following 15 locations: Breitenbush River, Detroit Head of Reservoir – North Santiam, Big Cliff Dam Tailrace, Green Peter Head of Reservoir – Middle Santiam, Green Peter Dam Tailrace, Foster Dam Head of Reservoir- South Santiam, Fall Creek Dam Tailrace, Cougar Dam Head of Reservoir, Cougar Dam Tailrace, Hills Creek Head of Reservoir- Lookout Point Head of Reservoir- Middle Fork Willamette, Lookout Dam Tailrace, and Dexter Dam Tailrace.

The RSTs located at Breitenbush River, Detroit Head of Reservoir – North Santiam, Green Peter Head of Reservoir – Middle Santiam, Foster Dam Head of Reservoir- South Santiam, Cougar Dam Head of Reservoir, and Hills Creek Head of Reservoir- Middle Fork Willamette resumed sampling on February 1<sup>st</sup>, 2025.

Winter Steelhead (*O. mykiss*) may be present in the Santiam Basin. All natural origin juvenile *O. mykiss* captured at these sites will be treated and reported as Winter Steelhead.

This report was written by Environmental Assessment Services, LLC (EAS) for Cramer Fish Sciences under contract W9127N19D0009. It contains season totals from data starting on January 1<sup>st</sup>, 2025 but incorporates operations from previous years sampled.

Sampling start dates are included in Table 2, and season total collection numbers are displayed in Table 3. The locations of the RSTs are depicted in Figure 1 through Figure 15.





Imagery Source: 2022, ESRI.



**FIGURE 1**  
Breitenbush River

● RST Locations

500 Feet







Portland  
Salem  
Eugene

MAP AREA

OREGON

## FIGURE 2

Detroit Head of Reservoir -  
North Santiam Above Detroit

● RST Locations

500 Feet







Imagery Source: 2021, ESRI.



**FIGURE 3**  
Big Cliff Dam Tailrace

● RST Locations

500 Feet







Imagery Source: 2022, ESRI.



**FIGURE 4**  
Green Peter Head of Reservoir -  
Middle Santiam River

● RST Locations

500 Feet







Portland  
Salem  
Eugene

OREGON

**FIGURE 5**  
Green Peter Tailrace -  
Middle Santiam River

● RST Locations

500 Feet







Portland  
Salem  
Eugene

OREGON

**FIGURE 6**  
Foster Dam Head of Reservoir -  
South Santiam River

● RST Locations

500 Feet







Imagery Source: 2020, NAIP.



**FIGURE 7**  
Cougar Dam Head of Reservoir

● RST Locations

500 Feet







**FIGURE 8**  
Cougar Dam Tailrace

● RST Locations

500 Feet







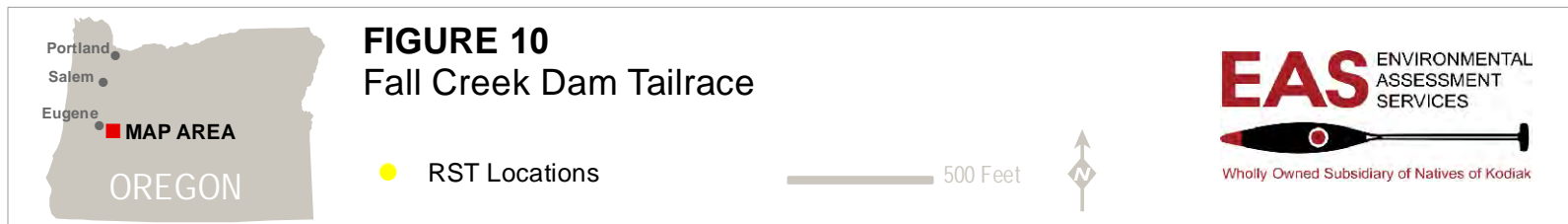
**FIGURE 9**  
Fall Creek Head of Reservoir

● RST Locations

500 Feet











**FIGURE 11**  
Hills Creek Head of Reservoir -  
Middle Fork Willamette Above Hills Creek

● RST Locations

500 Feet







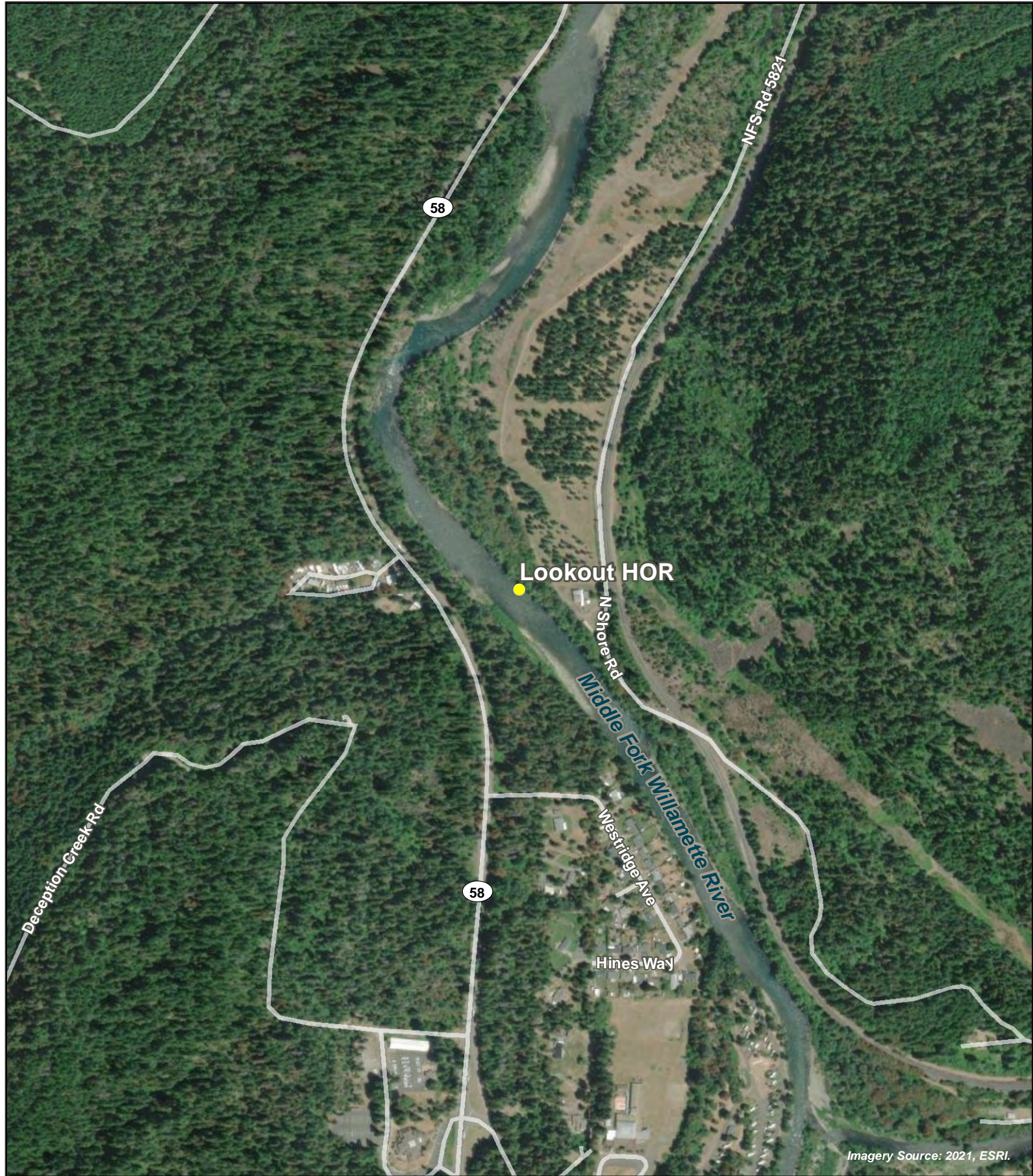
**FIGURE 12**  
Hills Creek Dam Tailrace

● RST Locations

500 Feet







**FIGURE 13**  
Lookout Point Head of Reservoir -  
Middle Fork Willamette

● RST Locations

500 Feet







**FIGURE 14**  
Lookout Dam Tailrace

● RST Locations

500 Feet







**FIGURE 15**  
**Dexter Dam Tailrace**

- RST location prior to 11/6/2023
- ▲ RST location after 11/6/2023

500 Feet



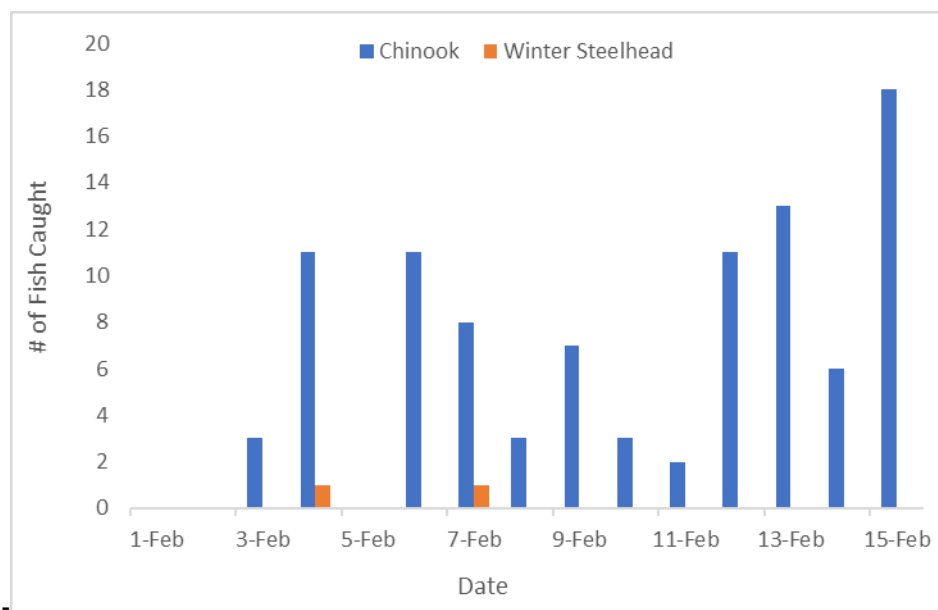


## Breitenbush River

The Breitenbush River RST was installed January 23<sup>rd</sup>, 2025 and began February 1<sup>st</sup>, 2025. All natural origin *O. mykiss* captured at this site will be reported as Winter Steelhead.

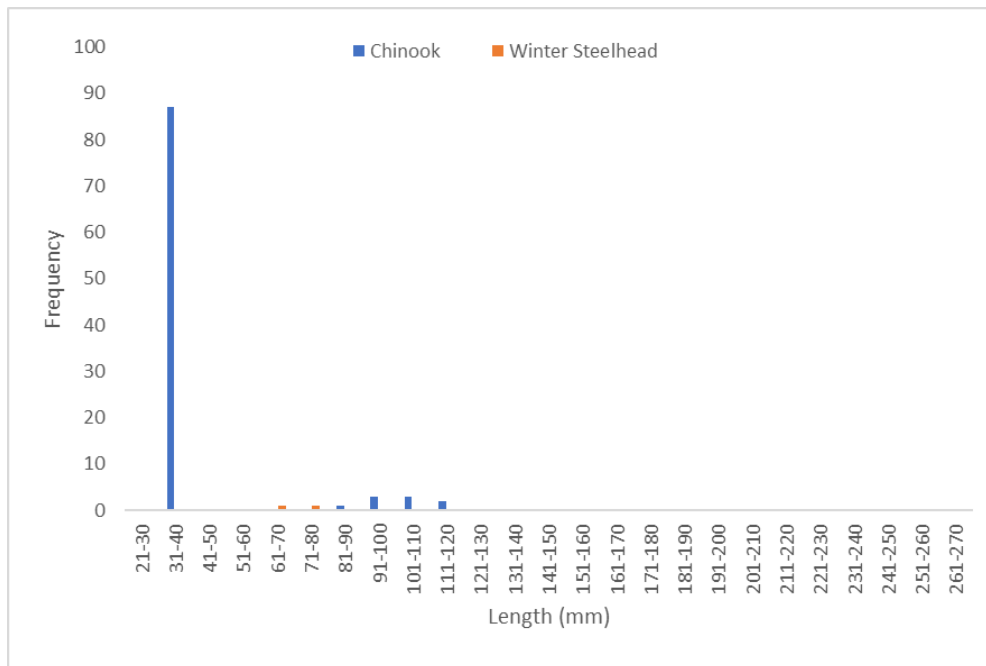
### Target Species

There were a total of 96 Chinook Salmon (CHS), and 2 Winter Steelhead (STW) captured during the reporting period (Figure 16). Sampling duration was 100.0% of the reporting period for the 5ft RST. Figure shows length frequency data to-date. Table 4 provides life stage, length, and weight data for all Chinook Salmon and Winter Steelhead that have been caught at the Breitenbush River site to-date and for the reporting period.



**Figure 16. Chinook and Winter Steelhead Captured Per Day for the Reporting Period (Breitenbush River).**





**Figure 17. Length Frequency of Juvenile Chinook Sampled Season To-Date (Breitenbush River).**

**Table 4. Descriptive Statistics of Target Species Captured at the Breitenbush River To-Date.**

To-Date (Since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Breitenbush River	5ft	CHS	Fry	87	32	39	35.6	N/A	N/A	N/A
		CHS	Parr	3	103	112	107.7	9.8	12.8	11.3
		CHS	Smolt	6	83	116	98.8	5.7	16.6	10.5
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	2	61	75	68.0	3.2	3.9	3.6
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

\*Fish that were missing heads or caudal fins are not included in length and weight calculations.

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Breitenbush River	5ft	CHS	Fry	87	32	39	35.6	N/A	N/A	N/A
		CHS	Parr	3	103	112	107.7	9.8	12.8	11.3
		CHS	Smolt	6	83	116	98.8	5.7	16.6	10.5
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	2	61	75	68.0	3.2	3.9	3.6
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

\*Fish that were missing heads or caudal fins are not included in length and weight calculations.

### Trapping Efficiency

On 11/26/2024, 718 hatchery Chinook were released above the trap site to evaluate the trapping efficiency of the 5 ft RST. 120 fish were recaptured for an efficiency of 16.7%, as detailed in Table 5.



**Table 5. Hatchery Trapping Efficiency (Breitenbush River)**

Breitenbush River	Release #	Recapture #	Capture Efficiency
5ft Trap	718	120	16.7%

**Run of River Trapping Efficiency**

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year 28 Spring Chinook and 0 Winter Steelhead have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 6).

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 6. Run of River Trapping Efficiency (Breitenbush River).**

Breitenbush River	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	28	1
Winter Steelhead	0	0

**Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 7, and target species injuries for the duration of the season are provided in Appendix A.

**Table 7. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Breitenbush River).**

Species	# Fish Collected	# DSC* <20%	# DSC* >20%	# with Body Injuries	# with Eye Injuries	# with COP* In B.C.	# with COP* on Fins	Mortalities	GBD
Chinook	96	9	0	9	0	0	0	0	0
Winter Steelhead	2	0	0	0	0	0	0	0	0

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

**Collected DNA and Scale Samples**

DNA was collected from 9 Spring Chinook and 2 Winter Steelhead. Scale samples were collected from 9 Spring Chinook and 2 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.

**PIT Tags**

11 fish were PIT tagged during this reporting period, 4 Chinook and 1 Winter Steelhead. More information regarding PIT tagged fish can be found in Appendix D.

**VIE Marking**

A total of 42 Spring Chinook and 1 Winter Steelhead have been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. No fish with VIE marks have been detected at downstream RST sites to date. Fish still showing an egg sac are not VIE marked. Release numbers and recaptures for this reporting period are summarized below (Table 8).



**Table 8. Summary of VIE Marked Fish (Breitenbush River)**

Month Tagged	Species	Tag Location	VIE Color	# Tagged	# Recaptured To-Date
February 2025	Chinook	Head	Yellow	42	1
February 2025	<i>O. mykiss</i>	Head	Yellow	1	0

**Non-Target Species**

2 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 9.

**Table 9. Summary of Non-target Species (Breitenbush River).**

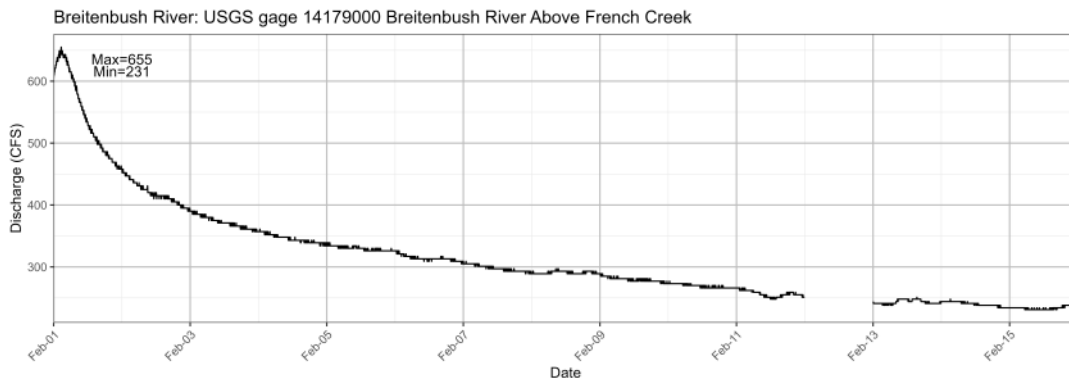
Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Kokanee	0	0	0	0
Chinook (clipped)	0	0	0	0
Cutthroat Trout	0	0	0	0
Mountain Whitefish	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	0	0
Sculpin	2	0	2	0
Unknown Salmonid	0	0	0	0
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>

**Stream Statistics**

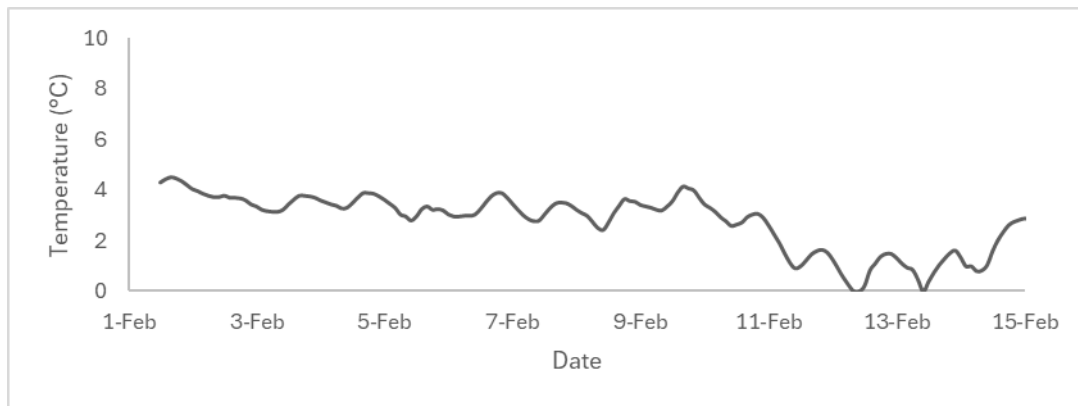
Basic stream statistics at the Breitenbush River RST site were calculated from data downloaded from the U.S. Geological Survey stream gage number 14179000. Instantaneous discharge (cfs) is displayed in Figure 18. Stream temperatures were recorded every 2 hours for the length of the reporting period (Figure 19). Catch per unit of effort (CPUE) data are summarized in Table 10. Gage height and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 10. Summary of salmonid CPUE, Breitenbush River.**

Description	Chinook (5 ft)	Winter Steelhead (5 ft)
Catch	96	2
Effort (hrs)	337.1	337.1
CPUE (fish/hr)	0.3	0.006

**Figure 18. Discharge (cfs); Breitenbush River.**





**Figure 19. Temperature at RST (Breitenbush River).**

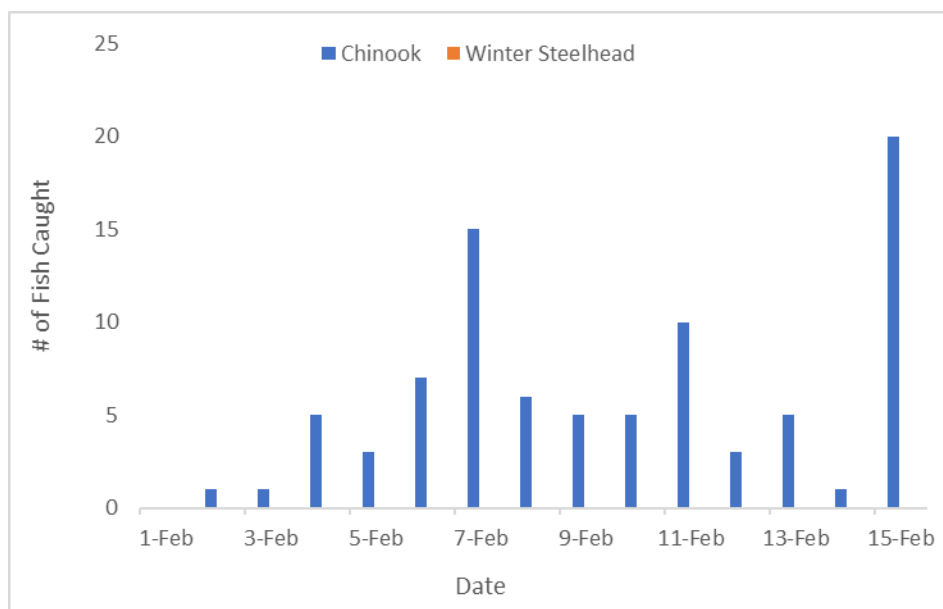


## North Santiam River – Detroit Head of Reservoir

The Detroit Head of Reservoir RST was installed January 25<sup>th</sup>, 2025 and began February 1<sup>st</sup>, 2025. All natural origin *O. mykiss* captured at this site will be reported as Winter Steelhead.

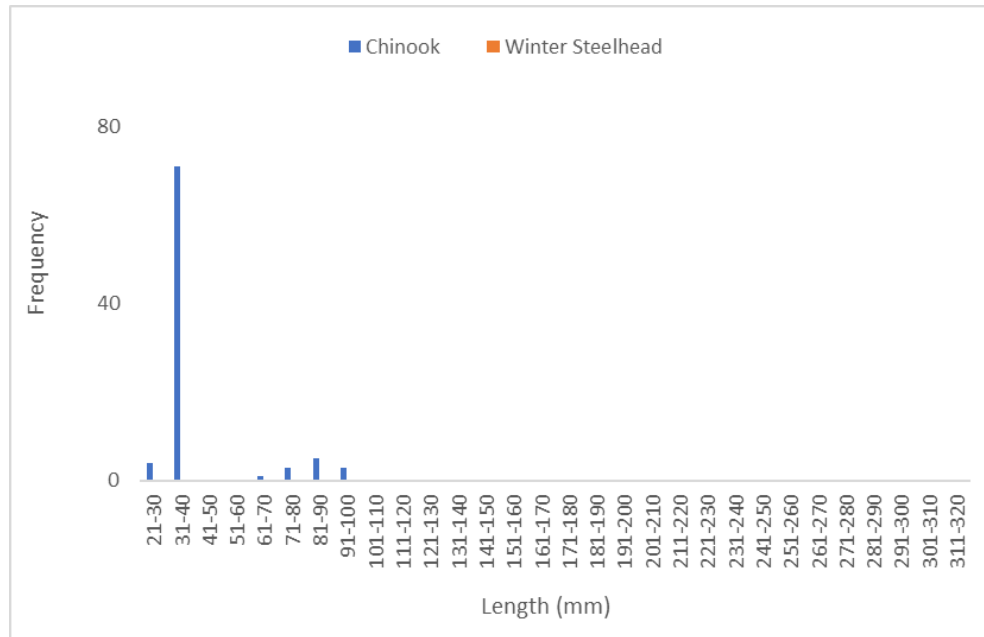
### Target Species

There were a total of 87 Chinook Salmon (CHS), and 0 Winter Steelhead (STW) captured for the reporting period (Figure 20). Sampling duration was 100.0% of the reporting period for the 5ft RST. Figure 21 shows length frequency data to-date. Table 11 provides life stage, length, and weight data for all Chinook Salmon and Winter Steelhead that have been caught at the Detroit Head of Reservoir site to-date and for the reporting period.



**Figure 20. Chinook and Winter Steelhead Captured Per Day for the Reporting Period (Detroit Head of Reservoir).**





**Figure 21. Length Frequency of Juvenile Chinook and Winter Steelhead Sampled Season To-Date (Detroit Head of Reservoir).**

**Table 11. Descriptive Statistics of Target Species Captured at Detroit Head of Reservoir Season To-Date.**

To-Date (Since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Detroit HOR	5ft	CHS	Fry	75	26	39	35.4	N/A	N/A	N/A
		CHS	Parr	9	69	97	82.9	3.5	9.4	6.3
		CHS	Smolt	3	86	95	89.7	6.9	8.5	7.6
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Detroit HOR	5ft	CHS	Fry	75	26	39	35.4	N/A	N/A	N/A
		CHS	Parr	9	69	97	82.9	3.5	9.4	6.3
		CHS	Smolt	3	86	95	89.7	6.9	8.5	7.6
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### Trapping Efficiency

On 2/12/2025, 827 hatchery Chinook were released above the trap site to evaluate the trapping efficiency of the 5 ft RST. 90 fish were recaptured for an efficiency of 10.9%, as detailed in Table 12.



**Table 12. Hatchery Trapping Efficiency (Detroit Head of Reservoir).**

Detroit Head of Reservoir	Release #	Recapture #	Capture Efficiency
5-ft Trap	827	90	10.9%

**Run of River Trapping Efficiency**

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year 56 Spring Chinook and 0 Winter Steelhead have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below Table 13.

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 13. Run of River Trapping Efficiency (Detroit Head of Reservoir).**

Detroit Head of Reservoir	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	56	2
Winter Steelhead	0	0

**Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 14, and target species injuries for the duration of the season are provided in Appendix A.

**Table 14. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Detroit Head of Reservoir).**

Species	# Fish Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Chinook	87	11	1	11	0	0	0	3	0
Winter Steelhead	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**Collected DNA and Scale Samples**

For the reporting period, DNA was collected from 12 Spring Chinook and 0 Winter Steelhead. Scale samples were collected from 11 Spring Chinook and 0 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.

**PIT Tags**

11 Spring Chinook and 0 Winter Steelhead were PIT tagged during this reporting period. More information regarding PIT tagged fish can be found in Appendix D.

**VIE Marking**

A total of 60 Spring Chinook and 0 Winter Steelhead have been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. Fish still showing an egg sac are not VIE marked.

1 Chinook smolt with VIE RDO (right dorsal orange) was encountered at the Big Cliff Dam RST on 12/22/2024. This fish was tagged by EAS in May of 2024 at the Detroit Head of Reservoir RST. Release numbers and recaptures for this reporting period are summarized below (Table 15).



**Table 15. Summary of VIE Marked Fish (Detroit Head of Reservoir).**

Date Tagged	Species	Tag Location	VIE Color	# Tagged	# Recaptured to Date
February 2025	Chinook	Right Dorsal	Yellow	60	0
February 2025	<i>O. mykiss</i>	Right Dorsal	Yellow	0	0

**Non-Target Species**

35 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 16.

**Table 16. Summary of Non-target Species (Detroit Head of Reservoir).**

Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Chinook (clipped)	11	0	11	0
Cutthroat Trout	0	0	0	0
Dace	0	0	0	0
Kokanee Wild	20	0	20	0
Largescale Sucker	0	0	0	0
Mountain Whitefish	0	0	0	0
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	0	0
<i>O. mykiss</i> (adult)	0	0	0	0
Sculpin	4	0	4	0
Unknown Salmonid	0	0	0	0
Unknown	0	0	0	0
<b>Totals</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>0</b>

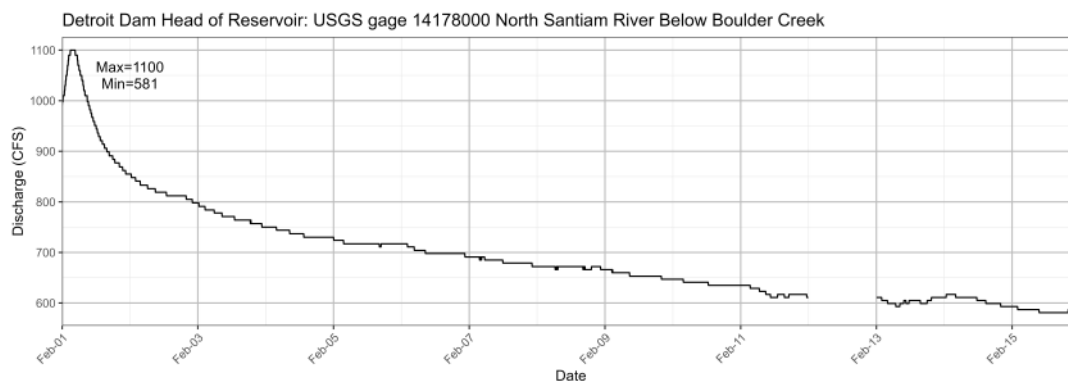
**Stream Statistics**

Basic stream statistics at the Detroit Head of Reservoir site were calculated from data downloaded from U.S. Geological Survey stream gage number 14178000. Discharge (cfs) metrics provided at gage 14178000 are displayed in Figure 22. Stream temperatures were recorded every 2 hours for the length of the reporting period at the Detroit Head of Reservoir RST site. Figure 23 shows temperature during the reporting period. Catch per unit of effort (CPUE) data are summarized in. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

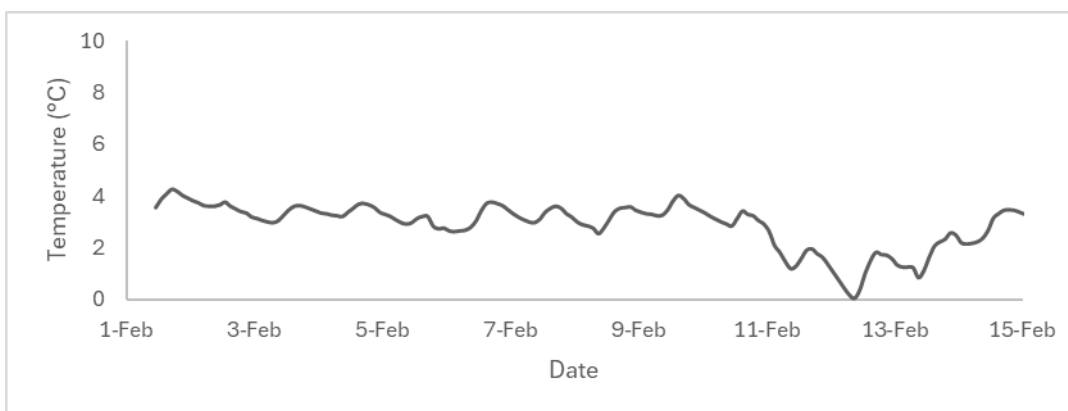
**Table 17. Summary of salmonid CPUE, Detroit Head of Reservoir – North Santiam River.**

Description	Chinook (5 ft)	Winter Steelhead (5 ft)
Catch	87	0
Effort (hrs)	340.1	340.1
CPUE (fish/hr)	0.3	0.0





**Figure 22. Discharge (cfs); Detroit Head of Reservoir – North Santiam River.**



**Figure 23. Temperature at RST (Detroit Head of Reservoir – North Santiam River).**



## North Santiam River – Big Cliff Dam Tailrace

The RST in the Big Cliff Dam Tailrace began sampling under contract W9127N19D0009 on October 16, 2023. Sampling at Big Cliff Dam Tailrace prior to October 16, 2023, was conducted by EAS for the USACE under contract W9127N19D0007.

### Target Species

For the reporting period, there were a total of 10 Chinook Salmon (CHS), and 2 Winter Steelhead (STW) captured (Figure 24). Sampling duration was 100.0% for the 8 ft RST. Table 18 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 25 shows length frequency data to-date.

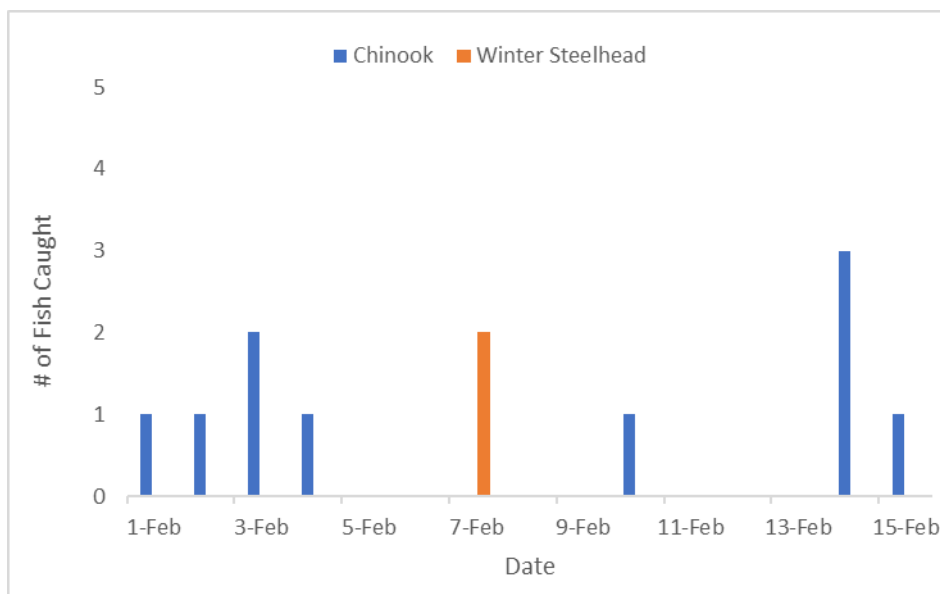
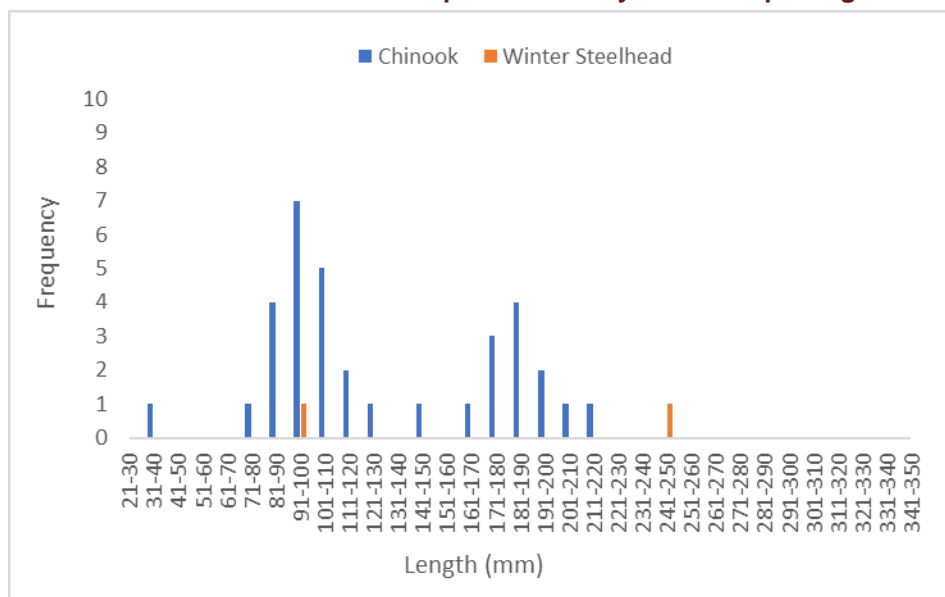


Figure 24. Chinook and Winter Steelhead Captured Per Day for the Reporting Period (Big Cliff).



\*Figure does not include fish without heads

Figure 25. Length Frequency of Juvenile Chinook and Winter Steelhead Sampled in 2025 (Big Cliff).



**Table 18. Descriptive Statistics of Target Species Captured at Big Cliff Dam To-Date and for the reporting period.**

To-Date (Since Jan. 1, 2025)										
Site	Trap	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Big Cliff	8 ft	CHS	Fry	4	27	36	29.5	N/A	N/A	N/A
		CHS	Parr	8	79	107	93.4	5.1	9.2	7.5
		CHS	Smolt	25	90	212	145.4	6.4	88	36.5
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	1	93	93	93.0	9.3	9.3	9.3
		STW	Smolt	1	247	247	247.0	131.3	131.3	131.3

Reporting Period										
Site	Trap	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Big Cliff	8 ft	CHS	Fry	1	36	36	36.0	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	9	90	198	142.4	6.4	72.7	36.3
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	1	93	93	93.0	9.3	9.3	9.3
		STW	Smolt	1	247	247	247.0	131.3	131.3	131.3

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

### Trapping Efficiency

On 02/12/2025, 500 hatchery Chinook were released below Big Cliff Dam. 84 fish were recaptured for an efficiency of 16.8% as detailed in Table 19.

**Table 19. Hatchery Trapping Efficiency (Big Cliff Dam)**

Big Cliff Dam	Release #	Recapture #	Capture Efficiency
8 ft	500	84	16.8%

### 24-Hour Post Collection Holding Trial

9 Spring Chinook and 2 Winter Steelhead were captured during the current reporting period and held for ~24 hours. 1 Chinook (11.1%) and 0 Winter Steelhead (0.0%) died in holding.

### Injuries and Copepod Infection

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 20, and target species injuries for the duration of the season are provided in Appendix A.

**Table 20. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Big Cliff Dam).**

Species	# Fish Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Chinook	10	7	2	8	1	8	3	1	0
Winter Steelhead	2	1	0	2	1	2	1	0	0

### Collected DNA and Scale Samples

DNA was collected from 9 Spring Chinook and 2 Winter Steelhead for the reporting period. Scales were collected from 8 Spring Chinook and 2 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.



### **PIT Tags**

0 Spring Chinook and 0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

1 Chinook with VIE RDO (right dorsal orange) was captured at the Big Cliff Dam RST on 12/22/2024. This fish was tagged in May 2024 at the Detroit Head of Reservoir RST.

### **Non-Target Species**

14 non-target fish were captured during this sampling period. A summary of non-target species catch and mortality numbers for 2025 are listed in Table 21.

**Table 21. Summary of Non-target Species (Big Cliff Dam).**

Species	8 ft Capture	8 ft Mortality	Season Total	Season Total Mortality
Bluegill	0	0	0	0
Brown Bullhead	0	0	0	0
Dace	0	0	0	0
Chinook (Adult)	0	0	0	0
Chinook (clipped)	1	0	2	0
Coho	0	0	0	0
Cutthroat Trout	0	0	0	0
Kokanee	3	1	10	4
Kokanee (clipped)	5	2	12	7
<i>O. mykiss</i> (clipped)	0	0	0	0
Pumpkinseed	0	0	0	0
Mountain Whitefish	0	0	1	1
Sculpin	0	0	0	0
Unknown	1	1	2	2
Unknown Salmonid	4	4	5	5
<b>Totals</b>	<b>14</b>	<b>8</b>	<b>32</b>	<b>19</b>

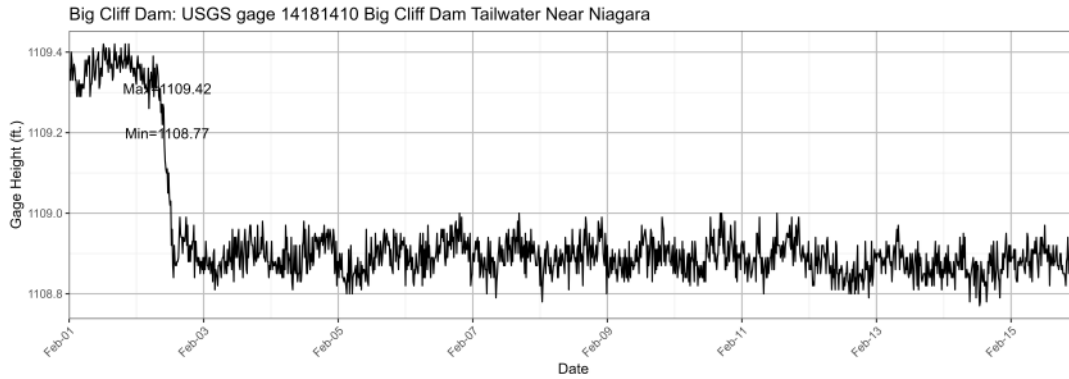
### **Stream Statistics**

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 (Figure 26). Total dissolved gas (TDG) saturation data was received from gauge 14181500, 1 rkm downstream of the trap (Figure 27). Stream temperatures were recorded every 2 hours for the length of the reporting period at the RST (Figure 28). The temperature probe for the trap operated normally throughout this reporting period. Flows through the Powerhouse and Spill during the reporting period are displayed in Figure 29. Catch per unit of effort (CPUE) data are summarized in Table 22. Detroit and Big Cliff forebay elevations and TDG at Niagara are shown in Appendix B. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

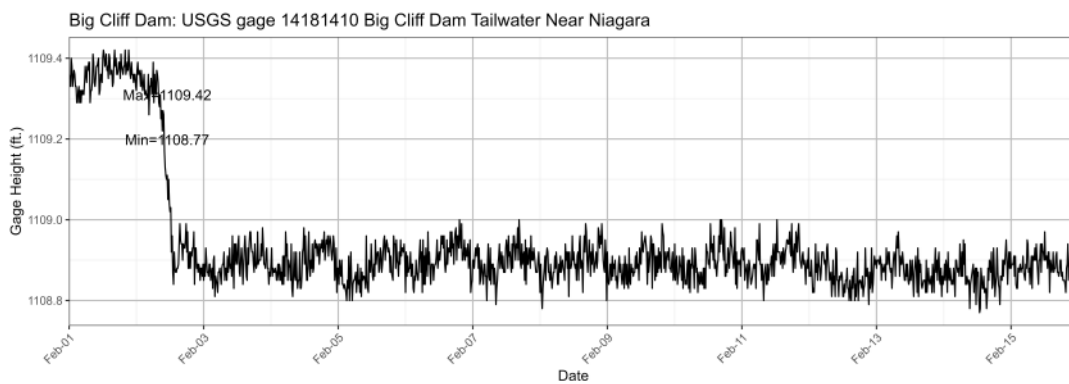
**Table 22. Summary of salmonid CPUE, Big Cliff Dam.**

Description	Chinook	Winter Steelhead
Catch	10	2
Effort (hrs)	358.7	358.7
CPUE (fish/hr)	0.03	0.006

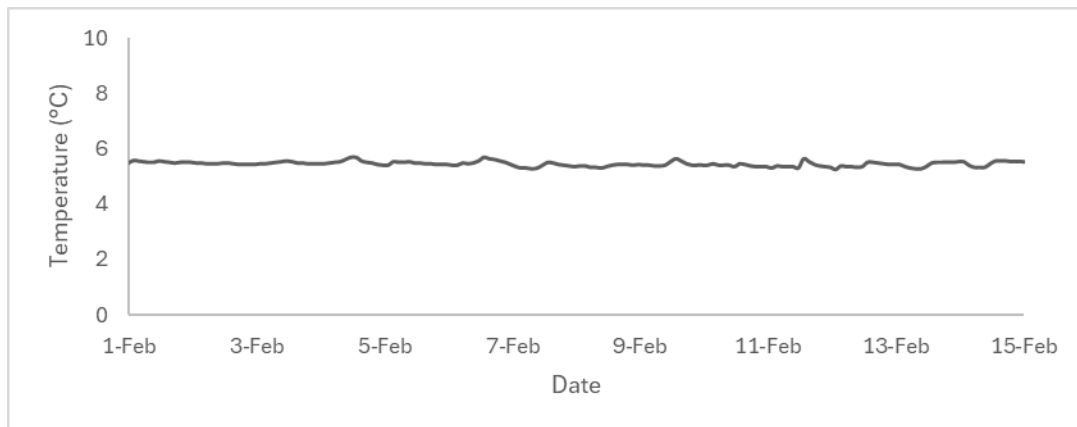




**Figure 26. Gauge height (ft); below Big Cliff Dam.**

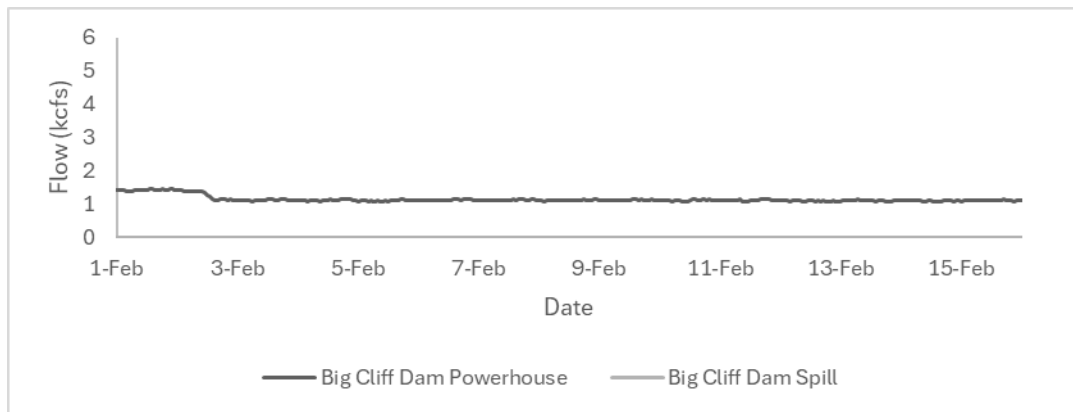


**Figure 27. Total Dissolved Gas Saturation (%); below Big Cliff Dam.**



**Figure 28. Temperature at RST (Big Cliff Dam).**





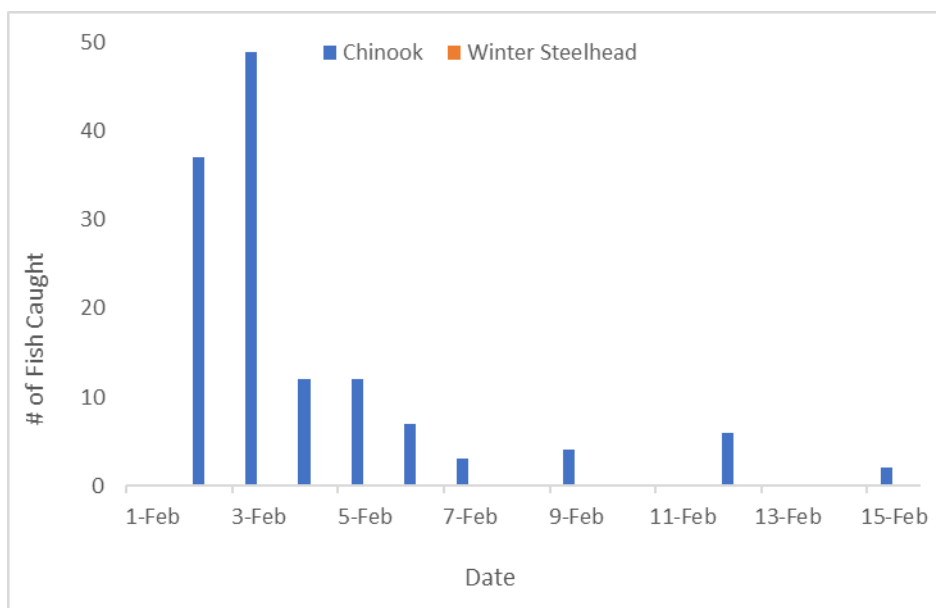
**Figure 29. Hourly Flows PH vs. Spill (Big Cliff Dam).**

## Middle Santiam River – Green Peter Head of Reservoir

The Green Peter Head of Reservoir RST was deployed February 1<sup>st</sup>, 2025. All natural origin *O. mykiss* captured at this site will be reported as Winter Steelhead.

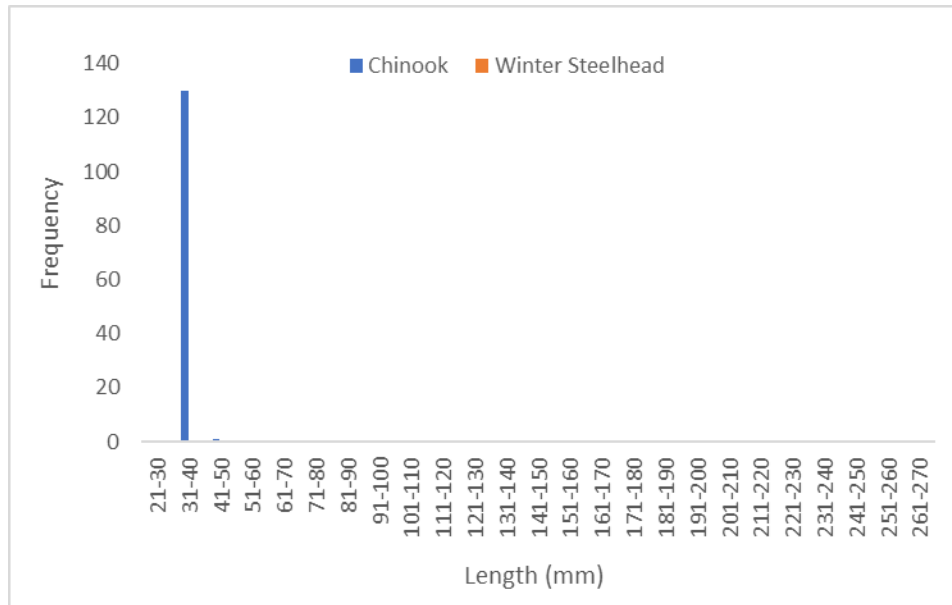
### Target Species

There were a total of 132 Chinook Salmon (CHS), and 0 Winter Steelhead (STW) captured for the reporting period (Figure 30). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Figure 31 shows length frequency data to-date. Table 23 provides life stage, length, and weight data for all Chinook Salmon and Winter Steelhead that have been caught at the Middle Santiam River- Green Peter Head of Reservoir site to-date and for the reporting period.



**Figure 30. Chinook Captured Per Day for the Reporting Period (Green Peter Head of Reservoir – Middle Santiam River).**





**Figure 31. Length Frequency of Juvenile Chinook Sampled Season To-Date (Green Peter Head of Reservoir – Middle Santiam River).**

**Table 23. Descriptive Statistics of Target Species Captured at Green Peter Head of Reservoir – Middle Santiam River Season To-Date.**

To-Date (since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Green Peter Head of Reservoir-Middle Santiam	5ft	CHS	Fry	132	31	41	36.3	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Green Peter Head of Reservoir-Middle Santiam	5ft	CHS	Fry	132	31	41	36.3	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### **Trapping Efficiency**

On 2/10/2025, 2,001 hatchery Chinook were released above the trap site to evaluate the trapping efficiency of the 5 ft RST. 7 fish were recaptured for an efficiency of 0.003% as detailed in Table 24.

**Table 24. Hatchery Trapping Efficiency (Green Peter Head of Reservoir).**

Green Peter Head of Reservoir- Middle Santiam River	Release #	Recapture #	Capture Efficiency
5-ft Trap	Alive (2,001)	7	0.3%
	Dead (N/A)	N/A	N/A

### **Run of River Trapping Efficiency**

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year 79 Spring Chinook and 0 Winter Steelhead have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 25).

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 25. Run of River Trapping Efficiency (Green Peter Head of Reservoir).**

Green Peter Head of Reservoir	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	79	2
Winter Steelhead	0	0

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 26, and target species injuries for the duration of the season are provided in Appendix A.

**Table 26. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Green Peter Head of Reservoir-Middle Santiam River).**

Species	# Fish Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Chinook	132	1	0	6	0	0	0	0	0
Winter Steelhead	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### **Collected DNA and Scale Samples**

For the reporting period, DNA was collected from 0 Spring Chinook and 0 Winter Steelhead. Scale samples were collected from 0 Spring Chinook and 0 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.

### **PIT Tags**

0 Spring Chinook and 0 Winter Steelhead were PIT tagged during this reporting period. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

A total of 85 Spring Chinook and 0 Winter Steelhead have been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. No fish with VIE marks have been detected at downstream RST sites to date. Fish still showing an egg sac are not VIE marked. Release numbers and recaptures for this reporting period are summarized below (Table 27).



**Table 27. Summary of VIE Marked Fish (Green Peter Head of Reservoir).**

Date Tagged	Species	Tag Location	VIE Color	# Tagged	# Recaptured to Date
February 2025	Chinook	Right Dorsal	Yellow	85	2
February 2025	<i>O. mykiss</i>	Right Dorsal	Yellow	0	0

### Non-Target Species

0 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 28.

**Table 28. Summary of Non-target Species (Green Peter Head of Reservoir – Middle Santiam River).**

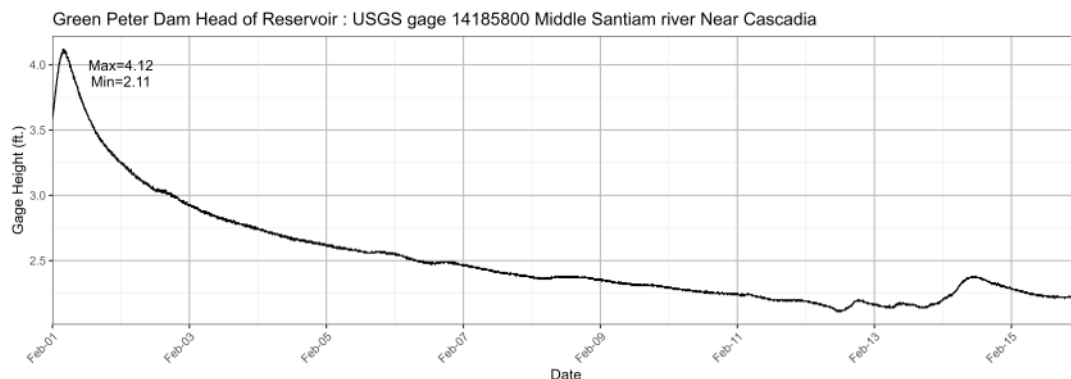
Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Kokanee	0	0	0	0
Cutthroat Trout	0	0	0	0
Chinook (clipped)	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	0	0
Dace	0	0	0	0
Mountain Whitefish	0	0	0	0
Largescale Sucker	0	0	0	0
Unknown Salmonid	0	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Stream Statistics

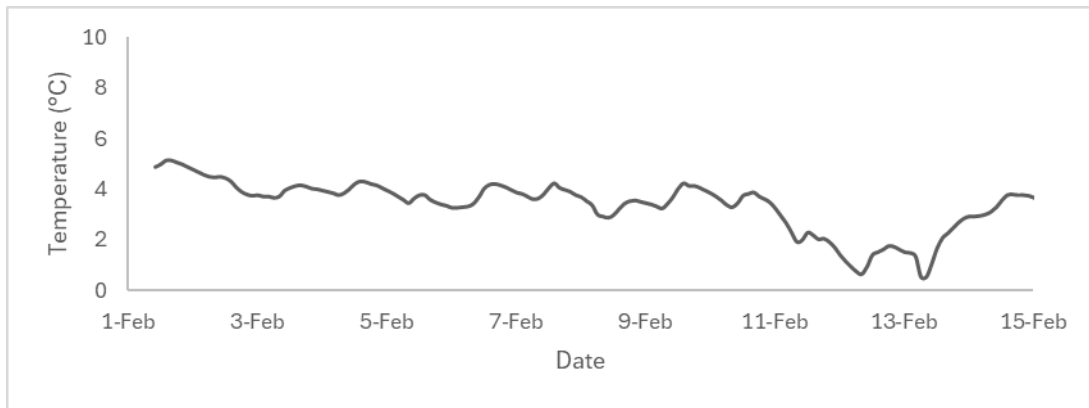
Basic stream statistics at the Green Peter Head of Reservoir – Middle Santiam River site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14185800 (Figure 32). Stream temperatures were recorded every 2 hours for the length of the report period for the RST (Figure 33). The temperature logger operated normally throughout the reporting period. Catch per unit of effort (CPUE) data are summarized in Table 29. Gage height and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 29. Summary of salmonid CPUE, Green Peter HOR – Middle Santiam River.**

Description	Chinook (5 ft)	Winter Steelhead (5 ft)
Catch	132	0
Effort (hrs)	284.5	284.5
CPUE (fish/hr)	0.5	0.0



**Figure 32. Gage Height (feet); Green Peter Head of Reservoir – Middle Santiam River.**



**Figure 33. Temperature at RST (Green Peter Head of Reservoir – Middle Santiam River).**

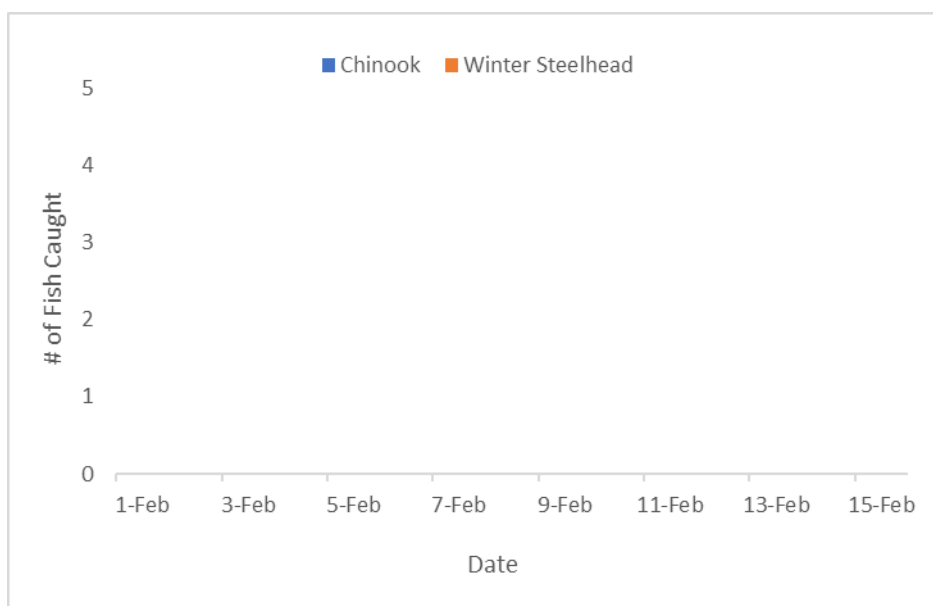


## Middle Santiam River – Green Peter Dam Tailrace

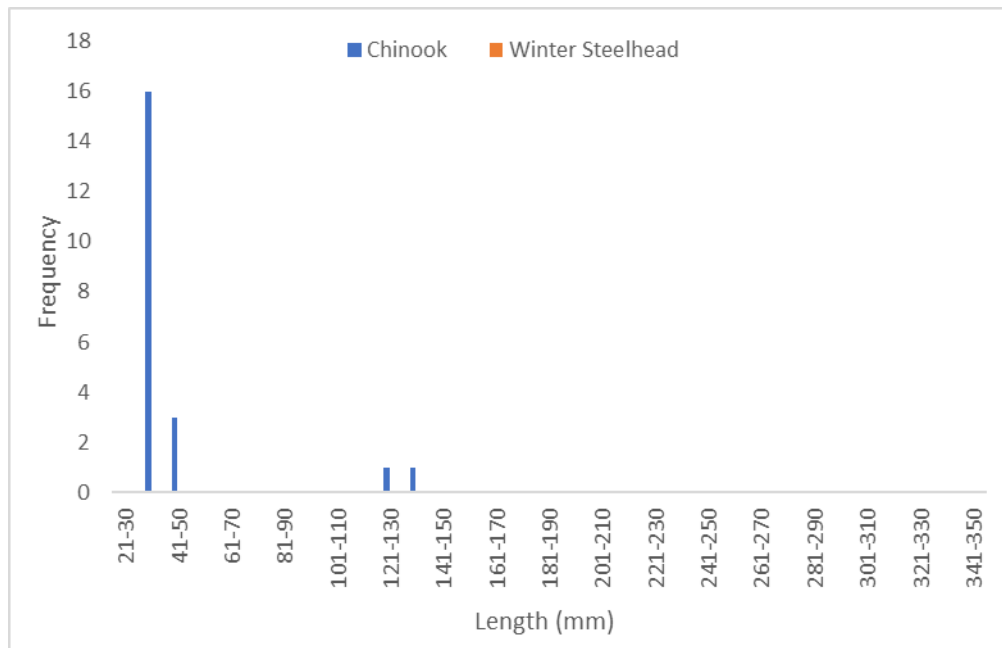
The RST in the Green Peter dam Tailrace began sampling under contract W9127N19D0009 on December 1, 2023. Sampling at Green Peter Dam Tailrace prior to December 1, 2023 was conducted by EAS for the USACE under contract W9127N19D0007.

### **Target Species**

For the reporting period, there were 0 Chinook Salmon (CHS), and 0 Winter Steelhead (STW) captured (Figure 34). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Table 30 provides life stage, length, and weight data for all target species that have been caught at the Green Peter Dam site to-date and for the reporting period. Figure 35 shows length frequency data to date for Chinook and Winter Steelhead.



**Figure 34. Chinook and Winter Steelhead Captured Per Day for the Reporting Period (Green Peter Tailrace- Middle Santiam).**



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

**Figure 35. Length Frequency of Juvenile Chinook and Winter Steelhead Sampled in 2025 (Green Peter Tailrace- Middle Santiam River).**



**Table 30. Descriptive Statistics of Target Species Captured at the Green Peter Tailrace- Middle Santiam River Season To-Date.**

To-Date (Since Jan. 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Green Peter Dam Tailrace	Spill	CHS	Fry	19	33	43	36.6	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	2	127	135	131.0	22.0	26.9	24.5
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Green Peter Dam Tailrace	Spill	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	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### Trapping Efficiency

On 01/21/2025, 1,000 hatchery Chinook were released for fish trapping efficiency below Green Peter Dam in the regulating outlet flow. 8 Chinook were recaptured for a trap efficiency of 0.8%, as detailed in Table 31.

**Table 31. Hatchery Trapping Efficiency (Green Peter Dam).**

Green Peter Dam Tailrace	Release #	Recapture #	Capture Efficiency
8 ft Trap	1,000	8	0.8%

### Run of River Trapping Efficiency

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year, no Spring Chinook have been marked and released upstream for the purpose of conducting dead run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 32).

**Table 32. Run of River Trapping Efficiency (Green Peter Dam).**

Green Peter Dam	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook (dead)	0	0

### 24-Hour Post Collection Holding Trial

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

### Injuries and Copepod Infection

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 33, and target species injuries for the duration of the season are provided in Appendix A.

**Table 33. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Green Peter Tailrace- Middle Santiam River).**

Species	# Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Chinook	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Winter Steelhead	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### **Collected DNA and Scale Samples**

DNA was collected from 0 Spring Chinook and 0 Winter Steelhead for the reporting period. Scales were collected from 0 Spring Chinook and 0 Winter Steelhead. The other targets captured did not meet length criteria for DNA sampling or were too descaled/damaged to collect samples.

### **PIT Tags**

0 Spring Chinook and 0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

No VIE marked Spring Chinook or Winter Steelhead have been detected at this site to date.

### **Non-Target Species**

2 non-target species were captured during this sampling period. A summary of non-target species catch and mortality numbers for 2025 are listed in Table 34.

**Table 34. Summary of Non-target Species (Green Peter Tailrace- Middle Santiam River).**

Species	Capture	Mortality	Season Total Capture	Season Total Mortality
Bass Unknown	0	0	0	0
Bluegill	1	0	6	0
Brown Bullhead	1	0	5	0
Chinook (clipped)	0	0	2	0
Cutthroat Trout	0	0	0	0
Dace	0	0	0	0
Kokanee	0	0	4	0
Kokanee (clipped)	0	0	0	0
Largemouth Bass	0	0	0	0
Largescale Sucker	0	0	1	1
Mountain Whitefish	0	0	0	0
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i> (adults)	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	0	0
Sculpin	0	0	0	0
Pumpkinseed	0	0	0	0
Smallmouth Bass	0	0	0	0
Spotted Bass	0	0	0	0
Unknown	0	0	0	0
Walleye	0	0	0	0
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>18</b>	<b>1</b>

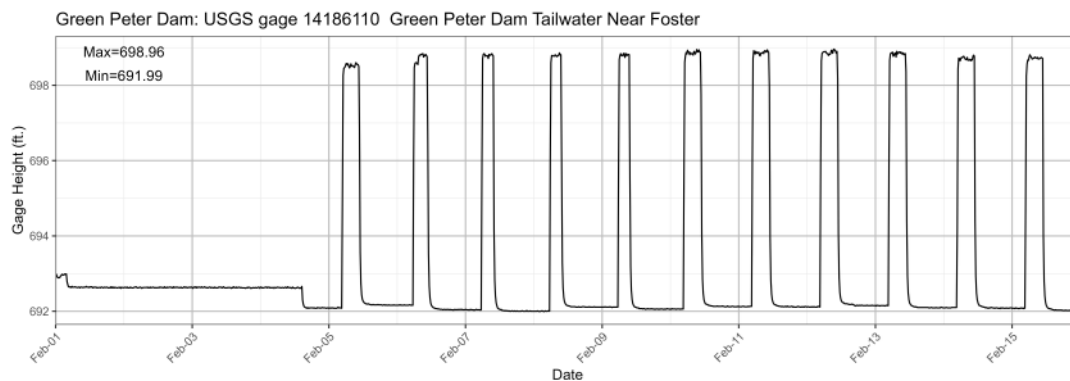


## Stream Statistics

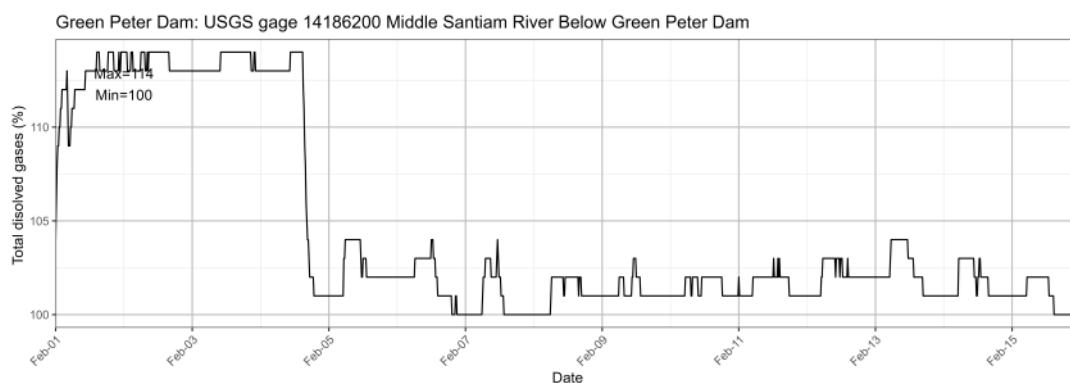
Basic stream statistics at the Green Peter Dam Tailrace- Middle Santiam site were calculated from data downloaded from the U.S. Geological Survey stream gage number 14186110 and 14186200. Gage height (feet) is the only metric provided at gage 14186110 (Figure 36). Total dissolved gas saturation data was received from gage number 14186200, 50 meters upstream of the trap (Figure 37). The temperature logger operated normally for the reporting period (Figure 38). Flows through the Powerhouse and Spillway during the reporting period are displayed in Figure 39. Catch per unit of effort (CPUE) data are summarized in Table 35. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 35. Summary of salmonid CPUE, Green Peter Tailrace- Middle Santiam River.**

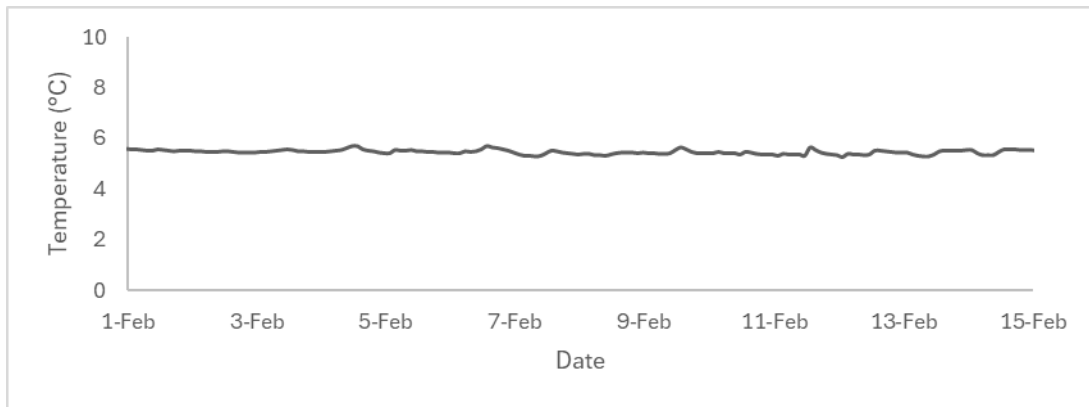
Description	Chinook	Winter Steelhead
Catch	0	0
Effort (hrs)	311.1	311.1
CPUE (fish/hr)	0.0	0.0



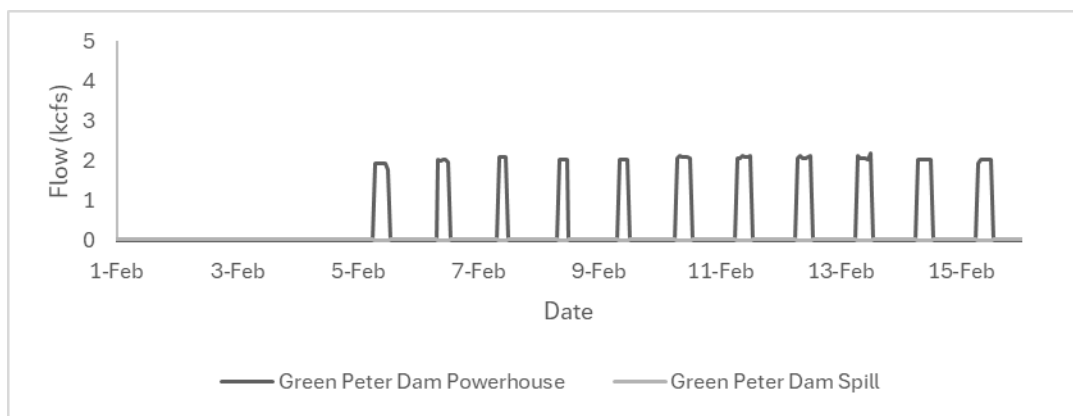
**Figure 36. Gage Height (feet); below Green Peter Dam.**



**Figure 37. Total Dissolved Gas Saturation (%); below Green Peter Dam.**



**Figure 38. Temperature at RST (Green Peter Tailrace- Middle Santiam River).**



**Figure 39. Hourly Flows PH vs. Spill (Green Peter Dam).**

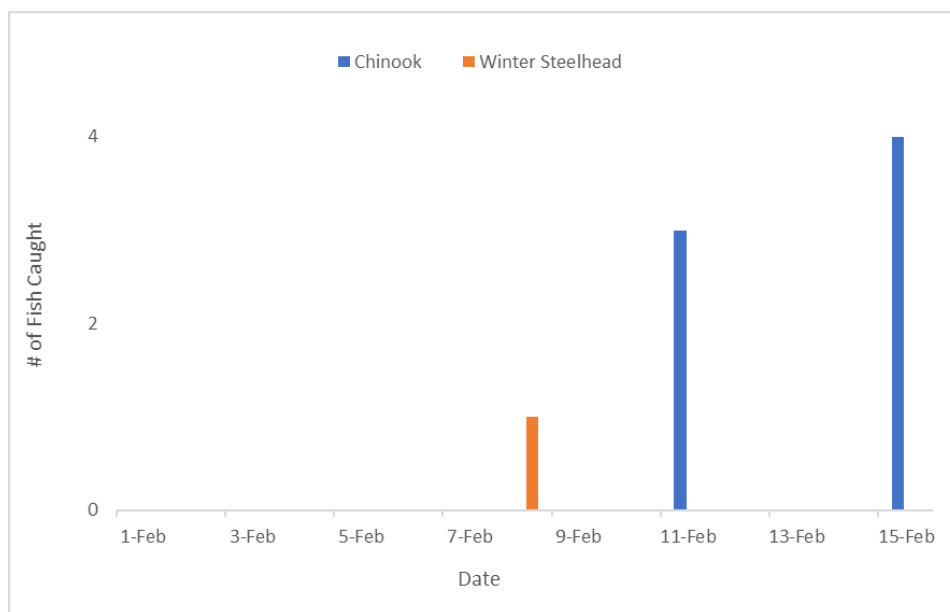


## South Santiam River – Foster Dam Head of Reservoir

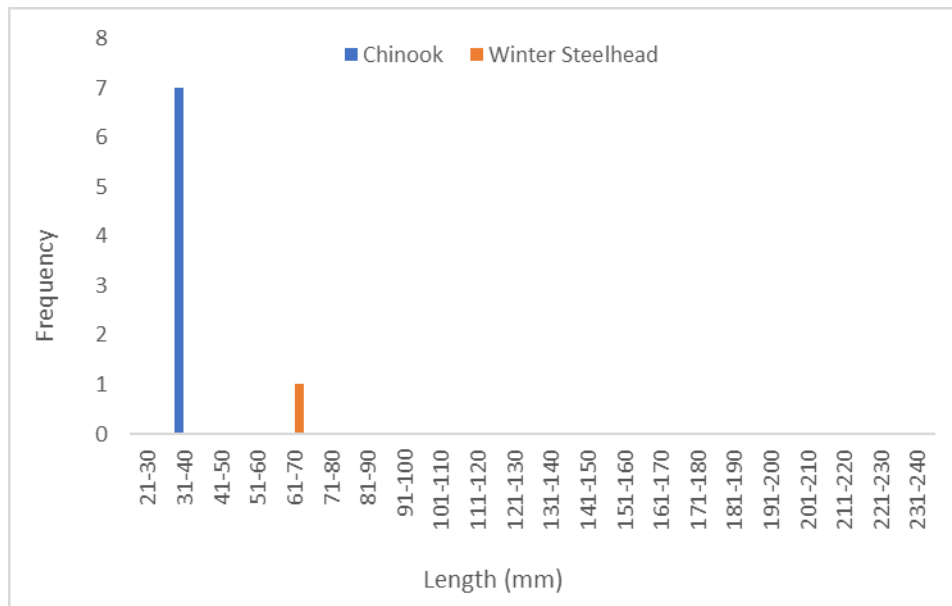
The Foster Dam Head of Reservoir RST was installed January 24<sup>th</sup>, 2025 and began February 1<sup>st</sup>, 2025. All natural origin *O. mykiss* captured at this site will be reported as Winter Steelhead.

### Target Species

There were a total of 7 Chinook Salmon (CHS), and 1 Winter Steelhead (STW) captured for the reporting period (Figure 40). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Figure 41 shows length frequency data to-date. Table 36 provides life stage, length, and weight data for all Chinook Salmon and Winter Steelhead that have been caught at the Foster Dam Head of Reservoir site to-date and for the reporting period.



**Figure 40. Chinook and Winter Steelhead Captured Per Day for the Reporting Period (Foster Dam Head of Reservoir).**



**Figure 41. Length Frequency of Juvenile Chinook Sampled Season To-Date (Foster Dam Head of Reservoir).**

**Table 36. Descriptive Statistics of Target Species Captured at the Foster Dam Head of Reservoir To-Date**

To-Date (Since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Foster Dam Head of Reservoir	5ft	CHS	Fry	7	35	40	38.1	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	1	70	70	70.0	4.2	4.2	4.2
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

\*Fish that were missing heads or caudal fins are not included in length and weight calculations.

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Foster Dam Head of Reservoir	5ft	CHS	Fry	7	35	40	38.1	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		STW	Parr	1	70	70	70.0	4.2	4.2	4.2
		STW	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

\*Fish that were missing heads or caudal fins are not included in length and weight calculations.

### **Trapping Efficiency**

On 2/3/2025, 1,000 hatchery Chinook were released above the trap site to evaluate the trapping efficiency of the 5 ft RST. 15 fish were recaptured for an efficiency of 1.5%, as detailed in Table 37.



**Table 37. Hatchery Trapping Efficiency (Foster Dam Head of Reservoir).**

Foster Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5-ft Trap	1,000	15	1.5%

**Run of River Trapping Efficiency**

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year 0 Spring Chinook and 0 Winter Steelhead have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 38).

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 38. Run of River Trapping Efficiency (Foster Dam Head of Reservoir).**

Foster Dam Head of Reservoir	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	0	0
Winter Steelhead	0	0

**Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon and Winter Steelhead during the reporting period is provided in Table 39, and target species injuries for the duration of the season are provided in Appendix A.

**Table 39. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon and Winter Steelhead for Sampling Period (Foster Dam Head of Reservoir).**

Species	# Fish Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Chinook	7	0	0	0	0	0	0	0	0
Winter Steelhead	1	0	0	0	0	0	0	0	0

**Collected DNA and Scale Samples**

DNA was collected from 0 Spring Chinook and 1 Winter Steelhead. Scale samples were collected from 0 Spring Chinook and 1 Winter Steelhead.

**PIT Tags**

0 Chinook and 1 Winter Steelhead were PIT tagged during this reporting period. More information regarding PIT tagged fish can be found in Appendix D.

**Non-Target Species**

0 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 40.

**Table 40. Summary of Non-target Species (Foster Dam Head of Reservoir).**

Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Chinook (clipped)	0	0	0	0
Cutthroat Trout	0	0	0	0
Dace	0	0	0	0
Kokanee	0	0	0	0
Largescale Sucker	0	0	0	0
Lamprey	0	0	0	0

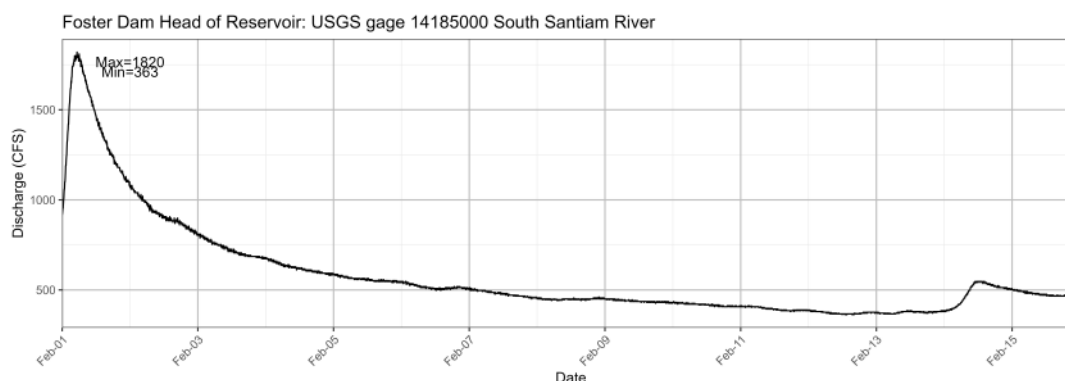
Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Northern Pikeminnow	0	0	0	0
O. mykiss (clipped)	0	0	0	0
Mountain Whitefish	0	0	0	0
Sculpin	0	0	0	0
Unknown	0	0	0	0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Stream Statistics

Basic stream statistics at the Foster Dam Head of Reservoir- South Santiam site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14185000. Discharge (cfs) and Gauge height (feet) are available at this gauge (Figure 42). Stream temperatures were recorded every 2 hours for the duration of the reporting period for the RST (Figure 43). Temperature probes for the trap operated normally throughout this reporting period. Catch per unit of effort (CPUE) data are summarized in Table 41. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

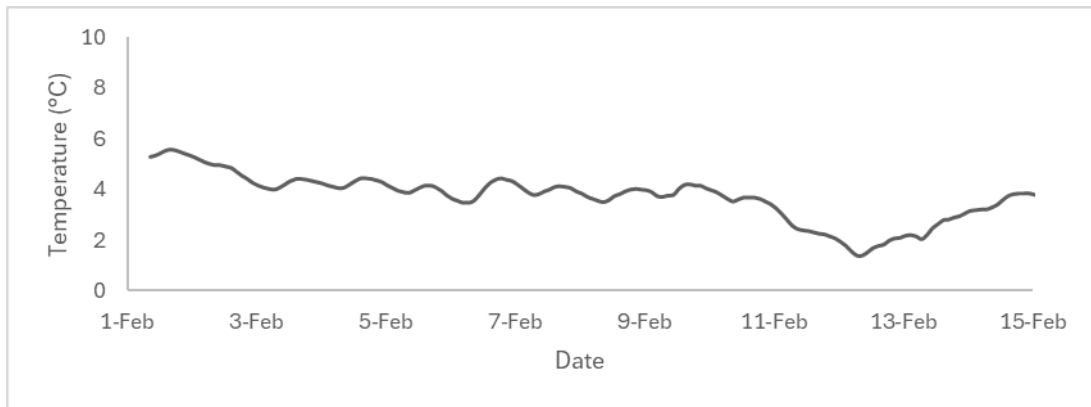
**Table 41. Summary of CPUE, Foster Dam Head of Reservoir.**

Description	Chinook (5 ft)	Winter Steelhead (5 ft)
Catch	7	1
Effort (hrs)	293.7	293.7
CPUE (fish/hr)	0.02	0.003



**Figure 42. Discharge (cfs); Foster Dam Head of Reservoir.**





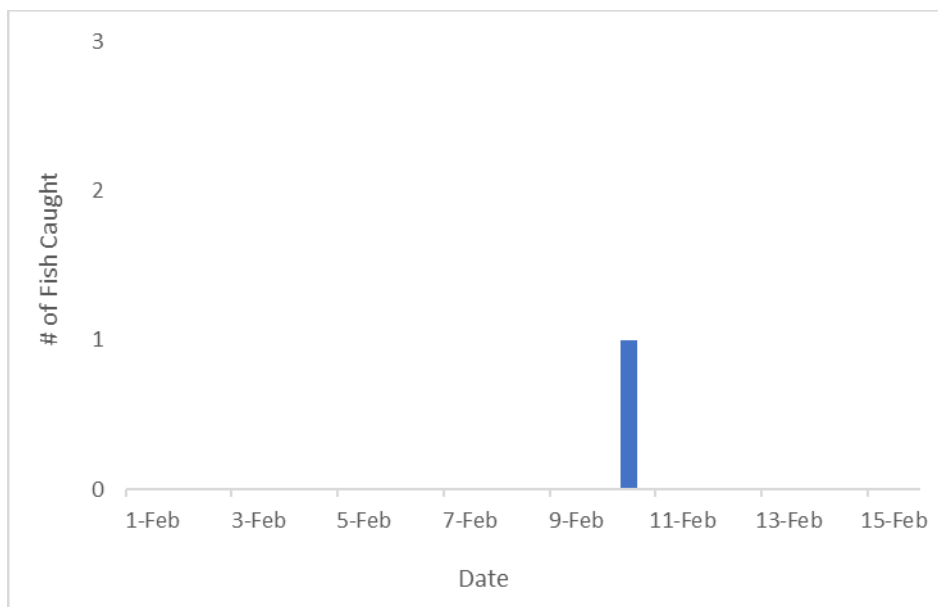
**Figure 43. Temperature at RST (Foster Dam Head of Reservoir).**

## South Fork McKenzie River – Cougar Dam Head of Reservoir

The Cougar Dam Head of Reservoir RST was installed January 26<sup>th</sup>, 2025 and began sampling on February 1<sup>st</sup>, 2025.

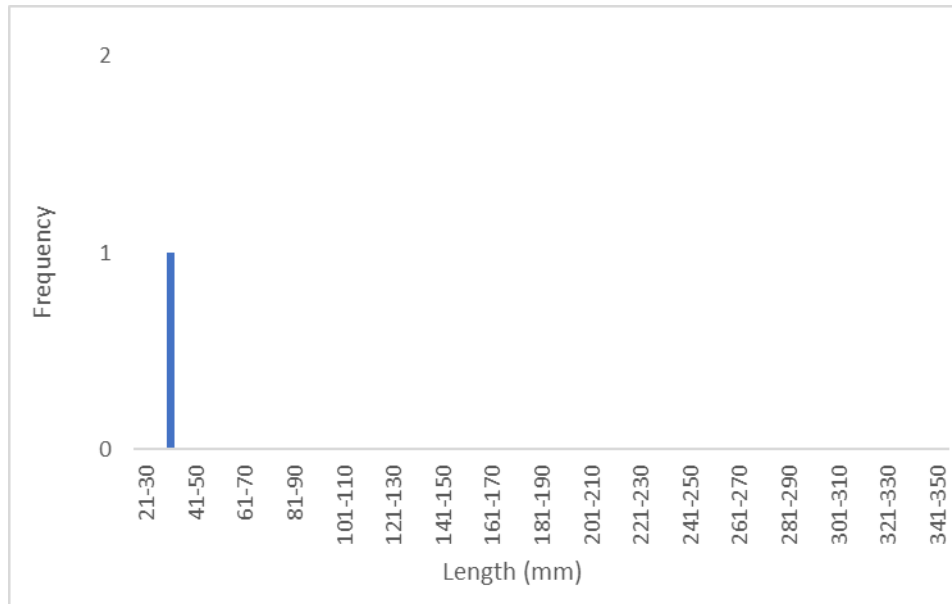
### **Target Species**

There was 1 Chinook Salmon (CHS) captured for the reporting period (Figure 44). The RST was raised to the non-sampling position from February 4<sup>th</sup> to 5<sup>th</sup> due to damage to the cone and then again from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 80.0% of the reporting period for the RST. Table 42 provides life stage, length, and weight data for all Chinook salmon that have been caught at the site to-date and Figure 45 shows length frequency data to-date.



**Figure 44. Chinook Captured Per Day for the Reporting Period (Cougar Dam Head of Reservoir).**





**Figure 45. Length Frequency of Juvenile Chinook Sampled in 2025 (Cougar Dam Head of Reservoir).**

**Table 42. Descriptive Statistics of Target Species Captured at Cougar Dam Head of Reservoir, Season To-Date and for the Reporting Period.**

To-Date (Since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)			Weight (g)		
					Min	Max	Mean	Min	Max	Mean
Cougar Dam Head of Reservoir	5 ft	CHS	Fry	1	33	33	33.0	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)			Weight (g)		
					Min	Max	Mean	Min	Max	Mean
Cougar Dam Head of Reservoir	5 ft	CHS	Fry	1	33	33	33.0	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

\*Most fry are too small to collect accurate weights and thus some metrics are not available for them.

### **Trapping Efficiency**

On 11/25/2024, 749 hatchery Chinook were released upstream of the Cougar Head of Reservoir trap site. A total of 33 fish were recaptured in the 5 ft trap. Trapping efficiency was 4.4%, as detailed in Table 43.

**Table 43. Hatchery Trapping Efficiency (Cougar Dam Head of Reservoir).**

Cougar Dam Head of Reservoir	Release #	Recapture #	Capture Efficiency
5-ft Trap	749	33	4.4%

### ***Run of River Trapping Efficiency***

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year 0 Spring Chinook have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 44).

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 44. Run of River Trapping Efficiency (Cougar Dam Head of Reservoir).**

Cougar Dam Head of Reservoir	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	0	0

### ***Injuries and Copepod Infection***

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 45, and target species injuries for the duration of the season are provided in Appendix A.

**Table 45. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Cougar Dam Head of Reservoir).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
1	0	0	0	0	0	0	0	0

### ***Collected DNA and Scale Samples***

DNA was collected from 0 of the Chinook captured. Scales were collected from 0 of the Chinook captured. The rest of the captured fish were under the minimum fork length threshold or too descaled to retrieve samples.

### ***PIT Tags***

0 Spring Chinook was PIT tagged during this reporting period. More information regarding PIT tagged fish can be found in Appendix D.

### ***VIE Marking***

0 Spring Chinook have been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. Fish still showing an egg sac are not VIE marked. Release numbers and recaptures for this reporting period are summarized below (Table 46).

**Table 46. Summary of VIE Marked Fish (Cougar Dam Head of Reservoir).**

Date Tagged	Tag Location	VIE Color	# Tagged	# Recaptured to Date
February 2025	Right Dorsal	Yellow	0	0

### ***Non-Target Species***

1 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 47.

**Table 47. Summary of Non-target Species (Cougar Dam Head of Reservoir).**

Species	Capture	Mortality	Season Total	Season Total Mortality
Bull Trout	0	0	0	0
Brook Trout	0	0	0	0
Cutthroat Trout	1	0	0	0



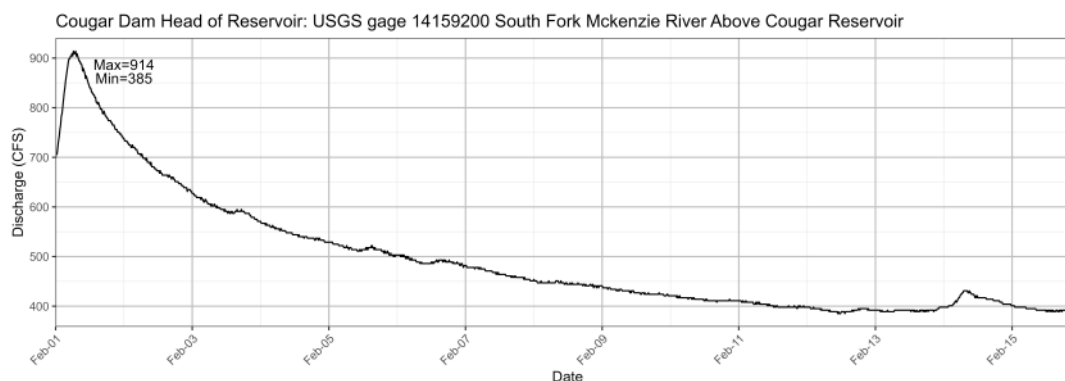
Species	Capture	Mortality	Season Total	Season Total Mortality
Chinook (Adult)	0	0	0	0
Chinook (clipped)	0	0	0	0
Dace	0	0	0	0
Mountain Whitefish	0	0	0	0
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i>	0	0	0	0
Lamprey	0	0	0	0
Sculpin	0	0	0	0
Unknown	0	0	0	0
<b>Totals</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>

### Stream Statistics

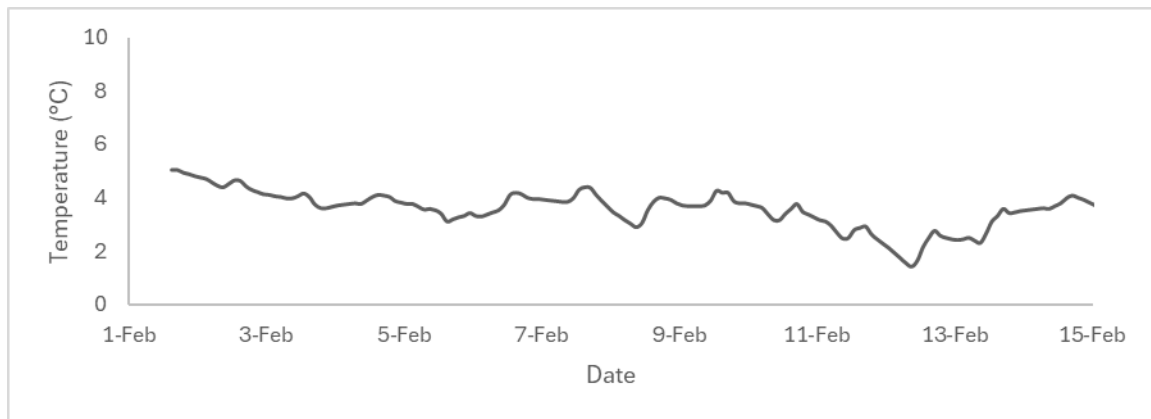
Basic stream statistics at the site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14159200 (Figure 46). Stream temperatures were recorded every 2 hours using a temperature probe at the Cougar Dam Head of Reservoir RST site during this reporting period. The temperature probe operated normally throughout the reporting period, and the data is shown below in Figure 47. Catch per unit of effort (CPUE) data are summarized in Table 48. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 48. Summary of Chinook CPUE, Cougar Dam Head of Reservoir.**

Description	Chinook
Catch	1
Effort (hrs)	266.4
CPUE (fish/hr)	0.004



**Figure 46. Discharge (cfs); South Fork McKenzie above Cougar Dam.**



**Figure 47. Temperature at RST (Cougar Dam Head of Reservoir).**

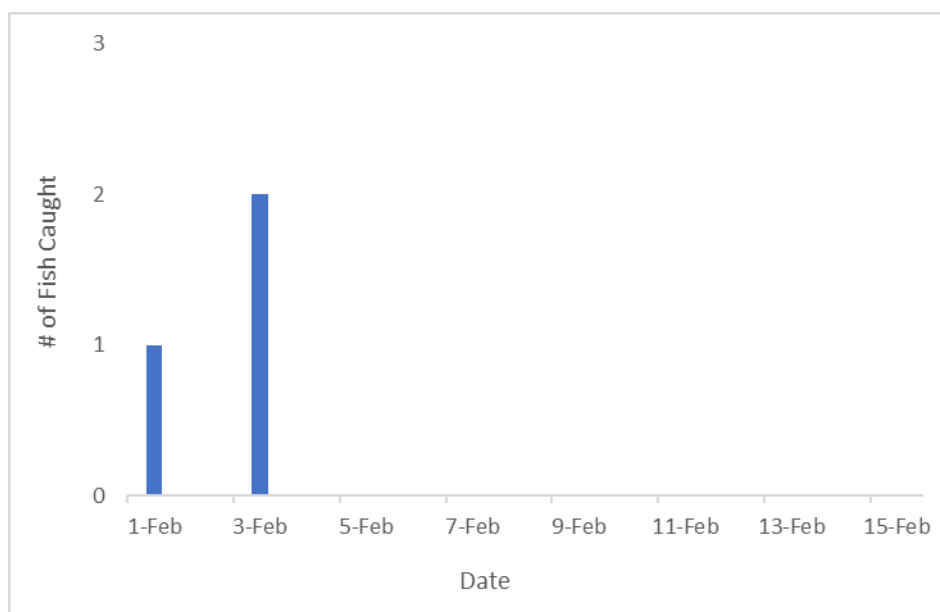


## South Fork McKenzie River– Cougar Dam Tailrace

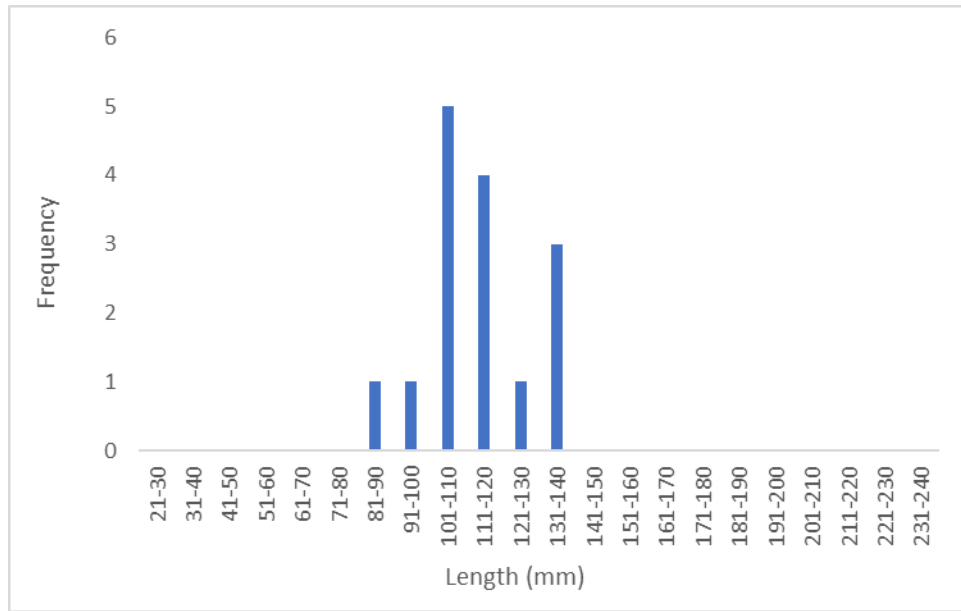
The RSTs in the Cougar Dam Tailrace began sampling under contract W9127N19D0009 on December 1<sup>st</sup>, 2023. Sampling at Cougar Dam prior to December 1, 2023, was conducted by EAS for the USACE under contract W9127N19D0007.

### ***Target Species***

For the reporting period, there were a total of 3 Chinook Salmon (CHS) captured. The RSTs were raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RSTs. Table 49 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 48 shows the daily capture numbers for Chinook and Figure 49 shows length frequency data to-date.



**Figure 48. Chinook Captured Per Day for the Reporting Period (Cougar Dam).**



**Figure 49. Length Frequency of Juvenile Chinook Sampled in 2025 (Cougar Dam).**

**Table 49. Descriptive Statistics of Target Species Captured at Cougar Dam To-Date.**

To-Date (Since Jan. 1, 2025)										
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	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	7	90	138	120.4	7.2	27.3	20.2
	PH 1	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	4	103	114	110.0	12.1	18.0	15.3
	PH 2	CHS	Fry	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Parr	1	97	97	97.0	11.0	11.0	11.0
		CHS	Smolt	3	104	119	110.7	12.0	16.5	13.6

Reporting Period										
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	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	3	107	133	123.0	12.2	25.8	21.2
	PH 1	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	0	N/A	N/A	N/A	N/A	N/A	N/A
	PH 2	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	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### Trapping Efficiency

No hatchery Chinook are available for trapping efficiency trials at the Cougar Dam RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### Run of River Trapping Efficiency

Run of river fish were differentially marked and released for the purpose of conducting run of river trapping efficiency trials at Cougar Dam. This year, no Chinook have been released for the purpose of run of river trapping efficiency. Numbers of fish released and recaptured by route for the reporting period are listed below (Table 50).

**Table 50. Run of River Trapping Efficiency (Cougar Dam).**

Release Route	Release (Current Reporting Period) #	Trap	Recapture (Current Reporting Period) #
PH	0	PH 1	0
		PH 2	0
RO	0	RO	0

### 24-Hour Post Collection Holding Trial

2 Spring Chinook were captured in the RO RST and 0 Chinook were captured in the PH RSTs and held for ~24 hours in holding tanks and then evaluated for survival rates. 0 of the RO RST captured fish (0.0%) died during holding. 0 of the fish from PH RST died during holding (0.0%).



### ***Injuries and Copepod Infection***

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 51, and target species injuries for the duration of the season are provided in Appendix A.

**Table 51. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Cougar Dam).**

Route	# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
RO	3	2	1	2	1	1	1	1	2
PH 1	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PH 2	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### ***Collected DNA and Scale Samples***

DNA was collected from 3 Spring Chinook during this reporting period. Scales were collected from 3 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

### ***PIT Tags***

0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### ***VIE Marking***

No VIE marked Spring Chinook were encountered during this reporting period. 5 VIE marked Spring Chinook have been detected at this site to date. These fish were tagged by EAS at Cougar Dam Head of Reservoir in May 2023. They were recaptured in November 2023.

### ***Non-Target Species***

1 non-target fish were captured during the reporting period; the data is summarized below in Table 52. One of the clipped Chinook was from Bulk Mark Releases from Cramer Fish Sciences.

**Table 52. Summary of Non-target Species (Cougar Dam).**

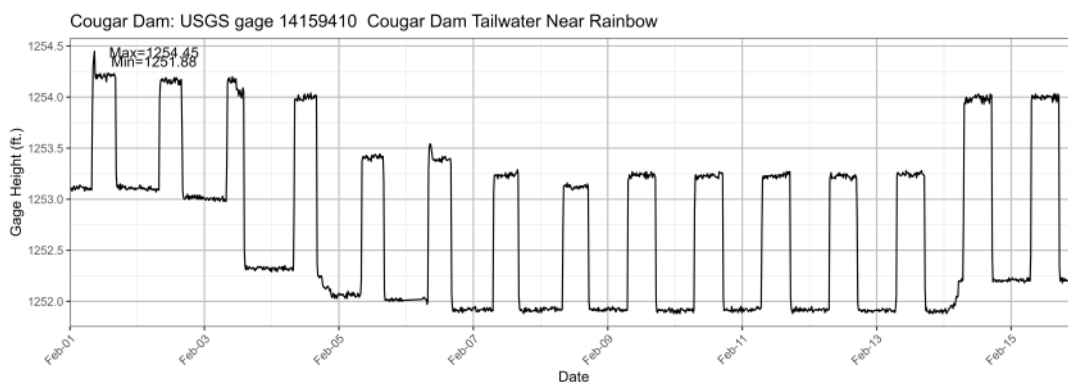
Species	RO Capture	RO Mortality	PH Capture	PH Mortality	Season Total Capture	Season Total Mortality
Bluegill	0	0	0	0	0	0
Crappie	0	0	0	0	0	0
Brook Lamprey	0	0	0	0	0	0
Bull Trout	0	0	0	0	0	0
Chinook (clipped)	0	0	0	0	2	0
Chinook (Adult)	0	0	0	0	0	0
Cutthroat Trout	0	0	0	0	2	0
Dace	0	0	0	0	0	0
Largescale Sucker	0	0	0	0	0	0
Mountain Whitefish	0	0	0	0	0	0
Northern Pikeminnow	0	0	0	0	0	0
<i>O. mykiss</i>	1	1	0	0	5	1
Pacific Lamprey	0	0	0	0	0	0
Sculpin	0	0	0	0	2	0
<b>Totals</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1</b>

## Stream Statistics

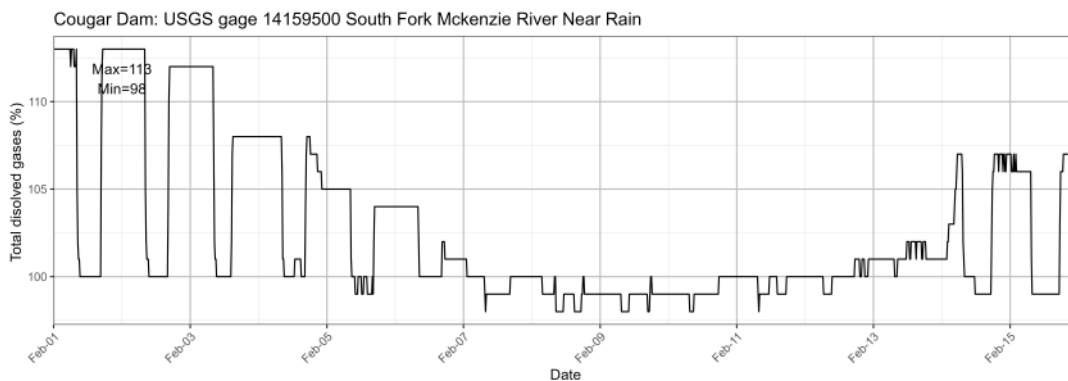
Basic stream statistics at the Cougar Dam site were calculated from data downloaded from U.S. Geological Survey stream gauge numbers 14159410 and 14181500 (Figure 50 and Figure 51). Stream temperatures were recorded using HOBO temperature loggers. The RO and PH temperature loggers recorded data every two hours (Figure 52 and Figure 53). Flow through the PH and RO during the reporting period is displayed in Figure 54. Catch per unit of effort (CPUE) data are summarized in Table 53. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 53. Summary of salmonid CPUE, Cougar Dam.**

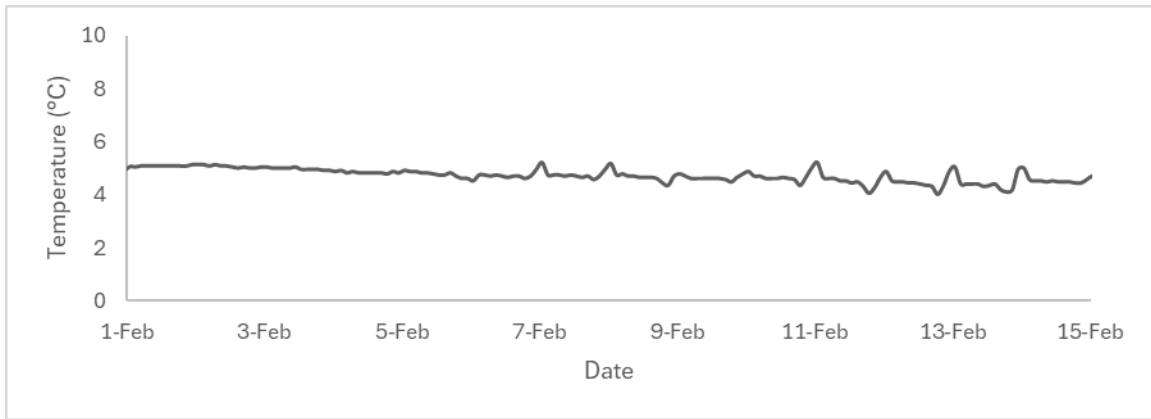
Description	PH 1	PH 2	RO
Catch	0	0	3
Effort (hrs)	312.9	312.9	313.5
CPUE (fish/hr)	0.0	0.0	0.01



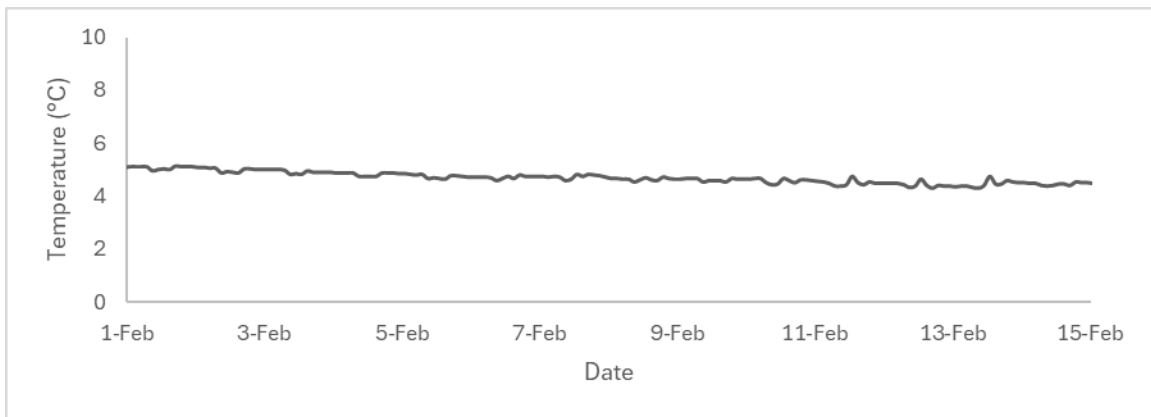
**Figure 50. Gauge Height (feet); below Cougar Dam, South Fork McKenzie River.**



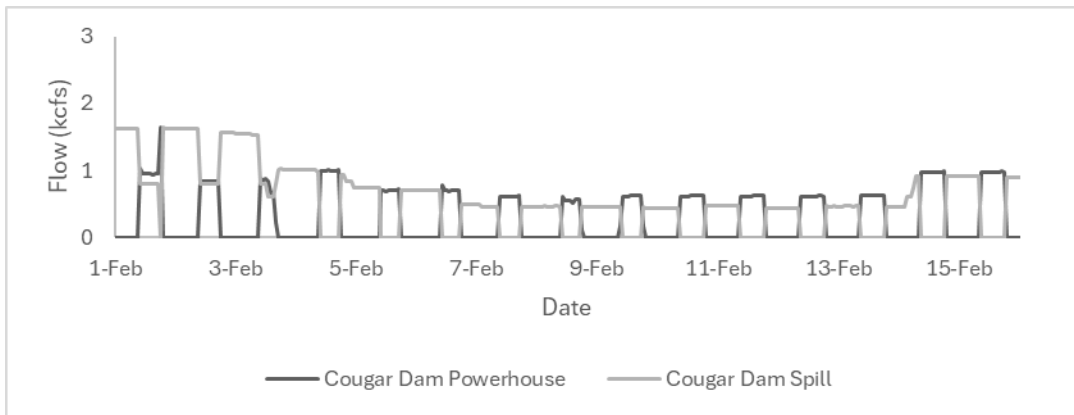
**Figure 51. Total Dissolved Gas Saturation (%); below Cougar Dam, South Fork McKenzie River.**



**Figure 52. Temperature at RO RST (Cougar Dam).**



**Figure 53. Temperature at PH RST (Cougar Dam).**



**Figure 54. Hourly Flows PH vs. RO (Cougar Dam).**



## Fall Creek Head of Reservoir

The Fall Creek Head of Reservoir RST was installed on December 31, 2024. The Fall Creek Head of Reservoir RST began sampling on January 6<sup>th</sup>, 2025 due to high flow.

### Target Species

For the reporting period, there were 4 Chinook Salmon (CHS) captured (Figure 55). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Table 54 provides life stage, length, and weight data for all Chinook salmon that have been caught at the site to-date and for the reporting period. Figure 56 shows length frequency data to-date for Chinook salmon.

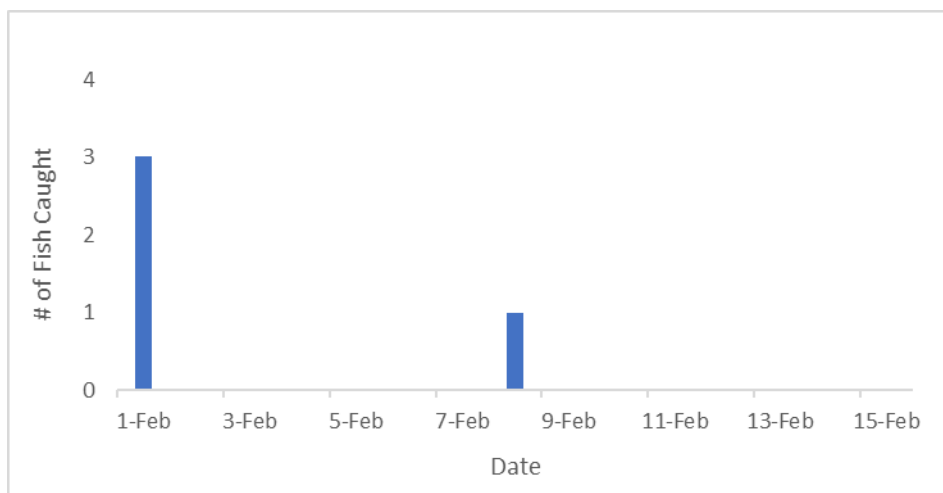


Figure 55. Chinook Captured Per Day for the Reporting Period (Fall Creek Head of Reservoir).

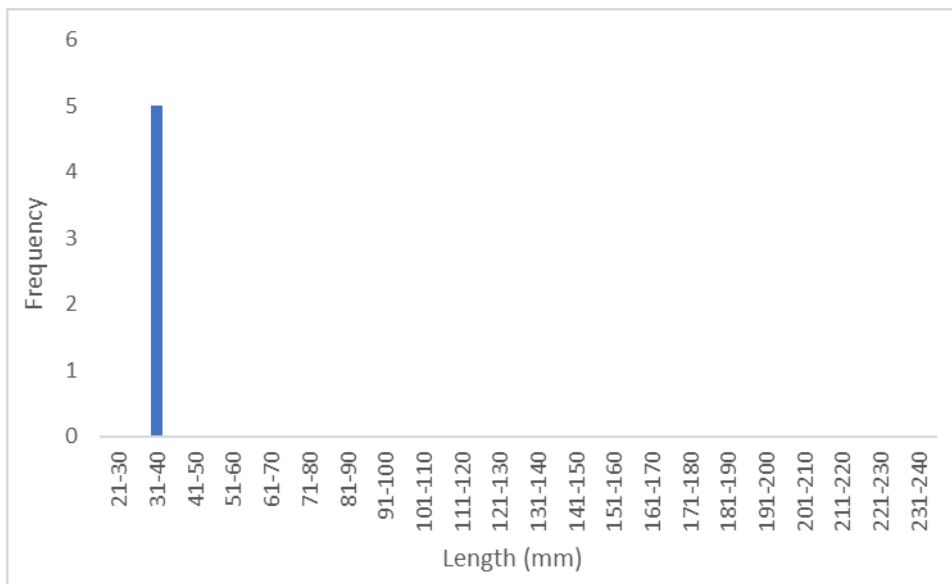


Figure 56. Length Frequency of Juvenile Chinook Sampled in 2025 (Fall Creek Head of Reservoir).

**Table 54. Descriptive Statistics of Target Species Captured at Fall Creek Head of Reservoir To-Date and for the Reporting Period.**

To-Date										
Site	Route	Species	Life stage	Collected	Length (mm) <sup>*</sup>			Weight (g) <sup>*</sup>		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Head of Reservoir	8 ft	CHS	Fry	5	31	35	33.4	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm) <sup>*</sup>			Weight (g) <sup>*</sup>		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Head of Reservoir	8 ft	CHS	Fry	4	31	35	33.0	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

### **Trapping Efficiency**

No hatchery Chinook are available for trapping efficiency trials at the Fall Creek Head of Reservoir RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### **Run of River Trapping Efficiency**

Run of river trapping efficiency trials have been discontinued until daily catch rates increase.

### **Collected DNA and Scale Samples**

Scales were collected from 0 Spring Chinook and DNA was collected from 0 Spring Chinook during this reporting period. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

### **PIT Tags**

No Spring Chinook have been PIT tagged this reporting period. Refer to Appendix D for further information regarding PIT tags.

### **VIE Marking**

1 Spring Chinook has been VIE marked with fluorescent elastomer in 2025. VIE tag color and locations are changed every month to distinctly mark groups of fish by capture date. Fish still showing an egg sac are not VIE marked. A summary of VIE marked fish is shown in Table 55. More information regarding VIE marked fish can be found in Appendix D.

**Table 55. Summary of VIE marked fish at the Fall Creek Head of Reservoir site in 2025.**

Month Tagged	Tag Location	VIE Color	# Tagged	# Recaptured to Date
February 2025	Left Dorsal	Yellow	1	0

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 56 and target species injuries for the duration of the season are provided in Appendix A.

**Table 56. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Fall Creek Head of Reservoir).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
4	0	0	0	0	0	0	0	0

### **Non-Target Species**

10 non-target fish were captured at Fall Creek Head of Reservoir this reporting period. Non-target data is summarized below in Table 57.

**Table 57. Summary of Non-target Species (Fall Creek Head of Reservoir).**

Species	Capture	Mortality	Season Total	Season Total Mortality
Brook Lamprey	0	0	0	0
Brown Bullhead	0	0	0	0
Cutthroat Trout	6	0	45	2
Dace	0	0	3	0
Chinook (clipped)	0	0	1	0
Largescale Sucker	0	0	4	0
Northern Pikeminnow	1	0	1	0
<i>O. mykiss</i>	3	0	80	1
<i>O. mykiss</i> (clipped)	0	0	0	0
Pacific Lamprey	0	0	0	0
Redside Shiner	0	0	0	0
Sculpin	0	0	0	0
Unknown Lamprey	0	0	0	0
<b>Totals</b>	<b>10</b>	<b>0</b>	<b>134</b>	<b>3</b>

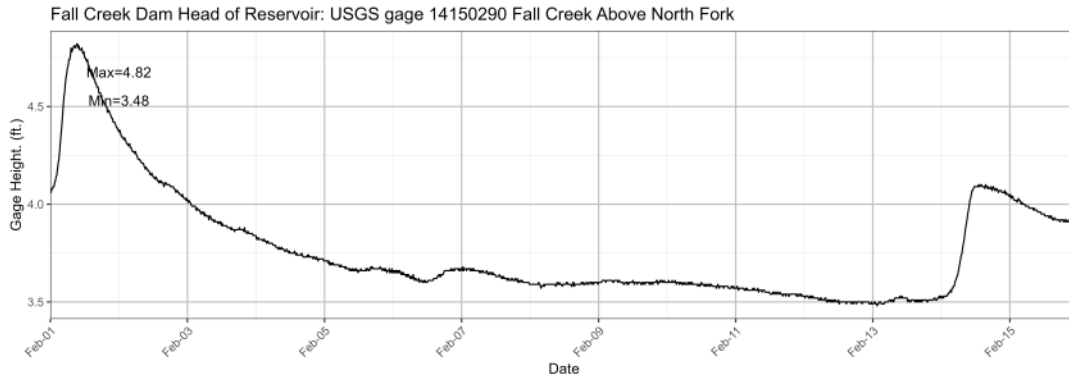
### **Stream Statistics**

Basic stream statistics at the Fall Creek Head of Reservoir site were calculated from data downloaded from the U.S. Geological Survey stream gage number 14150290 (Figure 57). Stream temperatures were recorded every 2 hours for the Fall Creek Head of Reservoir RST (Figure 58). Catch per unit of effort (CPUE) data are summarized in Table 58. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

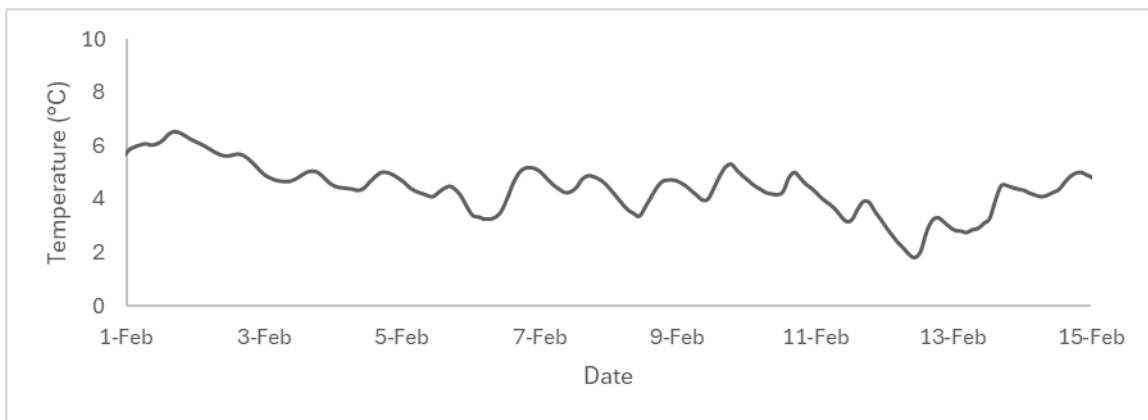
**Table 58. Summary of Chinook CPUE, Fall Creek Head of Reservoir.**

Descriptions	Chinook
Catch	4
Effort (hrs)	305.5
CPUE (fish/hr)	0.01





**Figure 57. Gage Height (feet); Fall Creek Above North Fork, Near Lowell OR.**



**Figure 58. Temperature at RST (Fall Creek Head of Reservoir).**

## Fall Creek Dam Tailrace

The RST in the Fall Creek Dam Tailrace began sampling under contract W9127N19D0009 on September 30, 2023. Sampling at Fall Creek Dam Tailrace prior to September 30, 2023, was conducted by EAS for the USACE under contract W9127N19D0007.

### Target Species

There were 4 Chinook Salmon (CHS) captured for the reporting period (Figure 59). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Figure 60 shows length frequency data to-date and Table 59 displays life stage, length, and weight data for all Chinook salmon that have been caught at the Fall Creek Dam Tailrace site to-date.

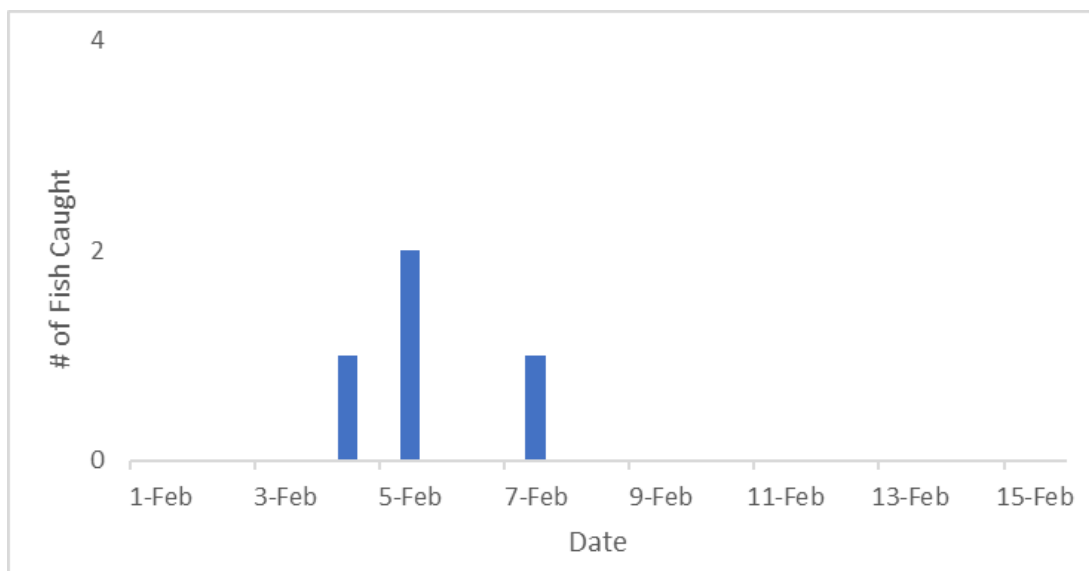


Figure 59. Chinook captured Per Day for the Reporting Period (Fall Creek Dam Tailrace).

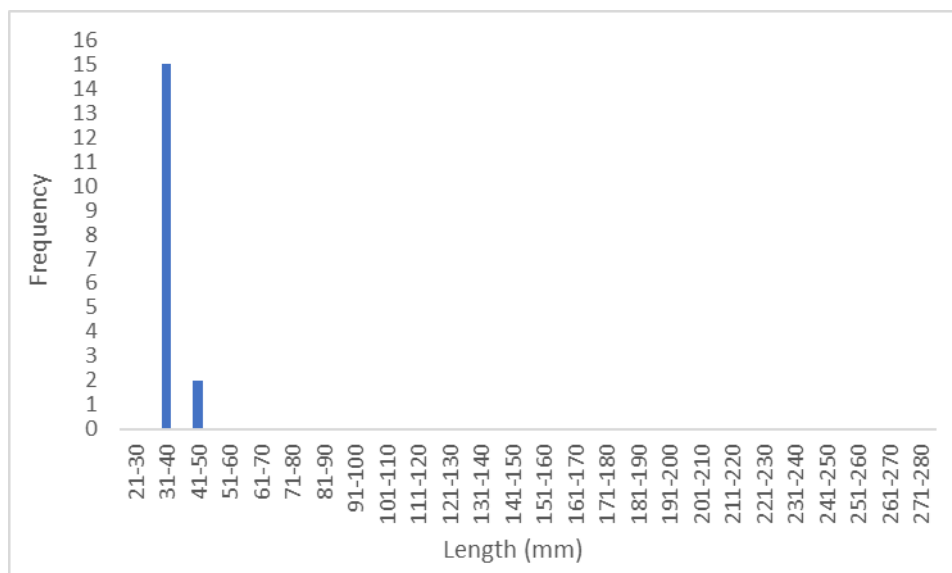


Figure 60. Length Frequency of Juvenile Chinook Sampled Season To-Date (Fall Creek Dam Tailrace).

**Table 59. Descriptive Statistics of Target Species Captured at Fall Creek Dam Tailrace To-Date and for the Reporting Period.**

To-Date (since Jan 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Dam	RO	CHS	Fry	17	31	43	35.8	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Fall Creek Dam	RO	CHS	Fry	4	31	37	34.5	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

### **Trapping Efficiency**

No hatchery Chinook are available for trapping efficiency trials at the Fall Creek Dam RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### **24-Hour Post Collection Holding Trial**

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

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 60, and target species injuries for the duration of the season are provided in Appendix A.

**Table 60. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Fall Creek Dam).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
4	0	0	0	0	0	0	0	0

### **Collected DNA and Scale Samples**

Scales were collected from 0 Spring Chinook and DNA was collected from 0 Spring Chinook during this reporting period. 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

No VIE marked Spring Chinook have been detected at this site to date.

### **Non-Target Species**

51 non-target fish were captured at the Fall Creek Dam Tailrace site during the reporting period; the data is summarized below in Table 61.



**Table 61. Summary of Non-target Species (Fall Creek Dam Tailrace).**

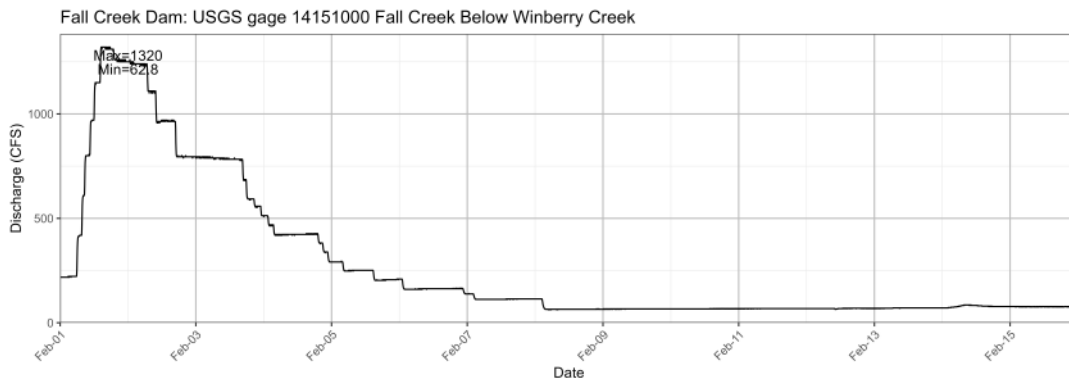
Species	Capture	Mortality	Season Total	Season Total Mortality
Bluegill	0	0	0	0
Brook Lamprey	0	0	4	0
Brown Bullhead	8	5	51	8
Chinook (clipped)	0	0	0	0
Cutthroat Trout	32	0	62	3
Dace	1	0	42	3
Largescale Sucker	2	0	13	1
Mosquitofish	0	0	0	0
Mountain Whitefish	3	1	4	2
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i>	4	0	50	0
<i>O. mykiss</i> (clipped)	0	0	4	0
Pacific Lamprey	0	0	0	0
Peamouth	0	0	0	0
Redside Shiner	0	0	0	0
Sculpin	1	0	4	1
Unknown Salmonid	0	0	0	0
Unknown	0	0	1	1
<b>Totals</b>	<b>51</b>	<b>6</b>	<b>235</b>	<b>19</b>

### Stream Statistics

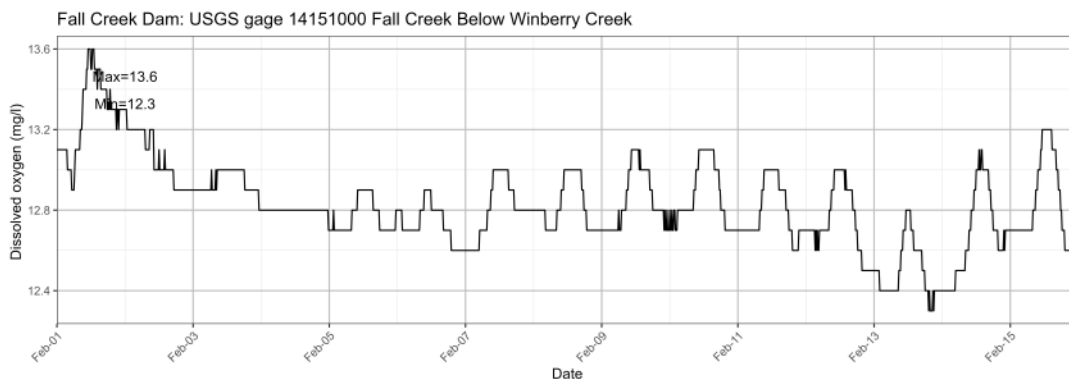
Basic stream statistics at the site were calculated from data downloaded from U.S. Geological Survey stream gage numbers 14151000 and 1415000. Instantaneous discharge (cfs) data was collected from gage 1415100 (Figure 61). Dissolved oxygen (mg/L) concentration data was received from gage 1415000, 1.2 rkms downstream of the trap (Figure 62). Stream temperatures were recorded every 2 hours using a temperature probe at the Fall Creek Dam RST site during this reporting period. Flows In and Out of reservoir during the reporting period are displayed in Figure 64. Catch per unit of effort (CPUE) data are summarized in Table 62. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 62. Summary of Chinook CPUE, Fall Creek Dam Tailrace.**

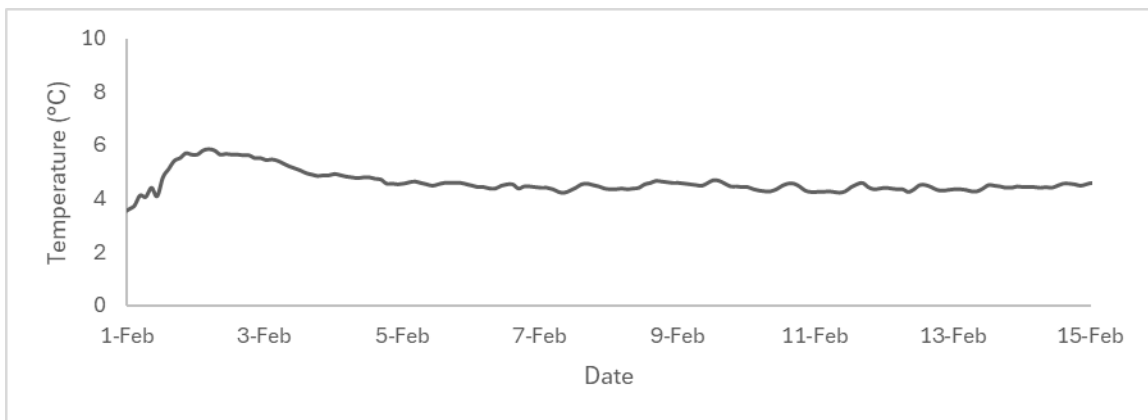
Description	Chinook
Catch	4
Effort (hrs)	308.4
CPUE (fish/hr)	0.01



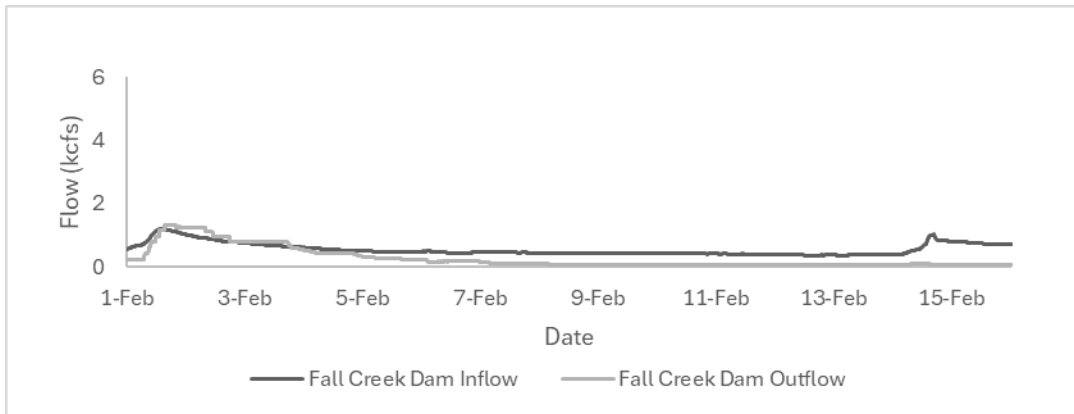
**Figure 61. Discharge (cfs); Fall Creek Below Winberry Creek, Near Fall Creek, OR**



**Figure 62. Dissolved Oxygen (mg/L), Fall Creek below Winberry Creek, Near fall Creek, OR**



**Figure 63. Temperature at RST (Fall Creek Dam Tailrace).**



**Figure 64. Hourly Flows Inflow vs. Outflow (RO) (Fall Creek Tailrace).**

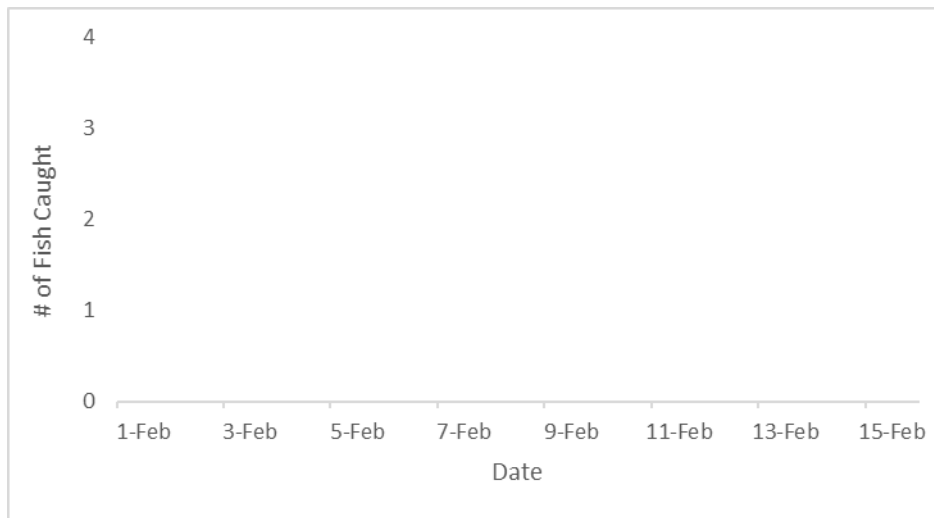


## Middle Fork Willamette River – Hills Creek Head of Reservoir

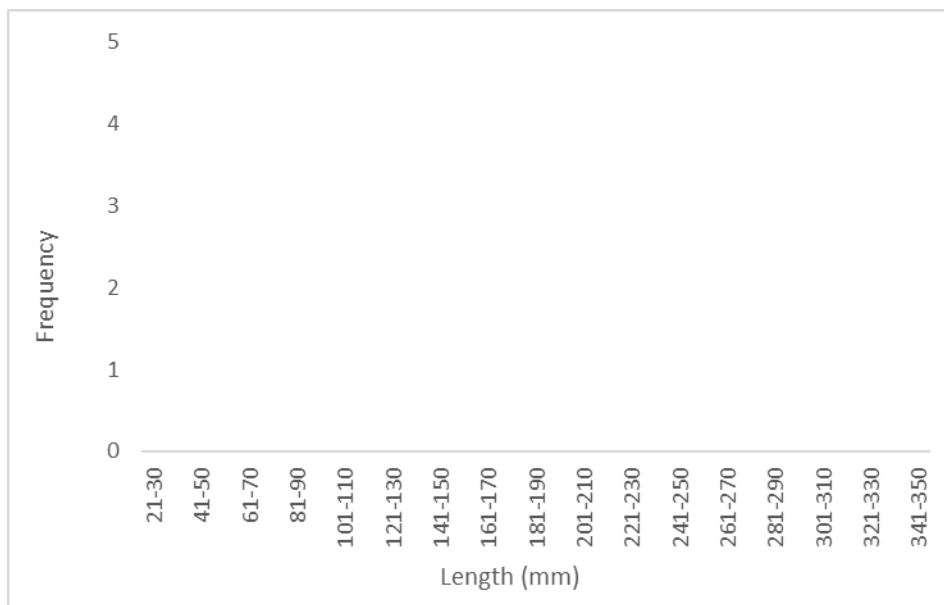
The Hills Creek Head of Reservoir RST was installed January 21<sup>st</sup>, 2025 and began February 1<sup>st</sup>, 2025.

### **Target Species**

There were 0 Chinook Salmon (CHS) captured for the reporting period (Figure 65). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Figure 66 shows length frequency data to-date. Table 63 provides life stage, length, and weight data for all Chinook Salmon that have been caught at the Hills Creek Head of Reservoir site to-date and for the reporting period.



**Figure 65. Chinook Captured Per Day for the Reporting Period (Hills Creek Head of Reservoir).**



**Figure 66. Length Frequency of Juvenile Chinook Sampled Season To-Date (Hills Creek Head of Reservoir).**

**Table 63. Descriptive Statistics of Target Species Captured at Hills Creek Head of Reservoir To-Date**

To-Date (Since February 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek Head of Reservoir	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	0	N/A	N/A	N/A	N/A	N/A	N/A

Fish that were missing heads or caudal fins are not included in length and weight calculations.

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek Head of Reservoir	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	0	N/A	N/A	N/A	N/A	N/A	N/A

Fish that were missing heads or caudal fins are not included in length and weight calculations.

### Trapping Efficiency

No hatchery Chinook are available for trapping efficiency trials at the Hills Creek Dam RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### Run of River Trapping Efficiency

Run of river fish captured in the RST have been differentially marked and released upstream to perform run of river trapping efficiency trials. This year, 0 Spring Chinook have been marked and released upstream for the purpose of conducting run of river trapping efficiency trials. Release numbers and recaptures for this reporting period are summarized below (Table 64).

Run of river trapping efficiency has been discontinued until daily catch rates increase.

**Table 64. Run of River Trapping Efficiency (Hills Creek Head of Reservoir).**

Hills Creek Head of Reservoir	Release (Current Reporting Period) #	Recapture (Current Reporting Period) #
Chinook	0	0

### Injuries and Copepod Infection

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 65, and target species injuries for the duration of the season are provided in Appendix A.

**Table 65. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Hills Creek Head of Reservoir).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### Collected DNA and Scale Samples

For the reporting period, DNA was collected from 0 Spring Chinook. Scales were collected from 0 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged.

### ***PIT Tags***

No Spring Chinook were PIT tagged during this reporting period. More information regarding PIT tagged fish can be found in Appendix D.

### ***VIE Marking***

A total of 0 Spring Chinook have been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. No fish with VIE marks have been detected at downstream RST sites to date. Fish still showing an egg sac are not VIE marked. A summary of VIE marked fish is shown below (Table 66).

**Table 66. Summary of VIE Marked Fish (Hills Creek Head of Reservoir).**

Date Tagged	Species	Tag Location	VIE Color	# Tagged	# Recaptured to Date
February 2025	Chinook	Left Dorsal	Yellow	0	0

### ***Non-Target Species***

2 non-target species were captured during this reporting period. A summary of non-target fish capture is provided in Table 67.

**Table 67. Summary of Non-target Species (Hills Creek Head of Reservoir).**

Species	5 ft Capture	5 ft Mortality	Season Total	Season Total Mortality
Bull Trout	0	0	0	0
Chinook (clipped)	0	0	0	0
Cutthroat	1	0	0	0
Dace	1	0	0	0
Lamprey	0	0	0	0
Largescale Sucker	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	0	0
<i>O. mykiss</i>	0	0	0	0
Redside Shiner	0	0	0	0
Sculpin	0	0	0	0
<b>Totals</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>

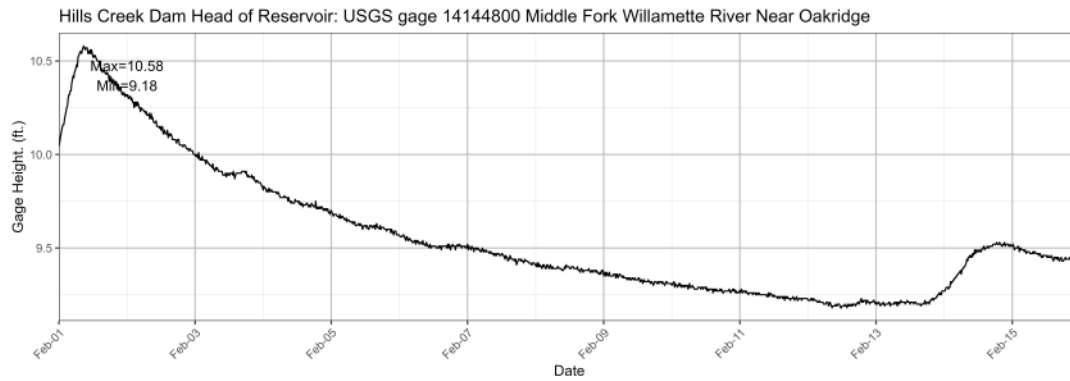
### ***Stream Statistics***

Basic stream statistics at the Hills Creek Head of Reservoir site were calculated from data downloaded from the U.S. Geological Survey stream gage number 14144800 (Figure 67). Stream temperatures were recorded every 2 hours for the length of the report period for the RST (Figure 68). Catch per unit of effort (CPUE) data is summarized in Table 68. Gage height and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

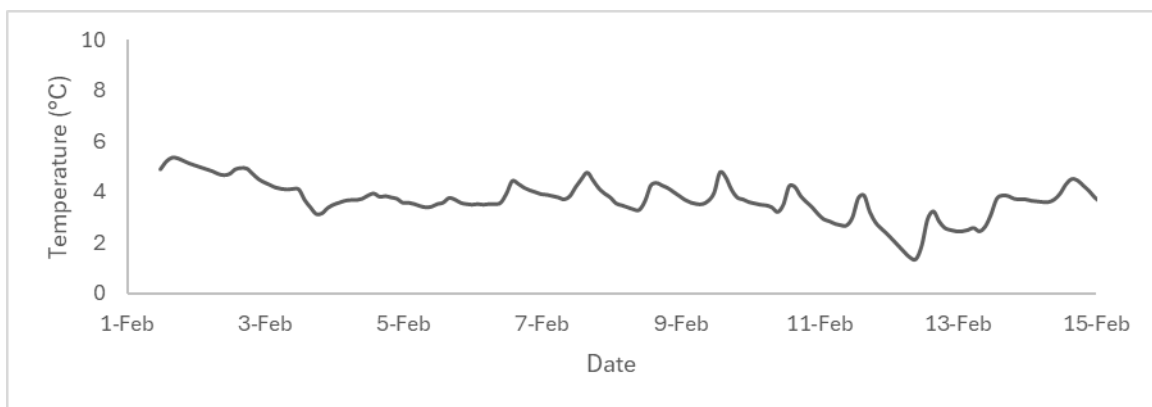
**Table 68. Summary of CPUE, Hills Creek Head of Reservoir.**

Description	Chinook 5 ft
Catch	0
Effort (hrs)	289.4
CPUE (fish/hr)	0.0





**Figure 67. Gage Height (feet); Hills Creek Head of Reservoir, Near Oakridge, OR.**



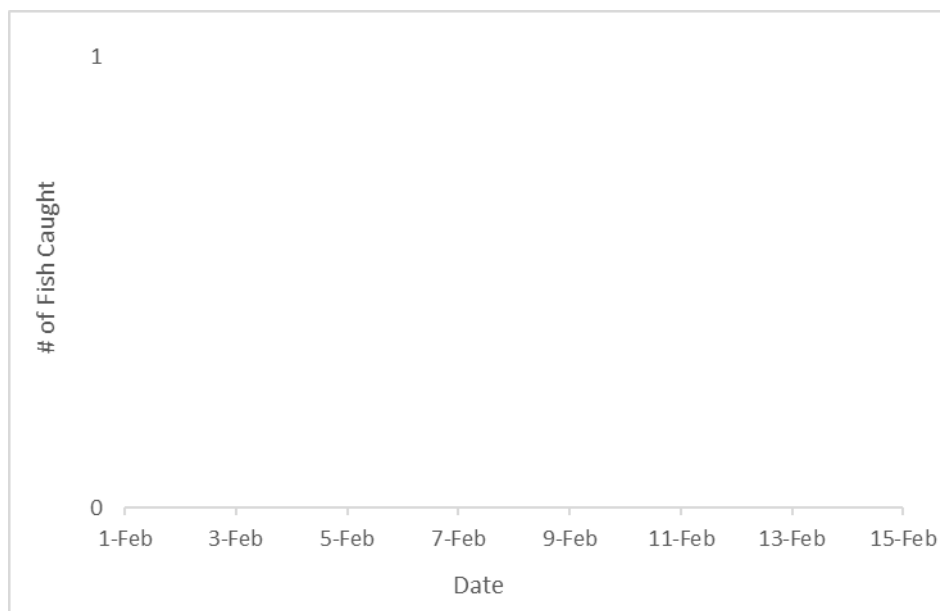
**Figure 68. Temperature at RST (Hills Creek Head of Reservoir)**

## Middle Fork Willamette River – Hills Creek Dam Tailrace

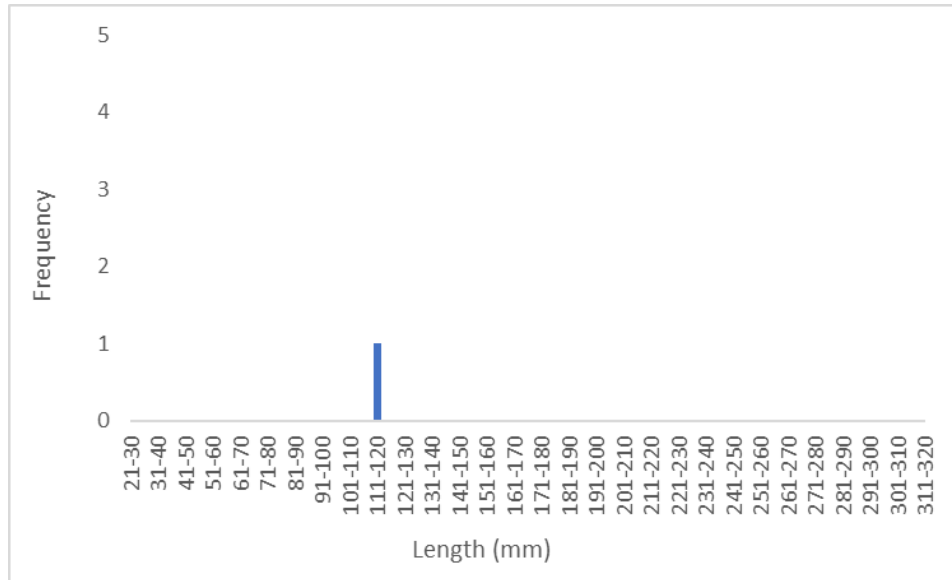
The RSTs in the Hills Creek Dam Tailrace began sampling under contract W9127N19D0009 on September 15<sup>th</sup>, 2023. Sampling at Hills Creek Dam Tailrace prior to September 15<sup>th</sup>, 2023 was conducted by EAS for the USACE under contract W9127N19D0007.

### ***Target Species***

For the reporting period, there were 0 Chinook Salmon (CHS) captured (Figure 69). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Table 69 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 70 shows length frequency data to-date.



**Figure 69. Chinook Captured Per Day for the Reporting Period (Hills Creek Dam Tailrace).**



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

**Figure 70. Length Frequency of Juvenile Chinook Sampled in 2025 (Hills Creek Dam Tailrace).**

**Table 69. Descriptive Statistics of Target Species Captured at Hills Creek Dam To-Date and for the Reporting Period.**

To-Date (Since Jan. 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek	RO	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	119	119	119.0	20.6	20.6	20.6
Hills Creek	PH	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	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Hills Creek	RO	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	0	N/A	N/A	N/A	N/A	N/A	N/A
Hills Creek	PH	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	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### Trapping Efficiency

No hatchery Chinook are available for trapping efficiency trials at the Hills Creek Dam RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.



### ***Run of River Trapping Efficiency***

No run of river trapping efficiency trials were performed this reporting period. Run of river trapping efficiency trials have been discontinued until daily catch rates increase. Release numbers and recaptures by trap for this reporting period are summarized below (Table 70).

**Table 70. Run of River Trapping Efficiency (Hills Creek Dam).**

Release (Current Reporting Period) #	Recapture Location	Recapture (Current Reporting Period) #
0	PH Trap	0
	RO Trap	0

### ***24-Hour Post Collection Holding Trial***

0 Spring Chinook were held from the PH RST and 0 were held from the RO RST. 0 hold fish died from the PH RST (0.0%). 0 of the fish from RO RST died during holding (0.0%).

### ***Injuries and Copepod Infection***

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 71, and target species injuries for the duration of the season are provided in Appendix A.

**Table 71. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period. (Hills Creek Dam).**

Route	# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
RO	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PH	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### ***Collected DNA and Scale Samples***

For the reporting period, DNA was collected from 0 Spring Chinook. Scales were collected from 0 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged.

### ***PIT Tags***

0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### ***VIE Marking***

No Spring Chinook had been VIE marked with fluorescent elastomer in 2025. VIE tag color and locations are changed every month to distinctly mark groups of fish by capture date. The first 60 target fish per week are prioritized for the 24-Hour Post Collection Holding Study. These fish are not tagged to not bias the results of the holding study. Fish still showing an egg sac are not VIE marked. A summary of VIE marked fish at the Hills Creek Dam site is available in Table 72. More information regarding VIE marked fish can be found in Appendix D.

**Table 72. Summary of VIE Marked Fish (Hills Creek Dam).**

Month Tagged	Tag Location	VIE Color	# Tagged	# Recaptured to Date
N/A	Head	Green	0	0

### ***Non-Target Species***

27 non-target fish were captured at Hills Creek during the reporting period; the data is summarized below in Table 73.

**Table 73. Summary of Non-target Species (Hills Creek Dam).**

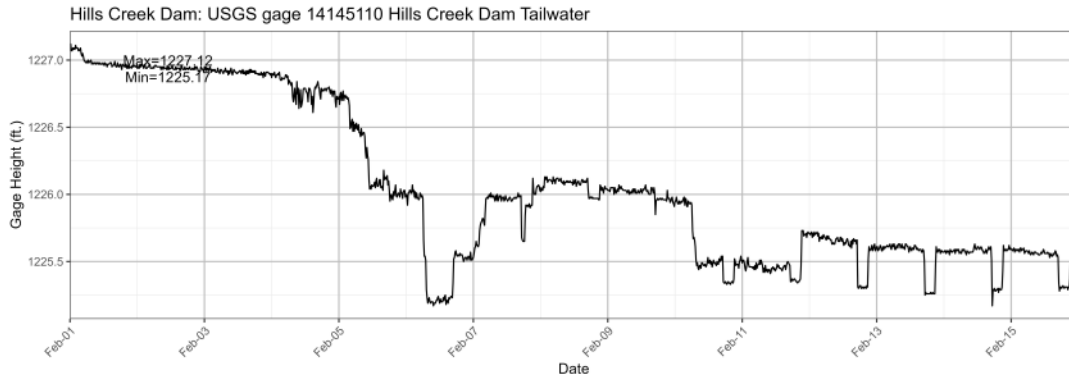
Species	RO Capture	RO Mortality	PH Capture	PH Mortality	Season Total	Season Total Mortality
Bass Unknown	0	0	0	0	0	0
Bluegill	5	2	3	1	82	53
Brook Lamprey	0	0	0	0	0	0
Brown Bullhead	0	0	0	0	2	1
Chinook (clipped)	0	0	0	0	1	1
Crappie	8	4	2	0	293	238
Cutthroat	1	0	0	0	2	0
Dace	0	0	0	0	0	0
Largemouth Bass	0	0	0	0	1	1
Largescale Sucker	0	0	0	0	34	14
Mountain Whitefish	0	0	0	0	0	0
Northern Pikeminnow	0	0	0	0	0	0
<i>O. mykiss (clipped)</i>	5	3	2	1	28	17
<i>O. mykiss</i>	0	0	1	0	15	3
Pumpkinseed	0	0	0	0	0	0
Redside Shiner	0	0	0	0	0	0
Sculpin	0	0	0	0	2	1
Smallmouth Bass	0	0	0	0	1	1
Spotted Bass	0	0	0	0	6	1
Unknown Bass	0	0	0	0	2	2
Unknown	0	0	0	0	1	0
Walleye	0	0	0	0	0	0
<b>Totals</b>	<b>19</b>	<b>9</b>	<b>8</b>	<b>2</b>	<b>470</b>	<b>333</b>

### Stream Statistics

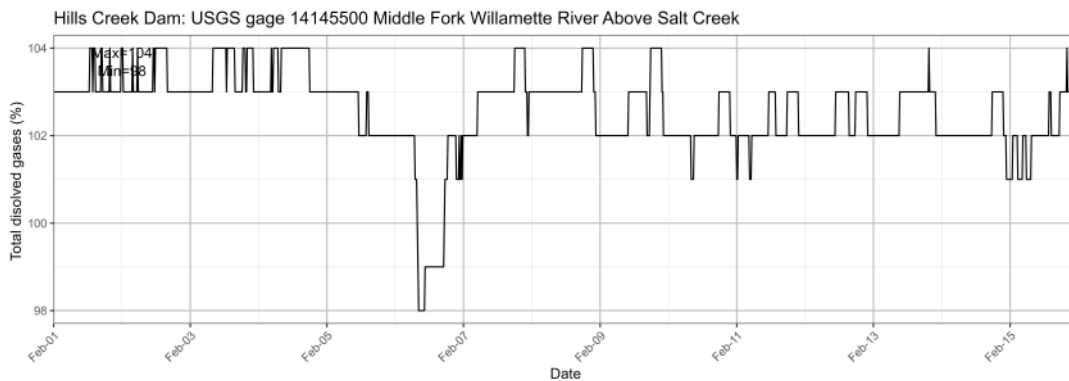
Basic stream statistics at the Hills Creek site were calculated from data downloaded from the U.S. Geological Survey stream gauge numbers 14145110 and 14145500. Gauge height (feet) is the only metric provided at this gage (Figure 71). Total dissolved gas saturation data was received from gauge 14145500, 1.4 rkms downstream of the trap (Figure 72). Stream temperatures were recorded every two hours using temperature probes at the Hills Creek Dam RST's during this reporting period (Figure 73 and Figure 74). Flows through the PH and RO during the reporting period are displayed in Figure 75. Catch per unit of effort (CPUE) data are summarized in Table 74. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 74. Summary of Chinook CPUE, Hills Creek Dam.**

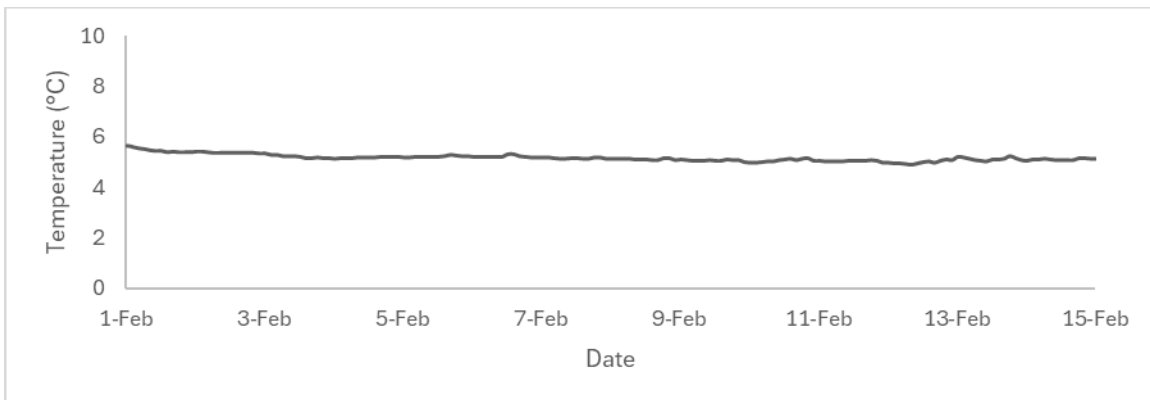
Descriptions	Chinook	
	RO (5 ft)	PH (8 ft)
Catch	0	0
Effort (hrs)	314.7	314.8
CPUE (fish/hr)	0.0	0.0



**Figure 71. Gauge Height (feet); below Hills Creek Dam - Middle Fork Willamette River.**

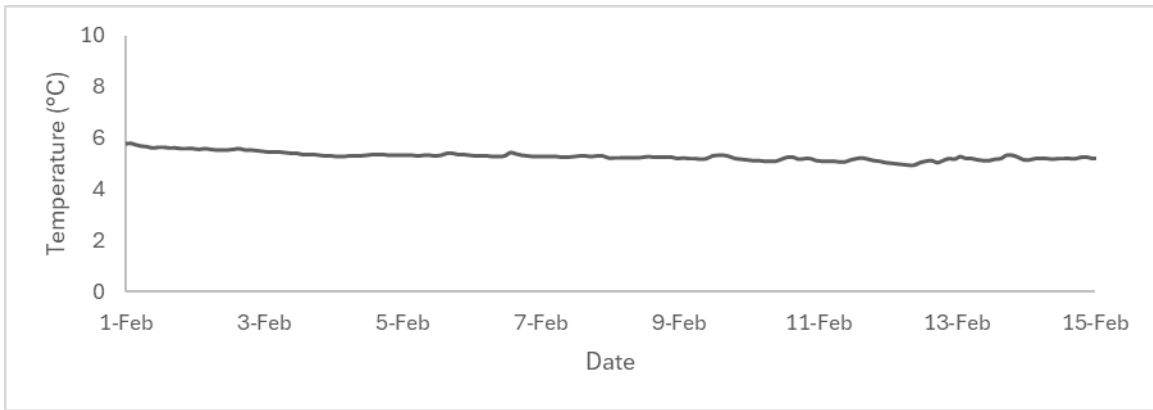


**Figure 72. Total Dissolved Gas Saturation (%); below Hills Creek Dam – Middle Fork Willamette River.**

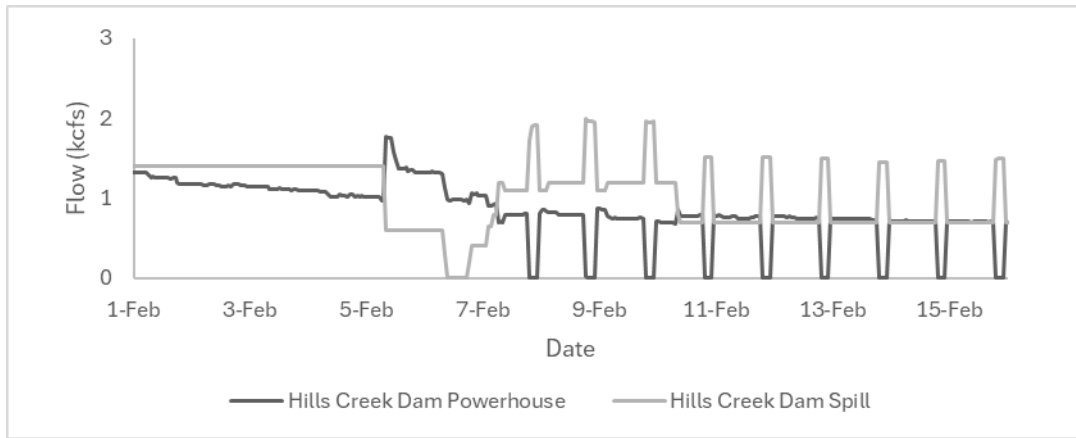


**Figure 73. Temperature at Hills Creek RST PH (Hills Creek Dam).**





**Figure 74. Temperature at Hills Creek RO RST (Hills Creek Dam).**



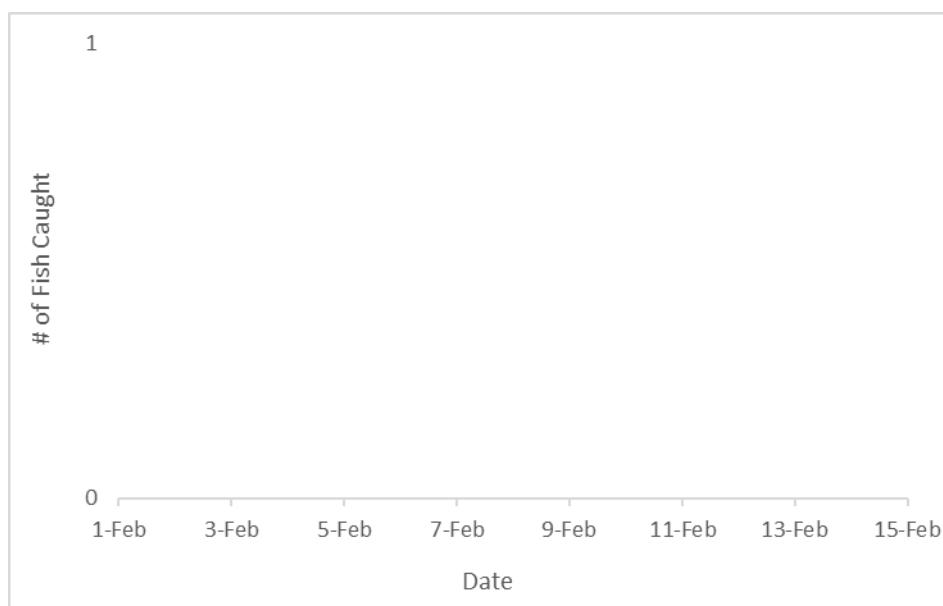
**Figure 75. Hourly Flows PH vs. RO (Hills Creek Dam).**

## Middle Fork Willamette River – Lookout Point Head of Reservoir

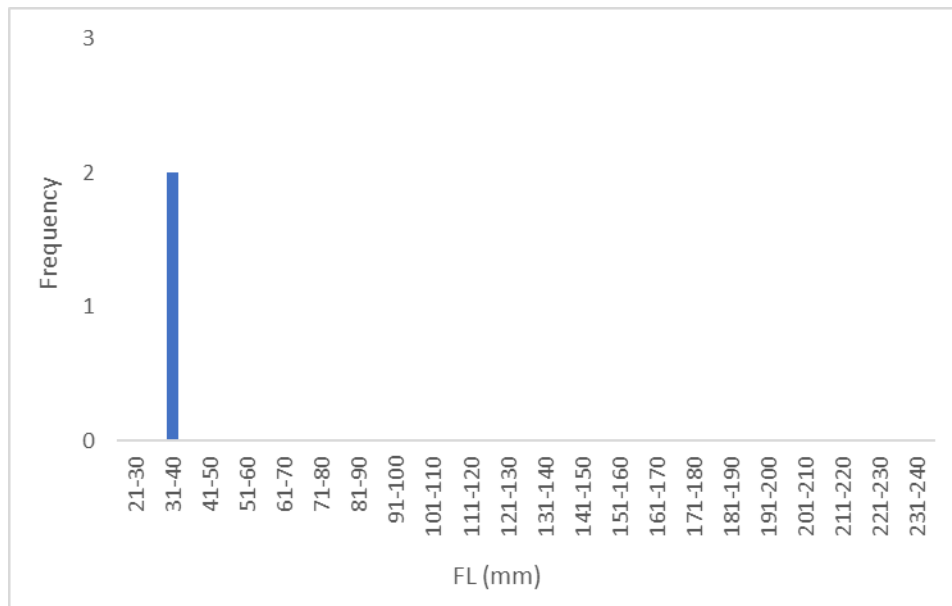
The RST at Lookout Point Head of Reservoir began sampling under contract W9127N19D0009 on December 16, 2023. Sampling at Lookout Point Head of Reservoir prior to December 16, 2023 was conducted by EAS for the USACE under contract W9127N19D0007.

### **Target Species**

For the reporting period, there were 0 Chinook Salmon (CHS) captured (Figure 76). The RST was raised to the non-sampling position from February 1<sup>st</sup> to February 2<sup>nd</sup> due to high flow surpassing safety thresholds. It was raised again from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. The RST was raised again on February 15<sup>th</sup> due to damage to the cone. Sampling duration was 80.0% of the reporting period for the RST. Table 75 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 77 shows length frequency data to-date.



**Figure 76. Chinook Captured Per Day for the Reporting Period (Lookout Point Head of Reservoir).**



**Figure 77. Length Frequency of Juvenile Chinook Sampled in 2025 (Lookout Point Head of Reservoir).**

**Table 75. Descriptive Statistics of Target Species Captured at Lookout Point Head of Reservoir To-Date and for the Reporting Period.**

To-Date (Since Jan. 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Head of Reservoir	5 ft	CHS	Fry	2	36	39	37.5	N/A	N/A	N/A
		CHS	Parr	0	N/A	N/A	N/A	N/A	N/A	N/A
		CHS	Smolt	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Head of Reservoir	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	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**

No hatchery Chinook are available for trapping efficiency trials at the Lookout Point Head of Reservoir RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### **Run of River Trapping Efficiency**

Run of river trapping efficiency trials have been discontinued until daily catch rates increase.

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 76, and target species injuries for the duration of the season are provided in Appendix A.

**Table 76. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Lookout Point Head of Reservoir).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### **Collected DNA and Scale Samples**

Genetics were collected from 0 Chinook captured for the reporting period. Scales were collected from 0 Chinook captured for the reporting period. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

### **PIT Tags**

0 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**

A total of 1 Spring Chinook has been VIE marked with fluorescent elastomer in 2025. VIE tag color is changed every month to distinctly mark groups of fish by capture date. No fish with VIE marks have been detected at downstream RST sites to date. Fish still showing an egg sac are not VIE marked. A summary of VIE marked fish is shown in Table 77.

**Table 77. Summary of VIE Marked Chinook at the Lookout Point Head of Reservoir site.**

Month Tagged	Tag Location	VIE Color	# Tagged	# Recaptured to Date
January 2025	Left Dorsal	Green	1	0

### **Non-Target Species**

7 non-target species were captured during the reporting period; the data is summarized below in Table 78.

**Table 78. Summary of Non-target Species (Lookout Point Head of Reservoir).**

Species	5ft Capture	5ft Mortality	Season Total	Season Total Mortality
Bluegill	0	0	3	2
Chinook (clipped)	0	0	0	0
Crappie	0	0	0	0
Cutthroat Trout	0	0	2	0
Dace	0	0	0	0
Lamprey	0	0	0	0
Largescale Sucker	0	0	0	0
Largemouth Bass	0	0	0	0
Mountain Whitefish	0	0	0	0
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i>	6	0	12	0
<i>O. mykiss</i> (clipped)	0	0	0	0
Redside Shiner	0	0	0	0
Sculpin	1	0	1	0
Smallmouth Bass	0	0	0	0
Spotted Bass	0	0	0	0
Oregon Chub	0	0	0	0



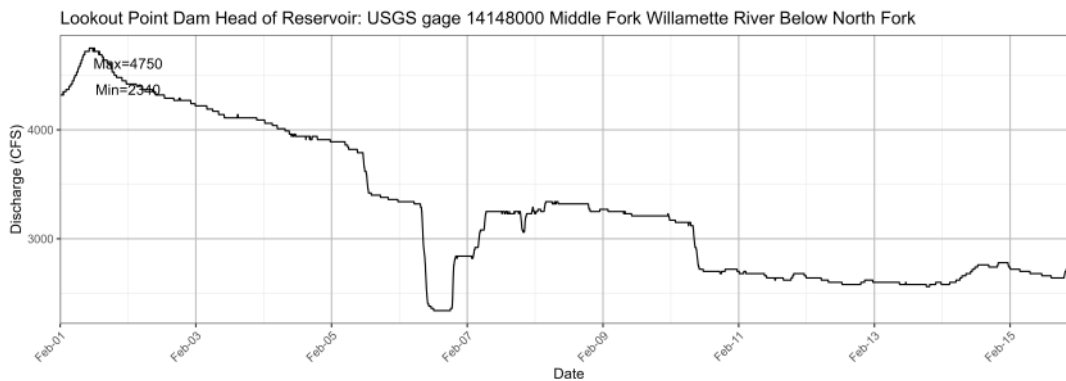
Species	5ft Capture	5ft Mortality	Season Total	Season Total Mortality
Unknown Bass	0	0	0	0
Walleye	0	0	0	0
Unknown	0	0	0	0
<b>Totals</b>	<b>7</b>	<b>0</b>	<b>18</b>	<b>2</b>

### Stream Statistics

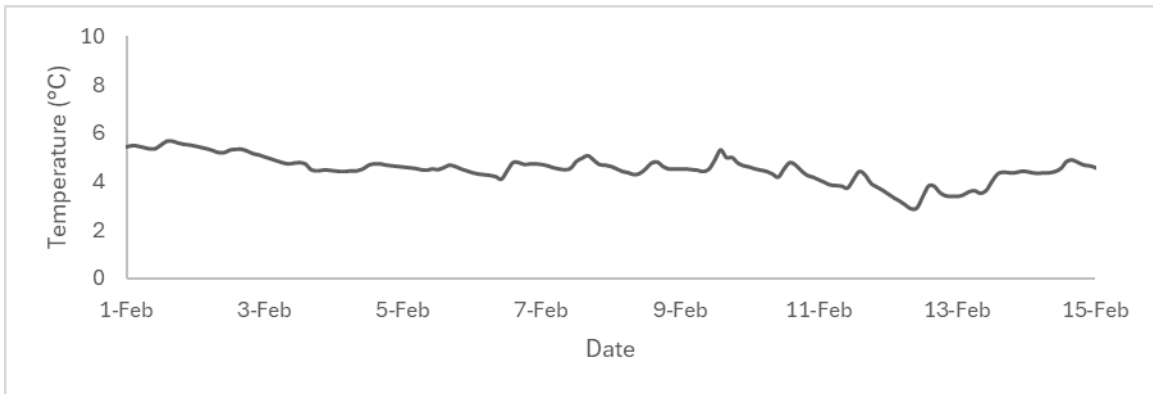
Basic stream statistics for the Lookout Point Head of Reservoir RST site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14148000 (Figure 78). Stream temperatures were recorded every 2 hours using a temperature probe at the Lookout Point Head of Reservoir RST site during this reporting period. The temperature probe at the RST operated normally throughout the reporting period (Figure 79). Flows into Lookout Point Reservoir are displayed in Figure 80. Catch per unit of effort (CPUE) data are summarized in Table 79. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 79. Summary of Chinook CPUE at Lookout Point Head of Reservoir.**

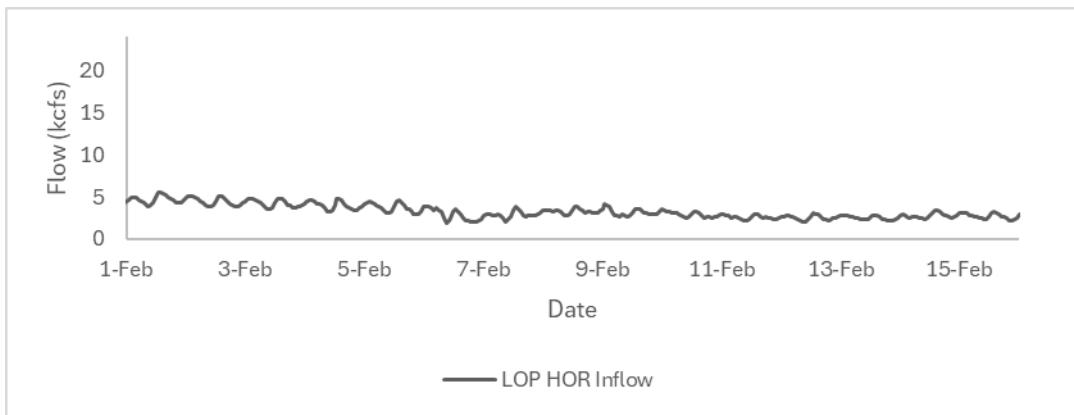
Description	Chinook
Catch	0
Effort (hrs)	287.9
CPUE (fish/hr)	0.0



**Figure 78. Discharge (cfs); above Lookout Point Reservoir, Below Oakridge, OR.**



**Figure 79. Temperature at RST (Lookout Point Head of Reservoir).**



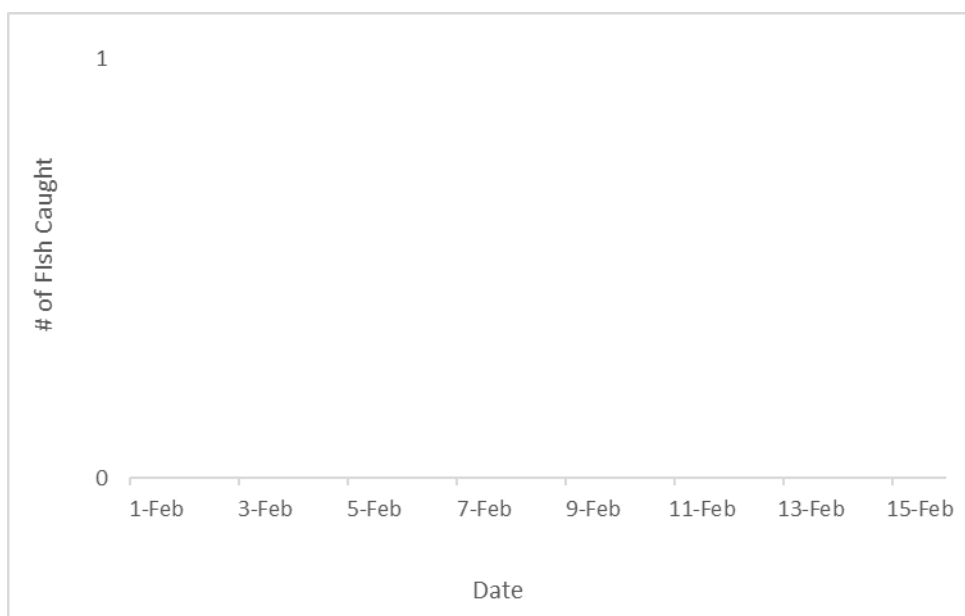
**Figure 80. Hourly Flows (Lookout Point Head of Reservoir site).**

## Middle Fork Willamette River – Lookout Dam Tailrace

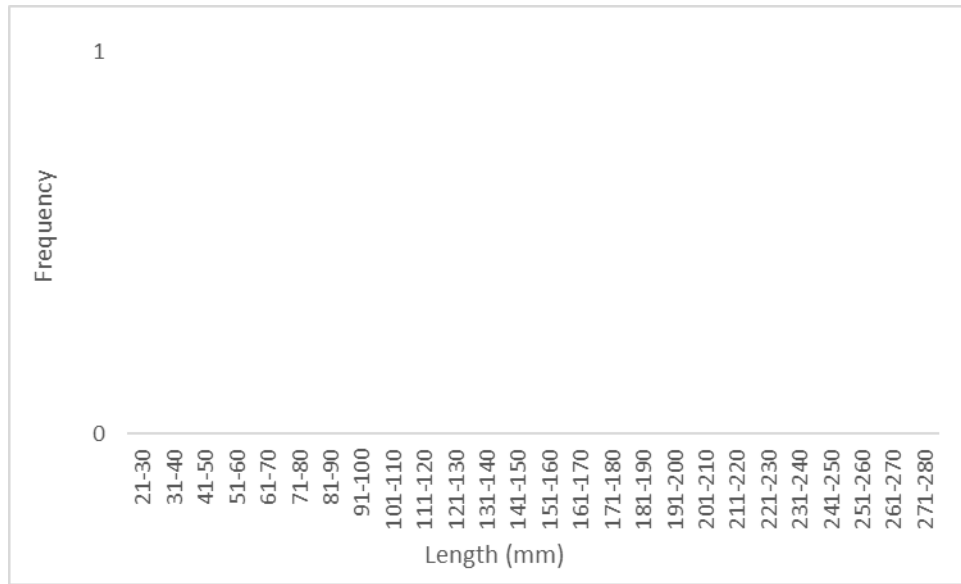
The RSTs in the Lookout Dam Tailrace began sampling under contract W9127N19D0009 on August 1, 2023. Sampling at Lookout Dam Tailrace prior to August 1, 2023 was conducted by EAS for the USACE under contract W9127N19D0007.

### ***Target Species***

For the reporting period, there were a total of 0 Chinook Salmon (CHS) captured (Figure 81). The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 86.7% of the reporting period for the RST. Table 80 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 82 shows length frequency data to-date.



**Figure 81. Chinook Captured Per Day for the Reporting Period (Lookout Point Dam Tailrace).**



**Figure 82. Length Frequency of Juvenile Chinook Sampled in 2025 (Lookout Point Dam Tailrace).**

**Table 80. Descriptive Statistics of Target Species Captured at Lookout Point Dam Tailrace To-Date and for the Reporting Period.**

To-Date (Since Jan. 1, 2025)										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Dam	PH 1	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	0	N/A	N/A	N/A	N/A	N/A	N/A
	PH 2	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	0	N/A	N/A	N/A	N/A	N/A	N/A
	Spill	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	0	N/A	N/A	N/A	N/A	N/A	N/A
Reporting Period										
Site	Route	Species	Life stage	Collected	Length (mm)*			Weight (g)*		
					Min	Max	Mean	Min	Max	Mean
Lookout Point Dam	PH 1	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	0	N/A	N/A	N/A	N/A	N/A	N/A
	PH 2	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	0	N/A	N/A	N/A	N/A	N/A	N/A
	Spill	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	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**

No hatchery Chinook are available for trapping efficiency trials at the Lookout Dam Tailrace RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### **24-Hour Post Collection Holding Trial**

0 Spring Chinook were held from the PH RSTs and 0 were held from the Spill RST. 0 hold fish died from the PH RSTs (0.0%), and 0 hold fish were unable to be located after the 24 hour trial. 0 hold fish died from the Spill RST (0.0%).

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 81 and target species injuries for the duration of the season are provided in Appendix A.

**Table 81. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Lookout Point Dam Tailrace).**

Route	# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
Spill	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PH 1	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PH 2	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### **Collected DNA and Scale Samples**

DNA was collected from 0 Spring Chinook for the reporting period. Scales were collected from 0 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

### **PIT Tags**

0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

No VIE marked Spring Chinook have been marked or detected at this site to date.

### **Non-Target Species**

110 non-target species were captured during the reporting period. The data is summarized below in Table 82.

**Table 82. Summary of Non-target Species (Lookout Point Dam Tailrace).**

Species	PH Capture	PH Mortality	Spill Capture	Spill Mortality	Season Total	Season Total Mortality
Bluegill	1	1	0	0	2	1
Brown Bullhead	0	0	0	0	2	0
Chinook (clipped)	0	0	0	0	1	0
Crappie	96	19	4	1	461	100
Cutthroat	0	0	0	0	1	0
Dace	0	0	0	0	0	0
Largemouth Bass	0	0	0	0	1	1
Mountain Whitefish	0	0	0	0	0	0
Largescale Sucker	0	0	0	0	2	0

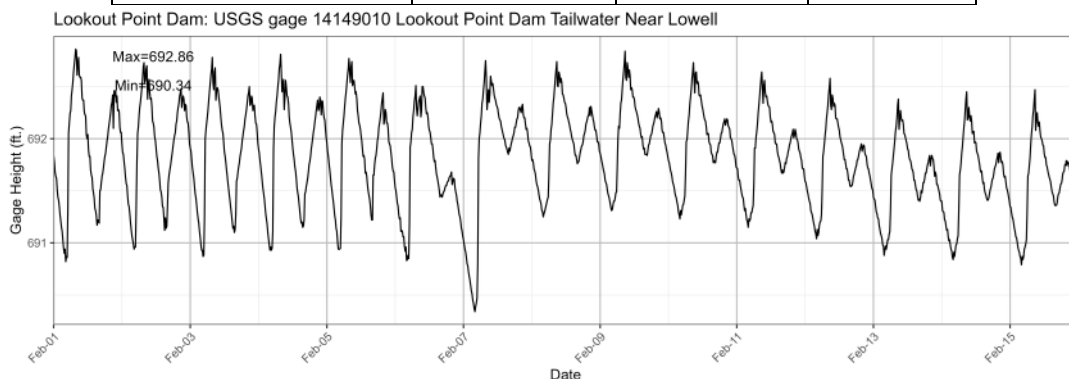
Species	PH Capture	PH Mortality	Spill Capture	Spill Mortality	Season Total	Season Total Mortality
Northern Pikeminnow	0	0	0	0	0	0
<i>O. mykiss</i>	0	0	0	0	1	0
<i>O. mykiss</i> (clipped)	0	0	0	0	0	0
Pumpkinseed	0	0	0	0	0	0
Redside Shiner	0	0	0	0	0	0
Sculpin	0	0	4	0	43	0
Smallmouth Bass	5	0	0	0	93	12
Spotted Bass	0	0	0	0	0	0
Unknown Bass	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Walleye	0	0	0	0	1	0
<b>Totals</b>	<b>102</b>	<b>20</b>	<b>8</b>	<b>1</b>	<b>608</b>	<b>114</b>

### Stream Statistics

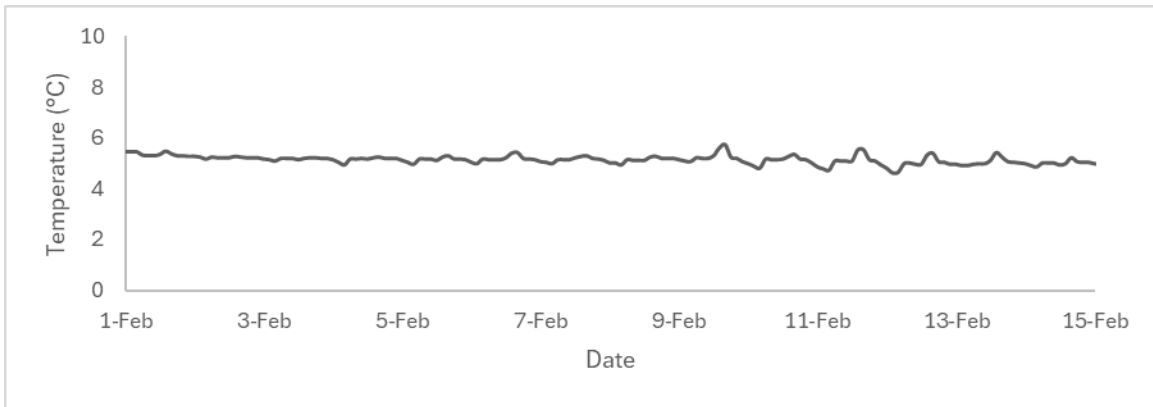
Basic stream statistics at Lookout Dam Tailrace site were calculated from data downloaded from the U.S. Geological Survey stream gauge number 14149010 (Figure 83). Stream temperatures were recorded every 2 hours using temperature probes at the PH and Spill Lookout Dam RST's during this reporting period. Temperature probes operated normally, and the data is shown below in (Figure 84 and Figure 85). Flows through the Powerhouse and Spill during the reporting period are displayed in Figure 86. Catch per unit of effort (CPUE) data are summarized in Table 83. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 83. Summary of Chinook CPUE at Lookout Point Dam Tailrace.**

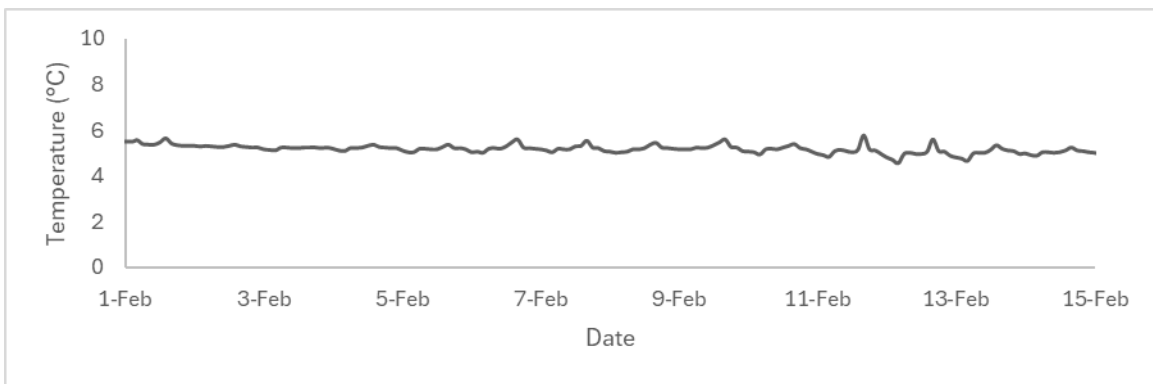
Description	Chinook		
	PH 1	PH 2	Spill
Catch	0	0	0
Effort (hrs)	316.2	316.1	316.3
CPUE (fish/hr)	0.0	0.0	0.0



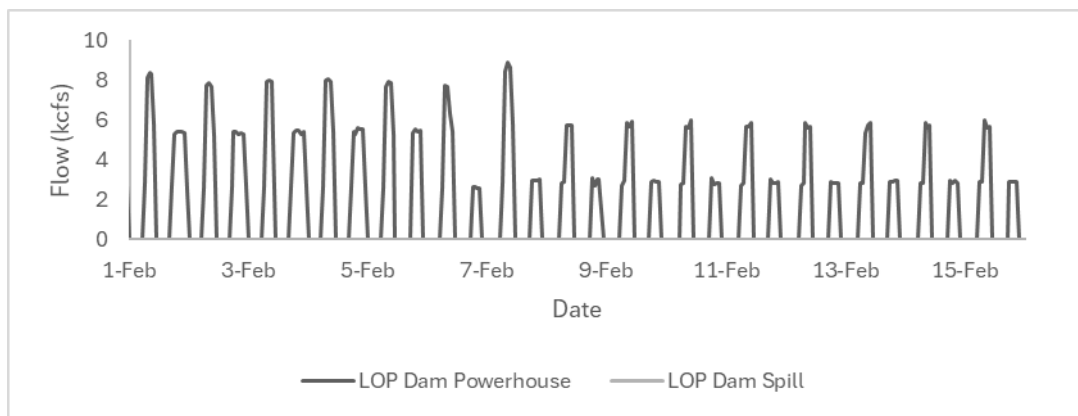
**Figure 83. Gauge Height (feet); below Lookout Dam.**



**Figure 84. Temperature at RST (Lookout Dam PH).**



**Figure 85. Temperature at RST (Lookout Dam Spill).**



**Figure 86. Hourly Flows PH vs. Spill (Lookout Dam Tailrace).**

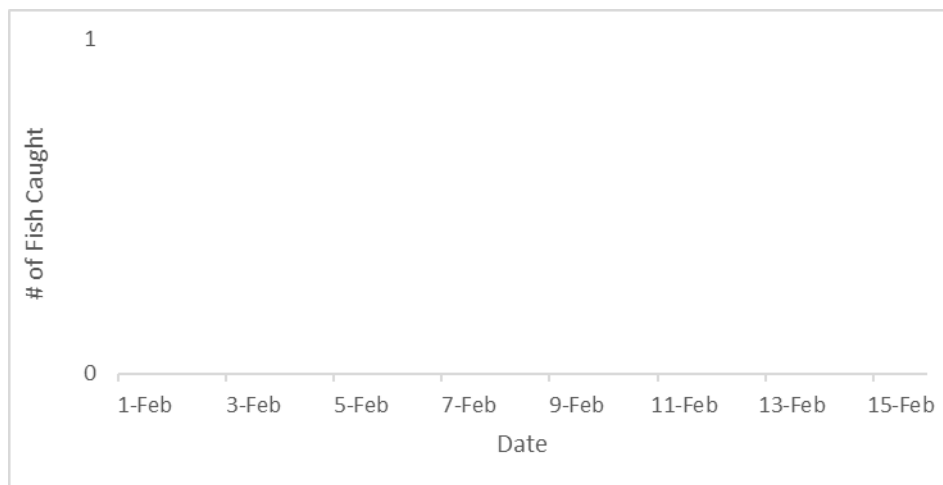
## Middle Fork Willamette River– Dexter Dam Tailrace

The RST in the Dexter Dam Tailrace began sampling under contract W9127N19D0009 on December 16, 2023. Sampling at Dexter Dam Tailrace prior to December 16, 2023, was conducted by EAS for the USACE under contract W9127N19D0007.

On November 7, 2023, the Dexter Dam Tailrace RST was moved to a new sampling site further downstream to allow construction crews to perform work at the Dexter Fish Facility. The trap will be sampled at this location until construction activities at the facility are completed.

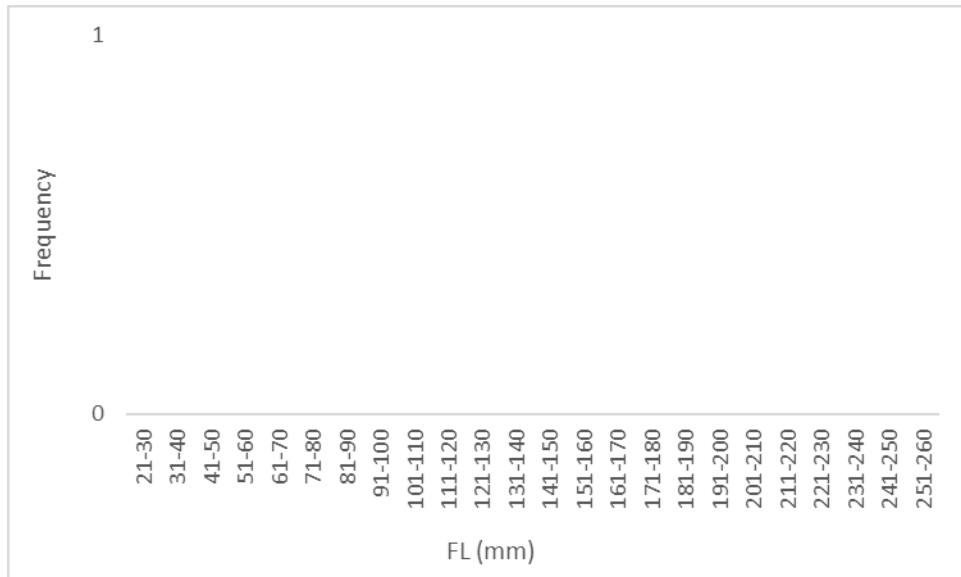
### ***Target Species***

For the reporting period, there were 0 Chinook Salmon (CHS) captured (Figure 87). The RST was raised to the non-sampling position from January 31<sup>st</sup> to February 2<sup>nd</sup> due to an ODFW fish release. The RST was raised to the non-sampling position from February 12<sup>th</sup> to February 14<sup>th</sup> due to an impending ice storm. Sampling duration was 73.3% of the reporting period for the RST. Table 84 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 88 shows length frequency data to-date for Chinook Salmon.



**Figure 87. Chinook Captured Per Day for the Reporting Period (Dexter Dam).**





**Figure 88. Length Frequency of Juvenile Chinook Sampled in 2025 (Dexter Dam).**

**Table 84. Descriptive Statistics of Target Species Captured at the Dexter Dam RST To-Date.**

To-Date (Since Jan. 1, 2025)										
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	0	N/A	N/A	N/A	N/A	N/A	N/A

Reporting Period										
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	0	N/A	N/A	N/A	N/A	N/A	N/A

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

### **Trapping Efficiency**

No hatchery Chinook are available for trapping efficiency trials at the Dexter Dam Tailrace RST site for 2025. Please refer to appendix C for a summary of trapping efficiency trials performed at this site prior to 2025.

### **24-Hour Post Collection Holding Trial**

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

### **Injuries and Copepod Infection**

A summary of injuries observed on Chinook Salmon during the reporting period is provided in Table 85, and target species injuries for the duration of the season are provided in Appendix A.

**Table 85. Number of Descaled, Bodily/Eye Injured, Copepod Infected and Dead Chinook Salmon for Sampling Period (Dexter Dam).**

# CHS Collected	# DSC <20%	# DSC >20%	# with Body Injuries	# with Eye Injuries	# with COP In B.C.	# with COP on Fins	Mortalities	GBD
0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

### **Collected DNA and Scale Samples**

For the reporting period, scales and DNA were collected from 0 Spring Chinook. The other targets captured did not meet length criteria for DNA sampling or were too damaged to remove scales.

### **PIT Tags**

0 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 to not bias the results of the holding study. More information regarding PIT tagged fish can be found in Appendix D.

### **VIE Marking**

No VIE marked Spring Chinook have been detected at this site to date.

### **Non-Target Species**

141 non-target fish were captured during the reporting period. The data is summarized below in Table 86.

**Table 86. Summary of Non-target Species (Dexter Dam).**

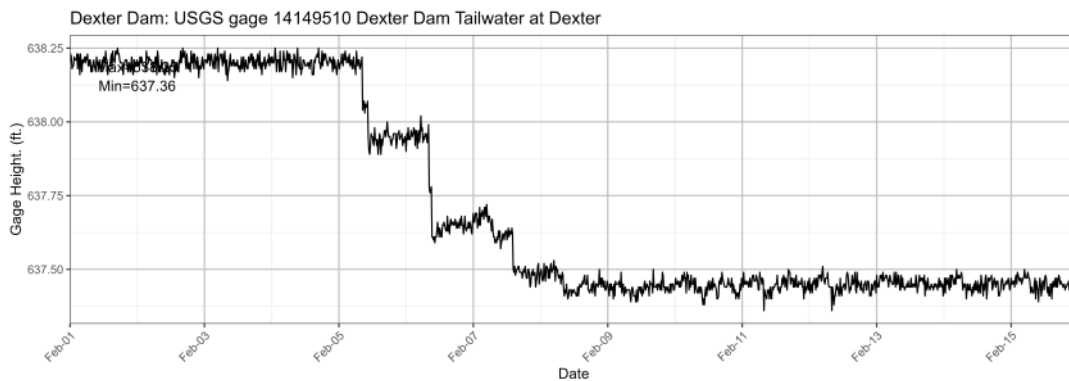
Species	Capture	Mortality	Season Total*	Season Total Mortality
Bass Unknown	0	0	0	0
Bluegill	34	12	93	16
Chinook (adult)	0	0	0	0
Chinook (clipped)	1	0	3	0
Crappie	55	4	671	46
Cutthroat Trout	1	0	1	0
Dace	1	0	1	0
Brown Bullhead Catfish	0	0	0	0
Lamprey	0	0	0	0
Pacific Lamprey	0	0	0	0
Largescale Sucker	0	0	0	0
Largemouth Bass	0	0	0	0
Mountain Whitefish	0	0	0	0
Northern Pikeminnow	0	0	0	0
<i>O. mykiss</i> (clipped)	0	0	3	0
<i>O. mykiss</i>	0	0	1	0
Redside Shiner	0	0	0	0
Sculpin	49	0	68	1
Smallmouth Bass	0	0	0	0
Unknown	0	0	0	0
Unknown Salmonid	0	0	0	0
Walleye	0	0	0	0
<b>Totals</b>	<b>141</b>	<b>16</b>	<b>841</b>	<b>63</b>

## Stream Statistics

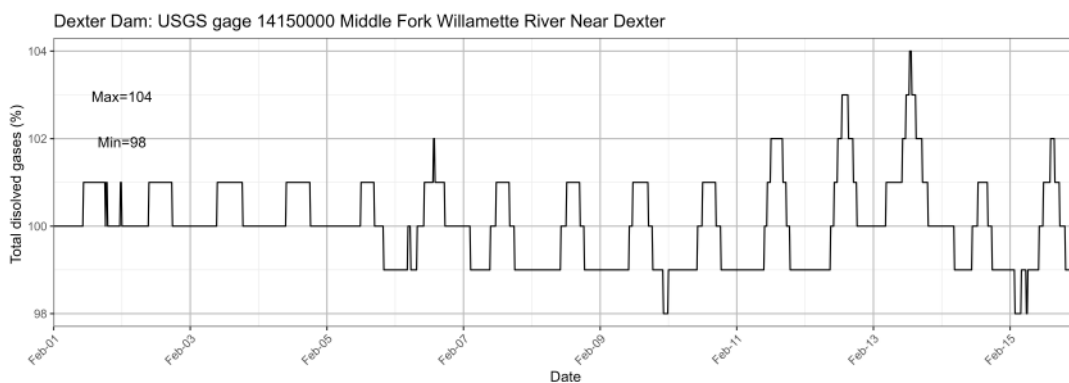
Basic stream statistics at the Dexter Dam site were calculated from data downloaded from the U.S. Geological Survey stream gauge numbers 14149510 and 14150000. Gauge height (feet) is the only metric provided at gage 14149510 (Figure 89). Total dissolved gas saturation data was received from gauge 14150000, 4.75 rkms downstream of the trap (Figure 90). Stream temperatures were recorded every 2 hours using a temperature probe at the Dexter Dam RST site during this reporting period. The temperature logger operated normally throughout the reporting period. Temperature data from the reporting period can be seen in Figure 91. Flows through the Powerhouse and Spill during the reporting period are displayed in Figure 92. Catch per unit of effort (CPUE) data are summarized in Table 87. Discharge and capture data for the duration of monitoring efforts at this location are provided in Appendix B.

**Table 87. Summary of salmonid CPUE, Dexter Dam.**

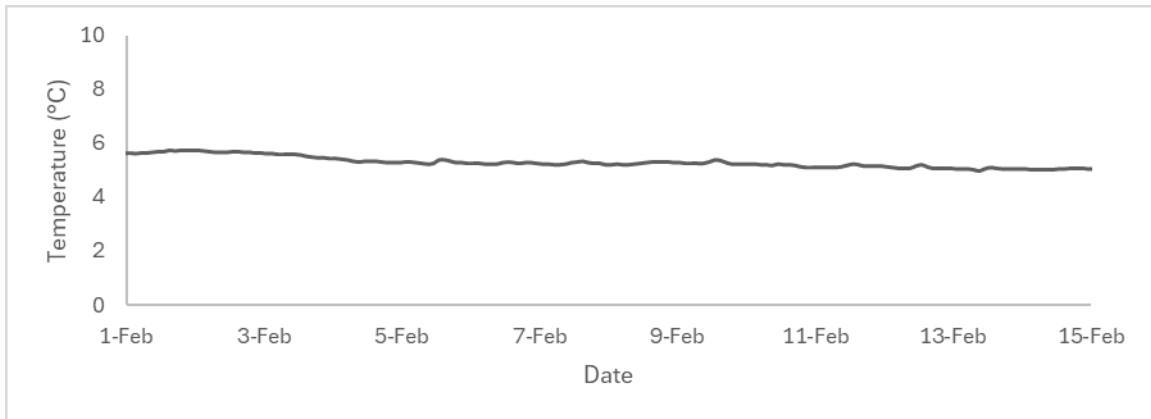
Description	Chinook
Catch	0
Effort (hrs)	266.4
CPUE (fish/hr)	0.0



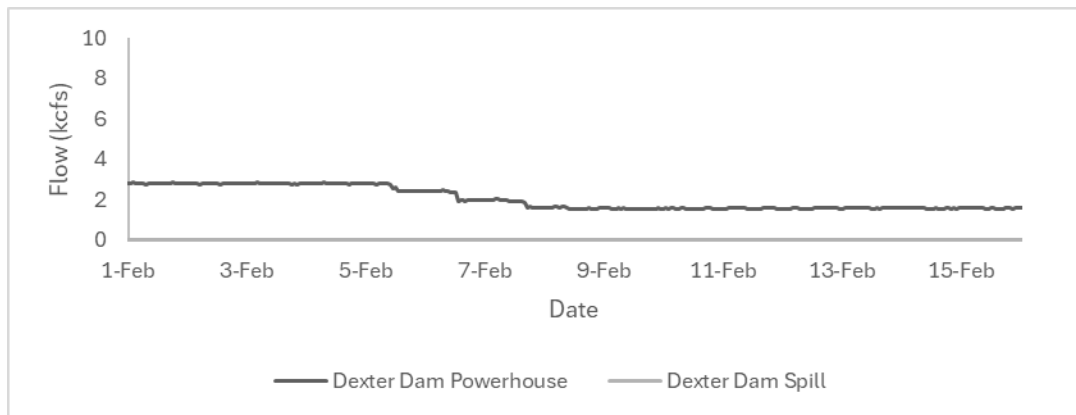
**Figure 89. Gauge Height (feet); below Dexter Dam, Middle Fork Willamette.**



**Figure 90. Total Dissolved Gas Saturation (%); Middle Fork Willamette River, Near Dexter, OR.**



**Figure 91. Temperature at RST (Dexter Dam).**



**Figure 92. Hourly Flows PH vs. Spill (Dexter Dam).**



## Issues Encountered

Site	Date(s) of Trap Outage	Reason for Outage
Dexter Dam Tailrace	1/31/2025-2/2/2025	The RST was raised at the request of ODFW for a fish release.
Lookout Point Head of Reservoir	2/1/2025-2/2/2025	The RST was raised to the non-sampling position due to high flow surpassing safety thresholds.
Cougar Dam Head of Reservoir	2/4/2025-2/5/2025	The RST was raised due to damage to the cone.
Cougar Dam RSTs	2/12/2025-2/14/2025	The RSTs were raised to the non-sampling position due to an impending ice storm.
Lookout Dam Tailrace RSTs	2/12/2025-2/14/2025	The RSTs were raised to the non-sampling position due to an impending ice storm.
Hills Creek Dam RSTs	2/12/2025-2/14/2025	The RSTs were raised to the non-sampling position due to an impending ice storm.
Dexter Dam Tailrace	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Fall Creek Dam Tailrace	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Green Peter Tailrace	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Cougar Dam Head of Reservoir	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Fall Creek Head of Reservoir	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Foster Dam Head of Reservoir- South Santiam River	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Green Peter Head of Reservoir- Middle Santiam River	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Hills Creek Head of Reservoir	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Lookout Point Head of Reservoir	2/12/2025-2/14/2025	The RST was raised to the non-sampling position due to an impending ice storm.
Lookout Point Head of Reservoir	2/15/2025-2/19/2025	The RST was raised to the non-sampling position due to damage to the cone.

## ***Upcoming USACE Support Services***

USACE crane support services are requested in March to install a new RST cone at Big Cliff Dam.

## Appendix A

### Chinook (CHS) To-Date

Chinook Injuries Year to Date (01-01-2025 to 2-15-2025)																							
Site/Trap/Lifestage	#NXI	#MUNK	#DS<2	#DS>2	#COP	#EYB	#OPD	#BLO	#FID	#BVT	#TEA	#FVB	#GBD	#POP	#HIN	#BRU	#HBP	#BO	#HBO	#PRD	#HO	#BKD	#FUN
Big Cliff Dam	2		28	5	23	6	3	1	23	1		1	4		1	1							2
8 ft	2		28	5	23	6	3	1	23	1		1	4		1	1							2
Fry	2					2									1								
Parr			6	2	2	1			4				1										
Smolt			22	3	21	3	3	1	19	1		1	3			1							2
Breitenbush River	84		9						8	1						1				1			
5 ft	84		9						8	1						1				1			
Fry	84		1						2	1						1							
Parr			3						2														
Smolt			5						4											1			
Cougar Dam			11	4	7	4	1		8	1	2	5	1	2	5	1							1
PH 1			3	1	2				1	1					1	2	1						
Smolt			3	1	2				1	1					1	2	1						
PH 2			2	2	1	1			2							2							1
Parr			1						1														1
Smolt			1	2	1	1			1							2							
RO			6	1	4	3	1		5			2	5	1	1	1							
Smolt			6	1	4	3	1		5			2	5	1	1	1							
Cougar Dam HOR	1																						
5 ft	1																						
Fry	1																						
Detroit HOR- North Santiam River	69		11	1					7	1	2			1	2	4			1	1			
5 ft	69		11	1					7	1	2			1	2	4			1	1			
Fry	69		1						1		2				1	3							
Parr			7	1					6	1				1	1	1			1	1			
Smolt			3																				
Fall Creek Dam Tailrace	15											1				1							
8 ft	15											1				1							
Fry	15											1				1							
Fall Creek HOR	4			1					1						1								
8 ft	4			1					1						1								
Fry	4			1					1						1								
Foster Dam HOR- South Santiam River	7																						
5 ft	7																						
Fry	7																						
Green Peter HOR- Middle Santiam River	126		1				1		2			1				3							
5 ft	126		1				1		2			1				3							
Fry	126		1				1		2			1				3							
Green Peter Tailrace - Middle Santiam River	17		3						2	1	1	1			1								
8 ft	17		3						2	1	1	1			1								
Fry	17		1						1	1	1	1			1								
Smolt			2						1														
Hills Creek Dam			1		1		1		1	1						1							
RO			1		1		1		1	1						1							
Smolt			1		1		1		1	1						1							
Lookout Point HOR	1			1					1													1	
5 ft	1			1					1													1	
Fry	1			1					1													1	
Grand Total	326		64	12	31	10	6	1	53	3	4	8	9	2	7	16	1		1	3			3

## Chinook (CHS) During Reporting Period

Chinook Injuries During this Reporting Period (2-1-2025 to 2-15-2025)																							
Site/Trap/Lifestage	#NXI	#MUNK	#DS<2	#DS=2	#COP	#EYB	#OPD	#FID	#BLO	#BVT	#TEA	#FVB	#GBD	#POP	#HIN	#BRU	#HBP	#BO	#HBO	#PRD	#HO	#BKD	#FUN
Big Cliff Dam	1		7	2	8	1	1	8	1	1													1
8 ft	1		7	2	8	1	1	8	1	1													1
Fry	1																						
Smolt			7	2	8	1	1	8	1	1													1
Breitenbush River	84		9					8				1				1				1			
5 ft	84		9					8				1				1				1			
Fry	84		1					2				1				1							
Parr			3					2															
Smolt			5					4												1			
Cougar Dam			2	1	1	1		1				1	2										
RO			2	1	1	1		1				1	2										
Smolt			2	1	1	1		1				1	2										
Cougar Dam Head of Reservoir	1																						
5 ft	1																						
Fry	1																						
Detroit Head of Reservoir- North Santiam River	69		11	1				7				1	2		1	2	4			1	1		
5 ft	69		11	1				7				1	2		1	2	4			1	1		
Fry	69		1					1				2			1	3							
Parr			7	1				6				1			1	1	1			1	1		
Smolt			3																				
Fall Creek Dam Tailrace	4																						
8 ft	4																						
Fry	4																						
Fall Creek Head of Reservoir	4																						
8 ft	4																						
Fry	4																						
Foster Dam Head of Reservoir- South Santiam River	7																						
5 ft	7																						
Fry	7																						
Green Peter Head of Reservoir- Middle Santiam River	126		1				1	2				1				3							
5 ft	126		1				1	2				1				3							
Fry	126		1				1	2				1				3							
Grand Total	296		30	4	9	2	2	26	1	1		2	4	2	1	2	8			1	2		1

## Steelhead (*O. mykiss*) To Date

O. mykiss Injuries Year to Date (01-01-2025 to 2-15-2025)																								
Row Labels		#NXI	#MUNK	#DS<2	#DS>2	#COP	#EYB	#OPD	#FID	#BLO	#BVT	#TEA	#FVB	#GBD	#POP	#HIN	#BRU	#HBP	#BO	#HBO	#PRD	#HO	#BKD	#FUN
Big Cliff Dam				1		2	1		1						1									
8 ft				1		2	1		1						1									
Parr						1			1															
Smolt				1		1	1								1									
Breitenbush River		2																						
5 ft		2																						
Parr		2																						
Foster Dam Head of Reservoir- South Santiam River		1																						
5 ft		1																						
Parr		1																						
Grand Total		3		1		2	1		1						1									

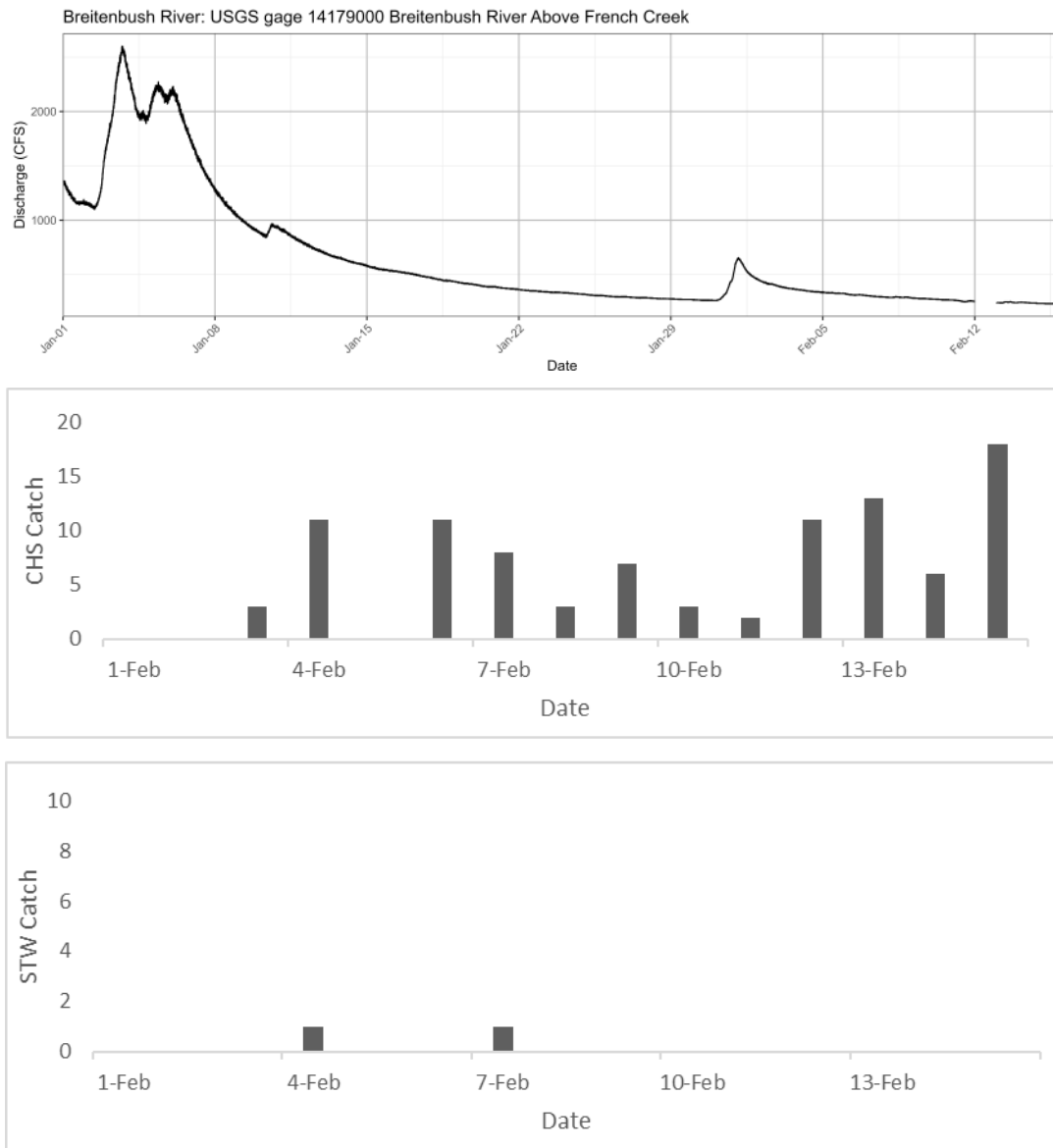
## Steelhead (*O. mykiss*) During Reporting Period

O. mykiss Injuries During this Reporting Period (2-1-2025 to 2-15-2025)																							
Site/Trap/Lifestage	#NXI	#MUNK	#DS<2	#DS>2	#COP	#EYB	#OPD	#FID	#BLO	#BVT	#TEA	#FVB	#GBD	#POP	#HIN	#BRU	#HBP	#BO	#HBO	#PRD	#HO	#BKD	#FUN
Big Cliff Dam			1		2	1		1						1									
8 ft			1		2	1		1						1									
Parr						1		1															
Smolt			1		1	1								1									
Breitenbush River	2																						
5 ft	2																						
Parr	2																						
Foster Dam Head of Reservoir- South																							
Santiam River	1																						
5 ft	1																						
Parr	1																						
Grand Total	3		1		2	1		1						1									

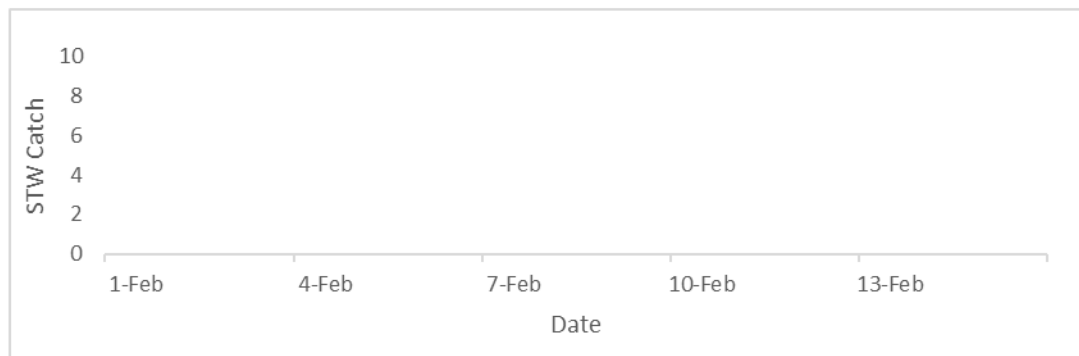
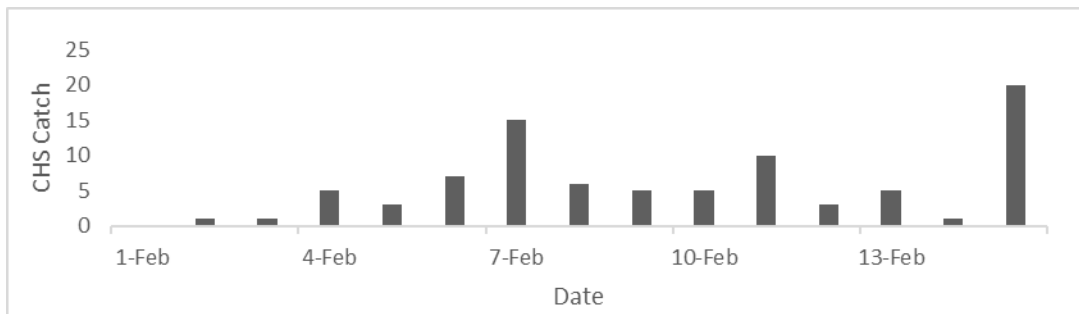
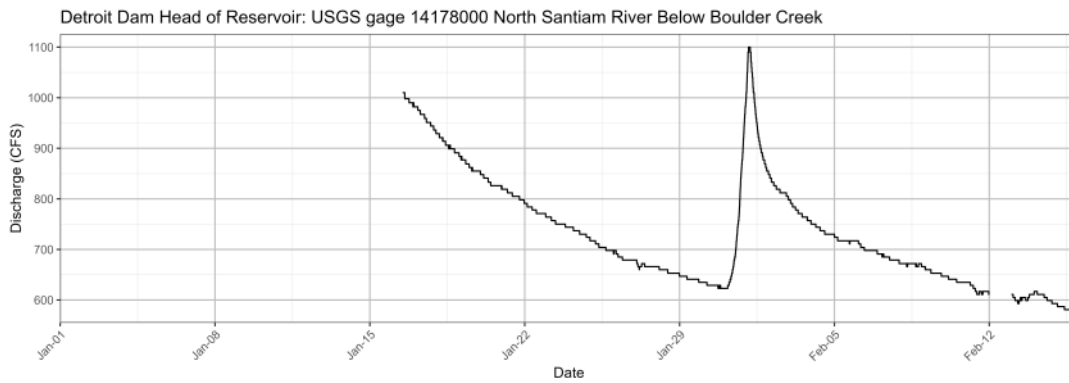


## Appendix B

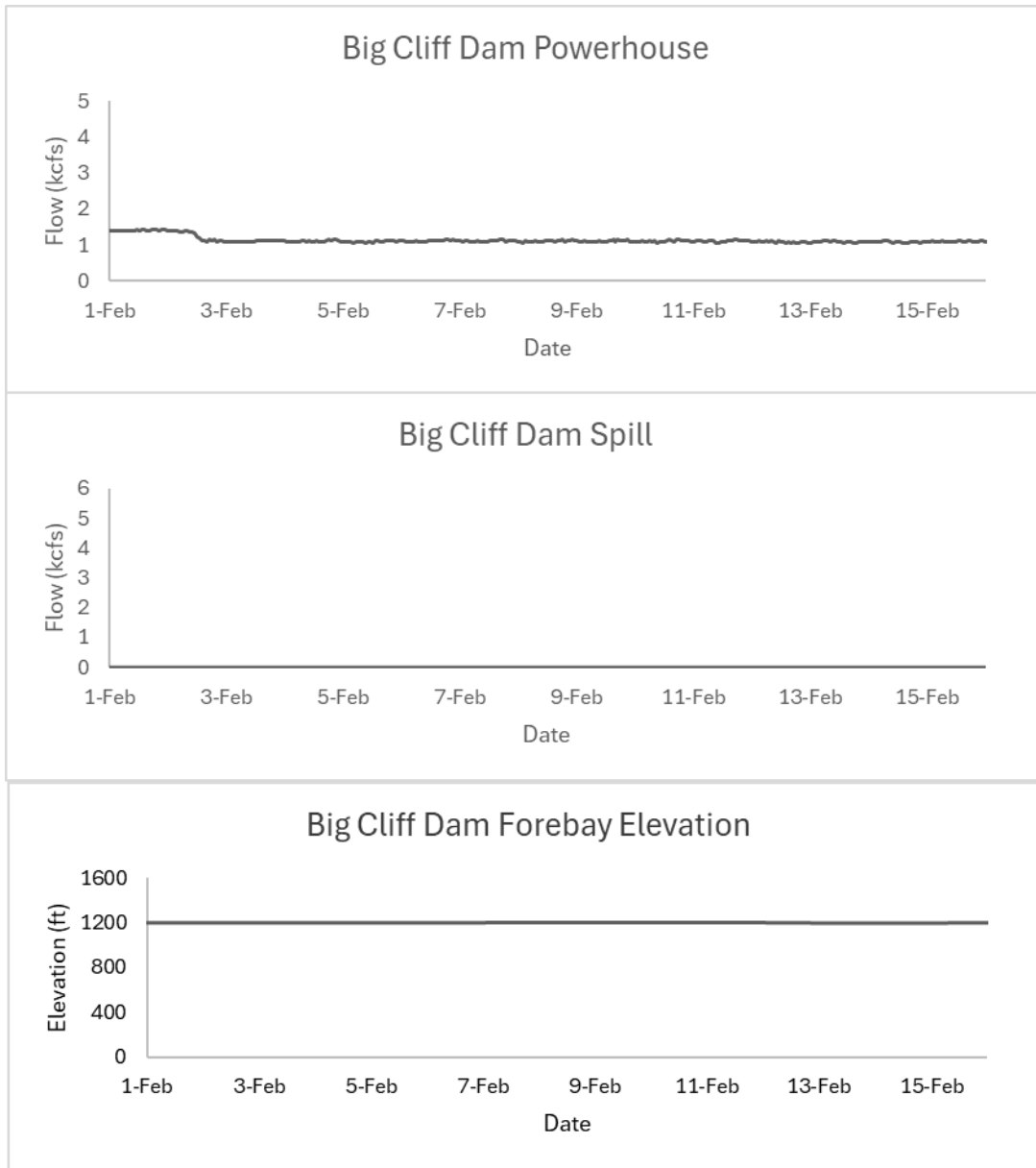
### Breitenbush River Flow and Capture Data in 2025

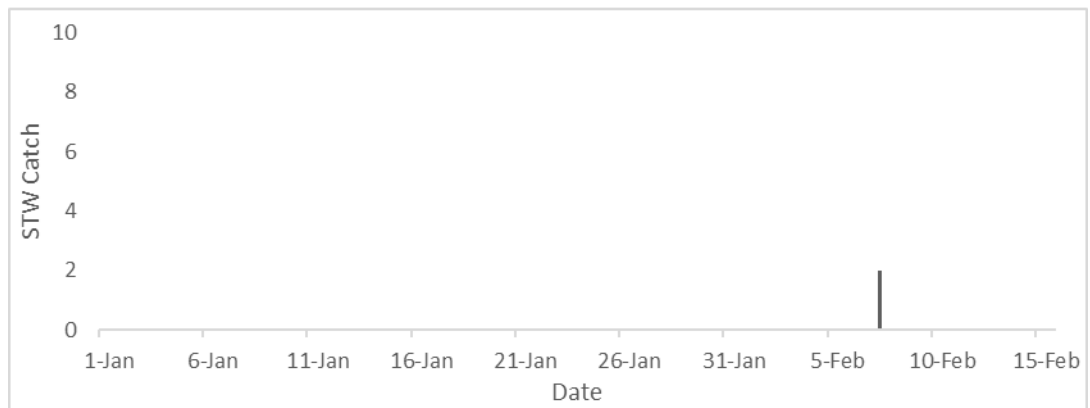
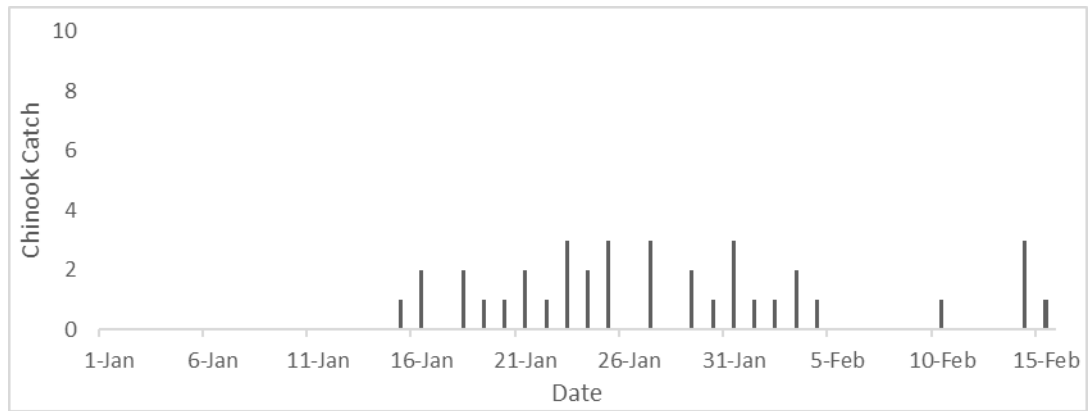


## Detroit Head of Reservoir- North Santiam Flow and Capture Data in 2025



### Big Cliff Dam Tailrace Operational and Capture Data in 2025

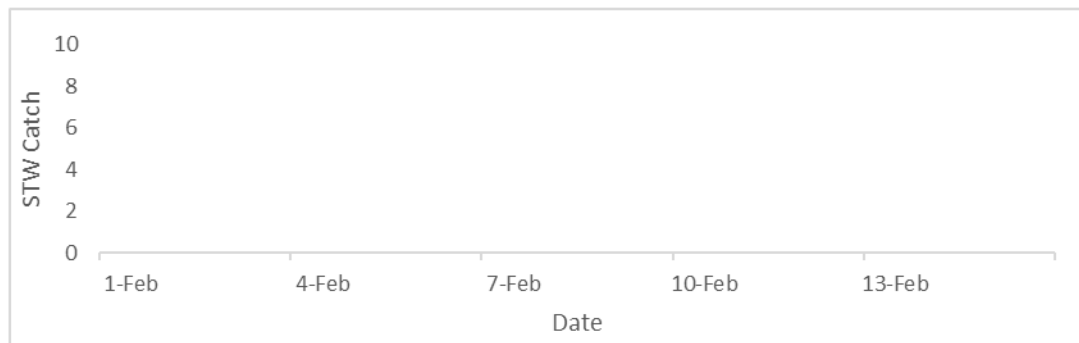
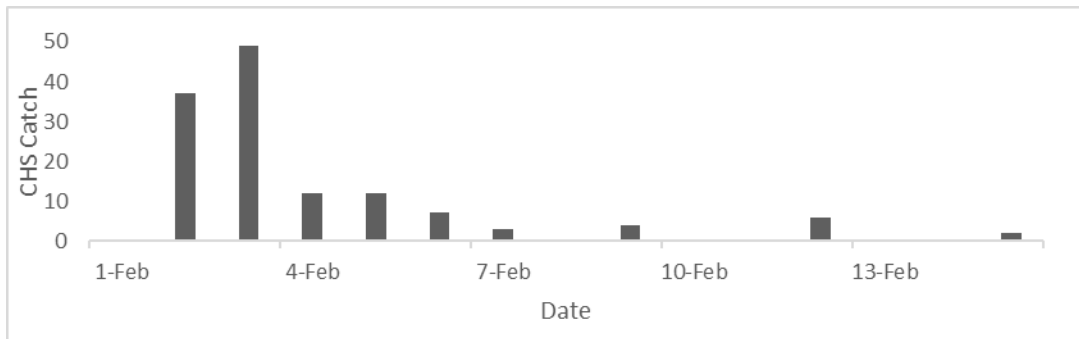
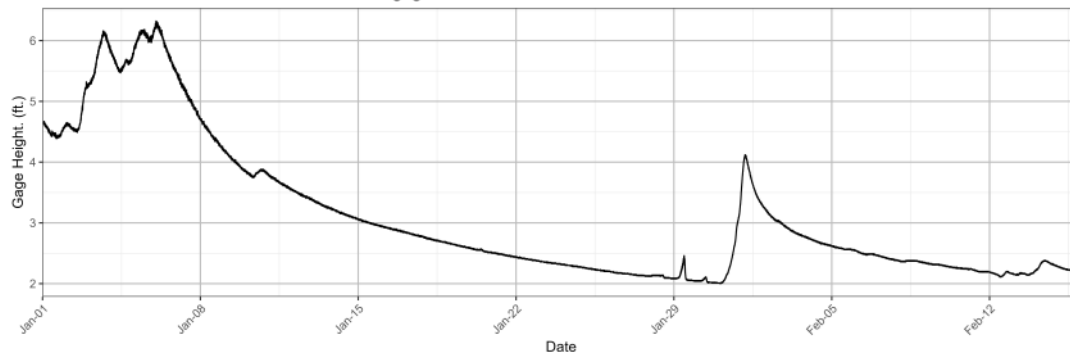




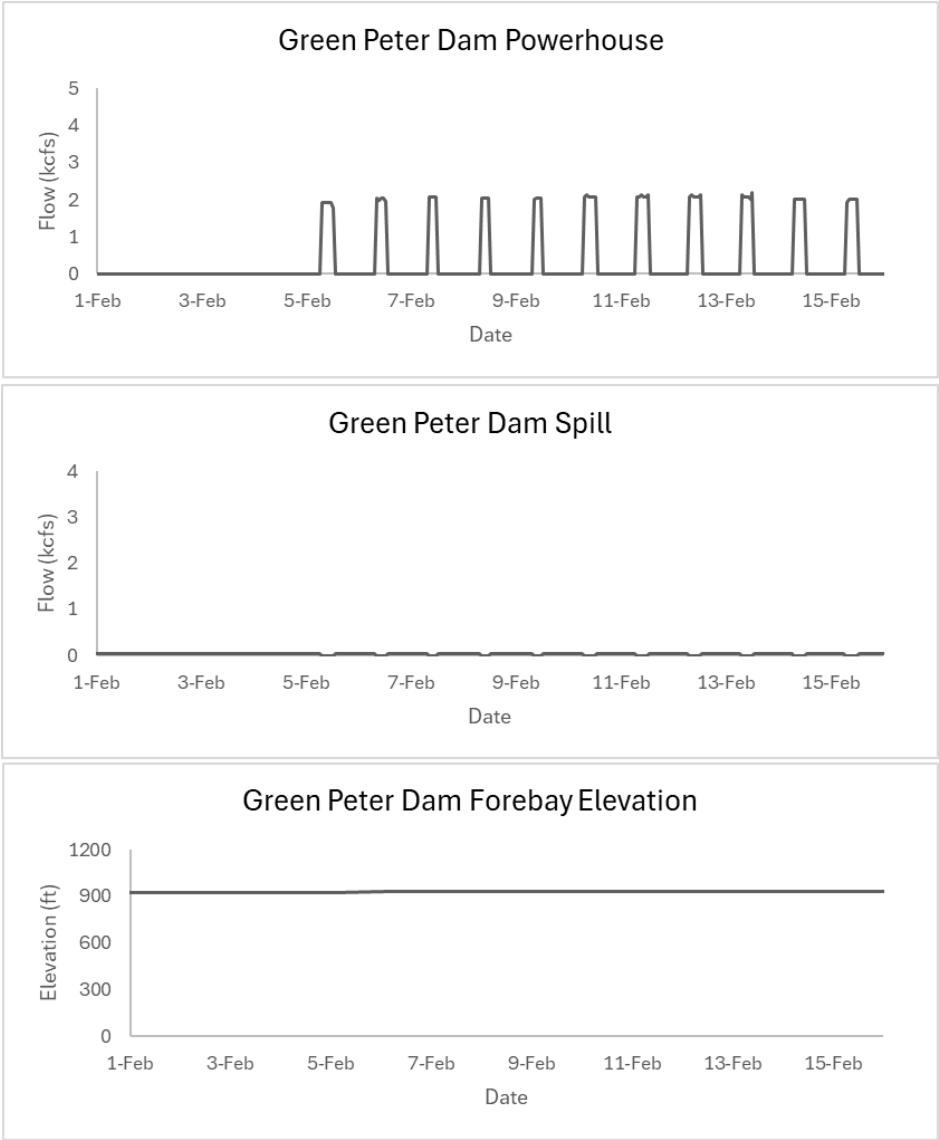


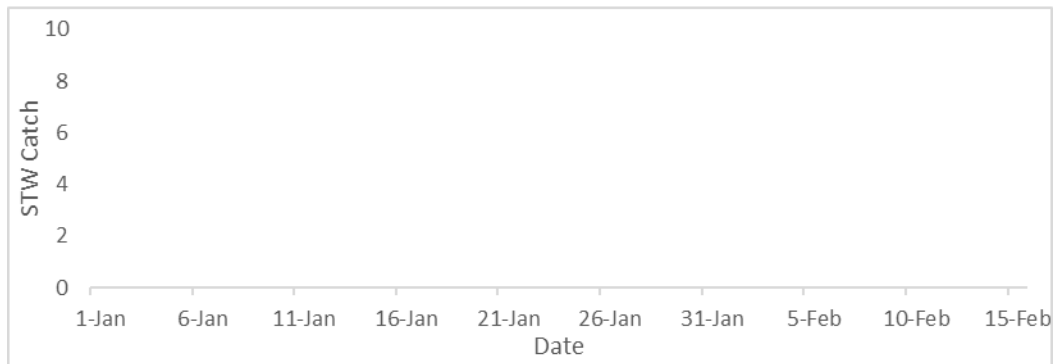
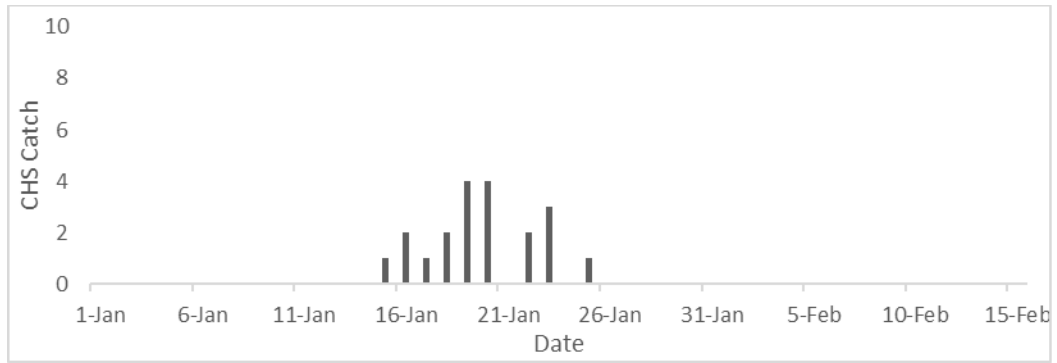
## Green Peter Head of Reservoir-Middle Santiam Flow and Capture Data in 2025

Green Peter Dam Head of Reservoir: USGS gage 14185800 Middle Santiam river Near Cascadia

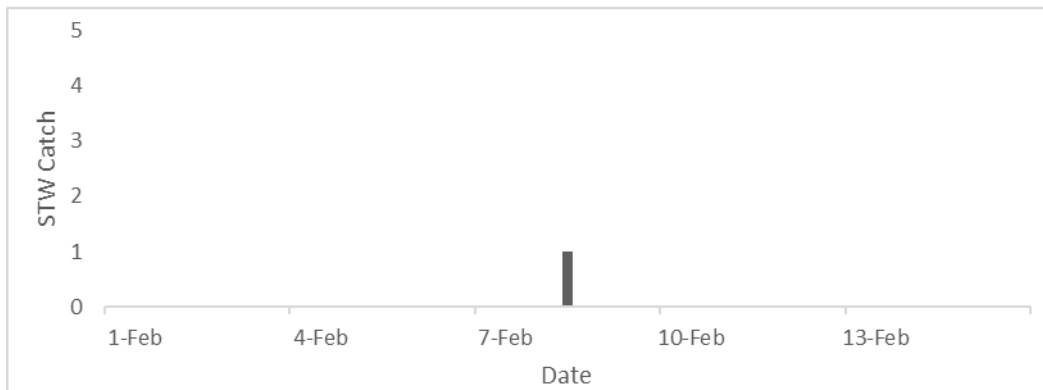
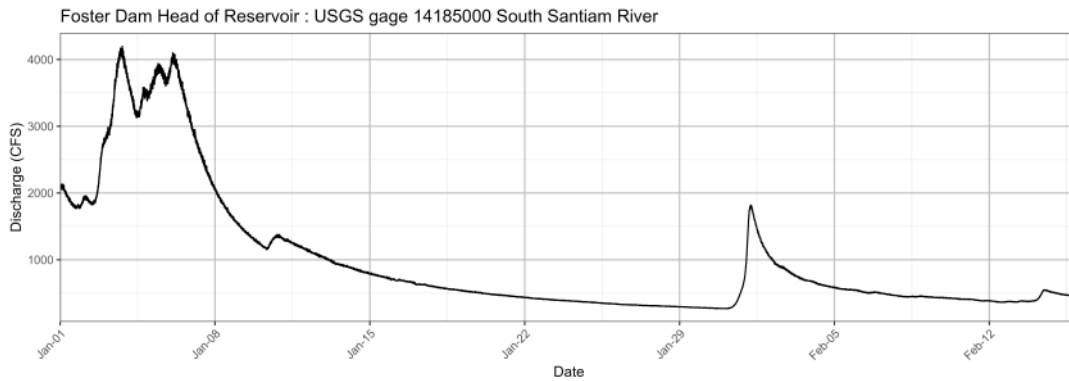


Green Peter Dam Tailrace Operational and Capture Data in 2025



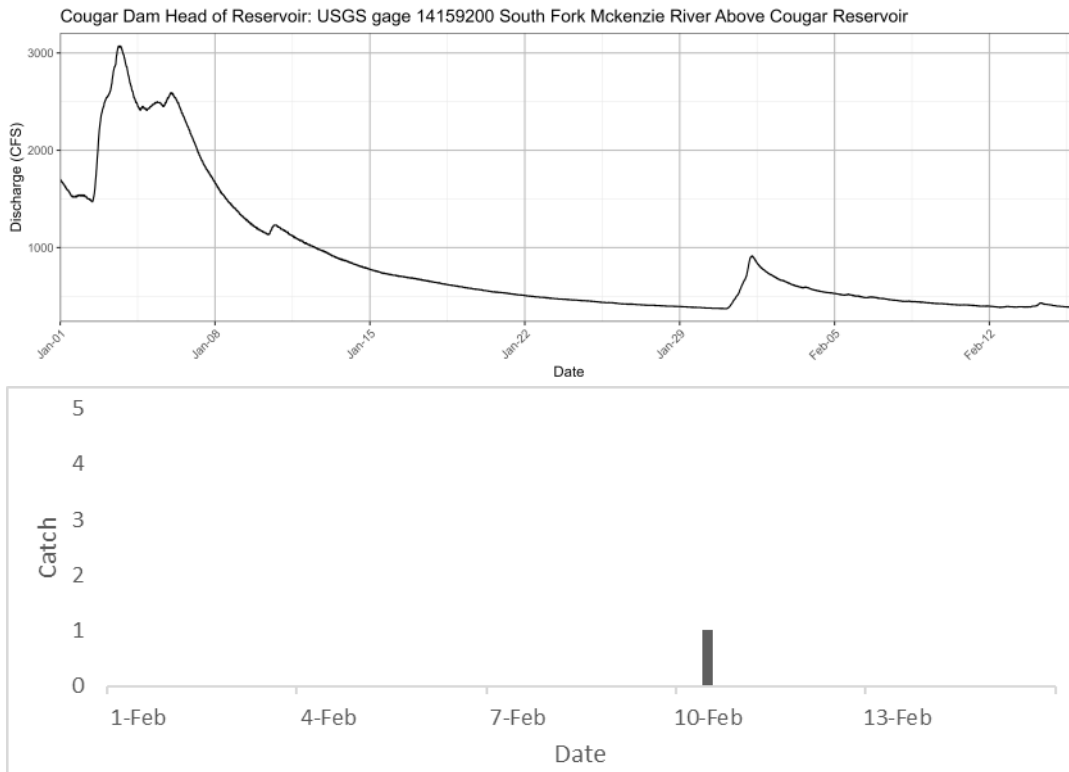


## Foster Dam Head of Reservoir- South Santiam Flow and Capture Data in 2025

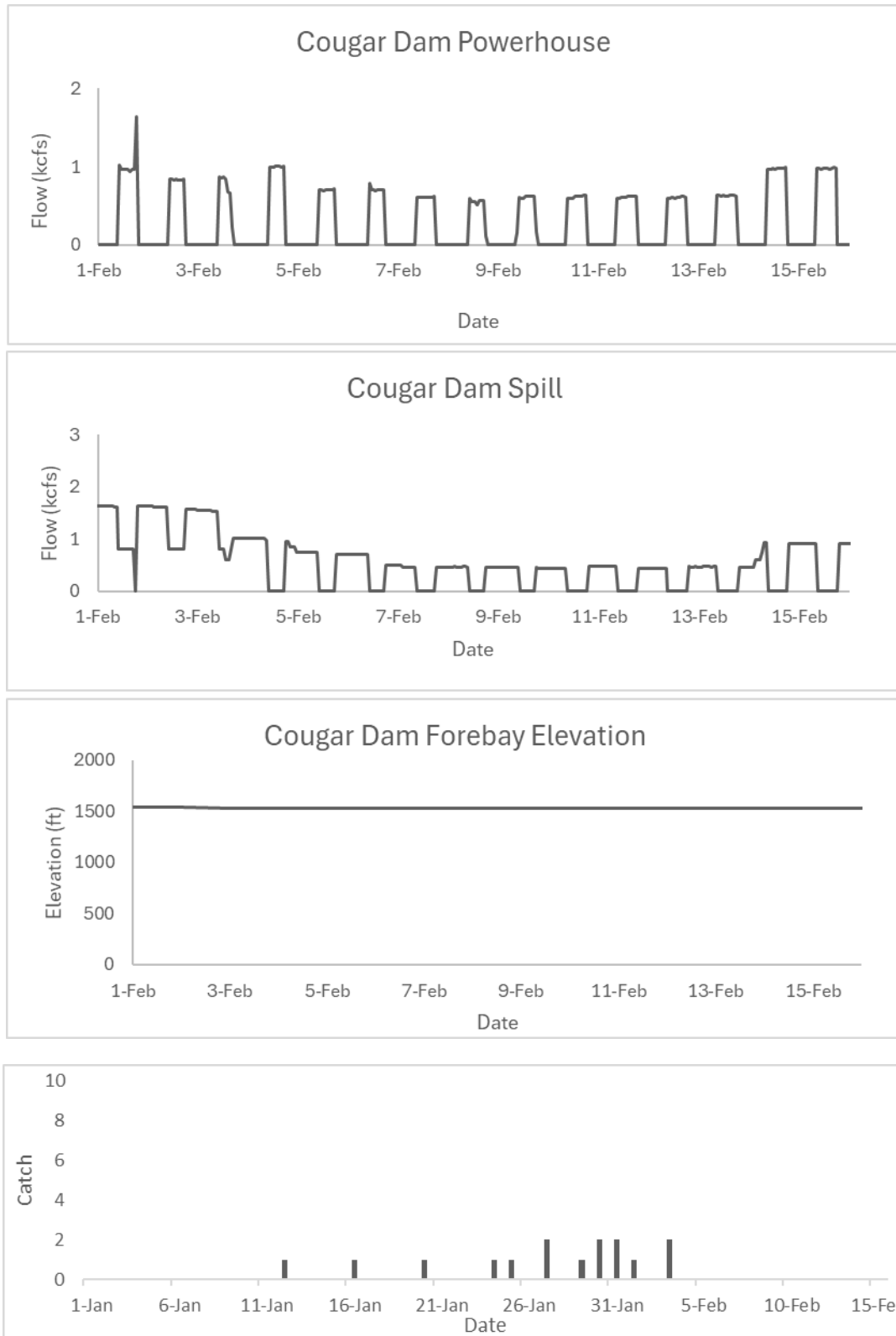




## Cougar Head of Reservoir Flow and Capture Data in 2025

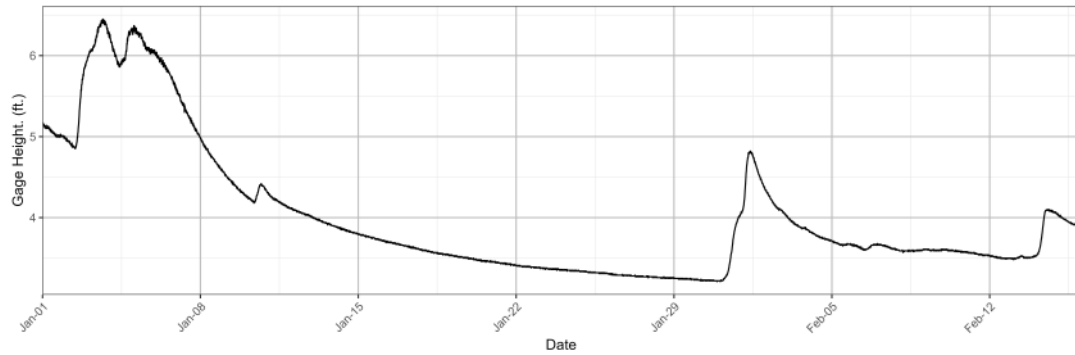


### Cougar Dam Tailrace Operational and Capture Data in 2025

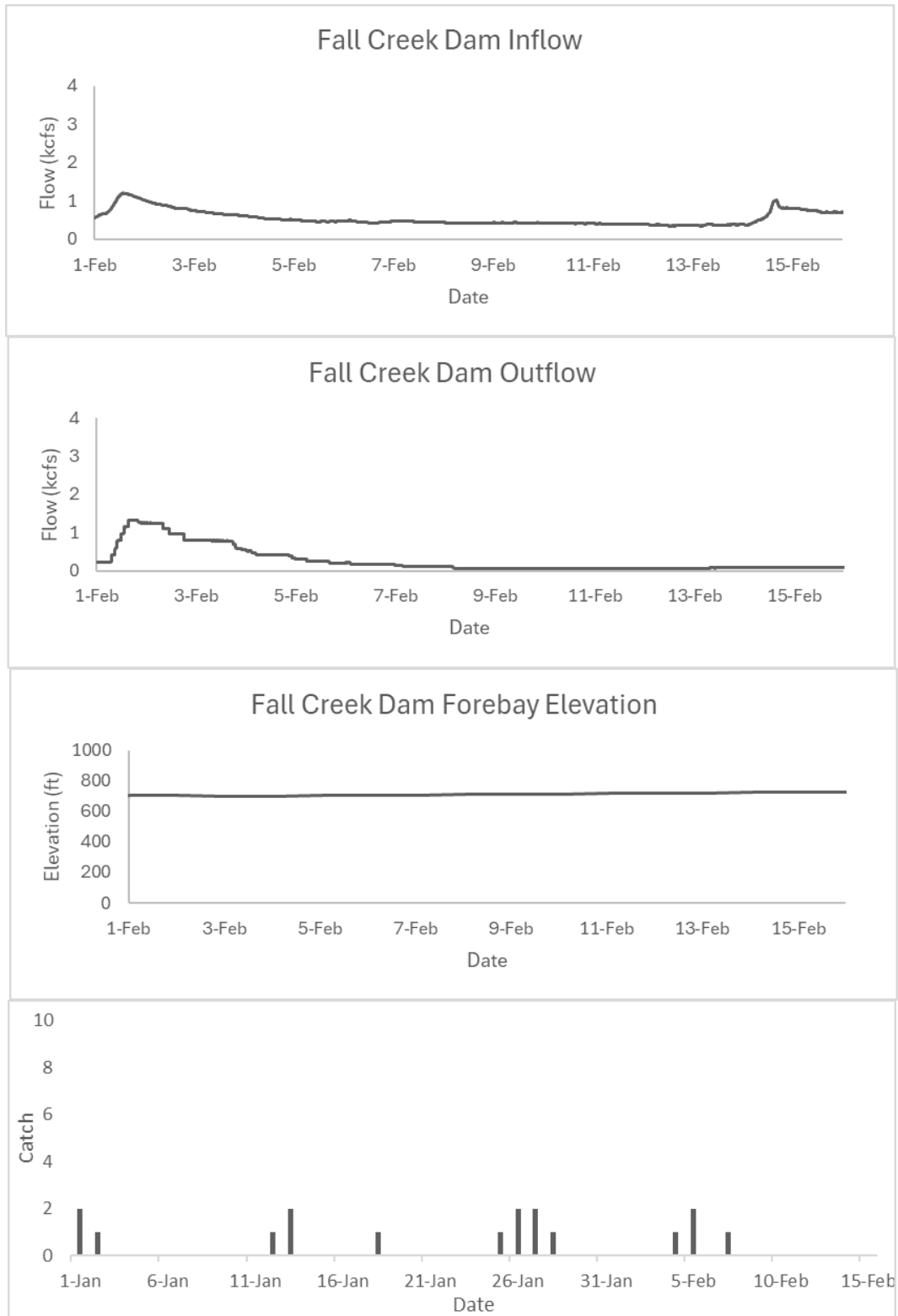


## Fall Creek Head of Reservoir Flow and Capture Data in 2025

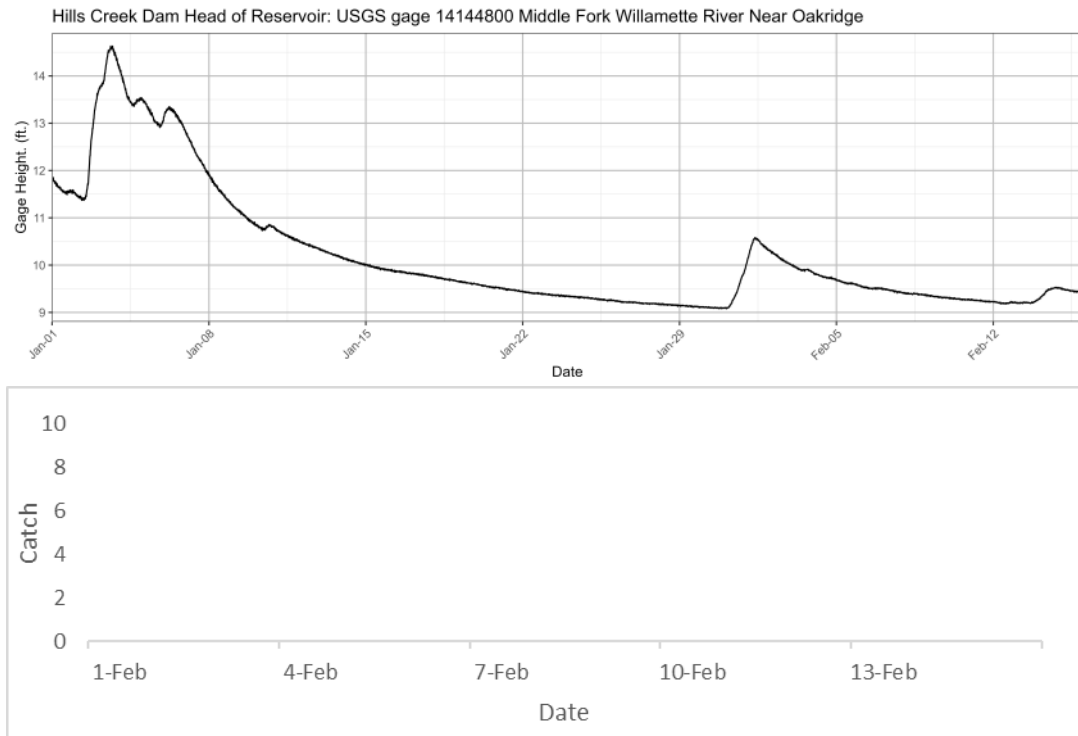
Fall Creek Dam Head of Reservoir: USGS gage 14150290 Fall Creek Above North Fork



### Fall Creek Dam Tailrace Operational and Capture Data in 2025

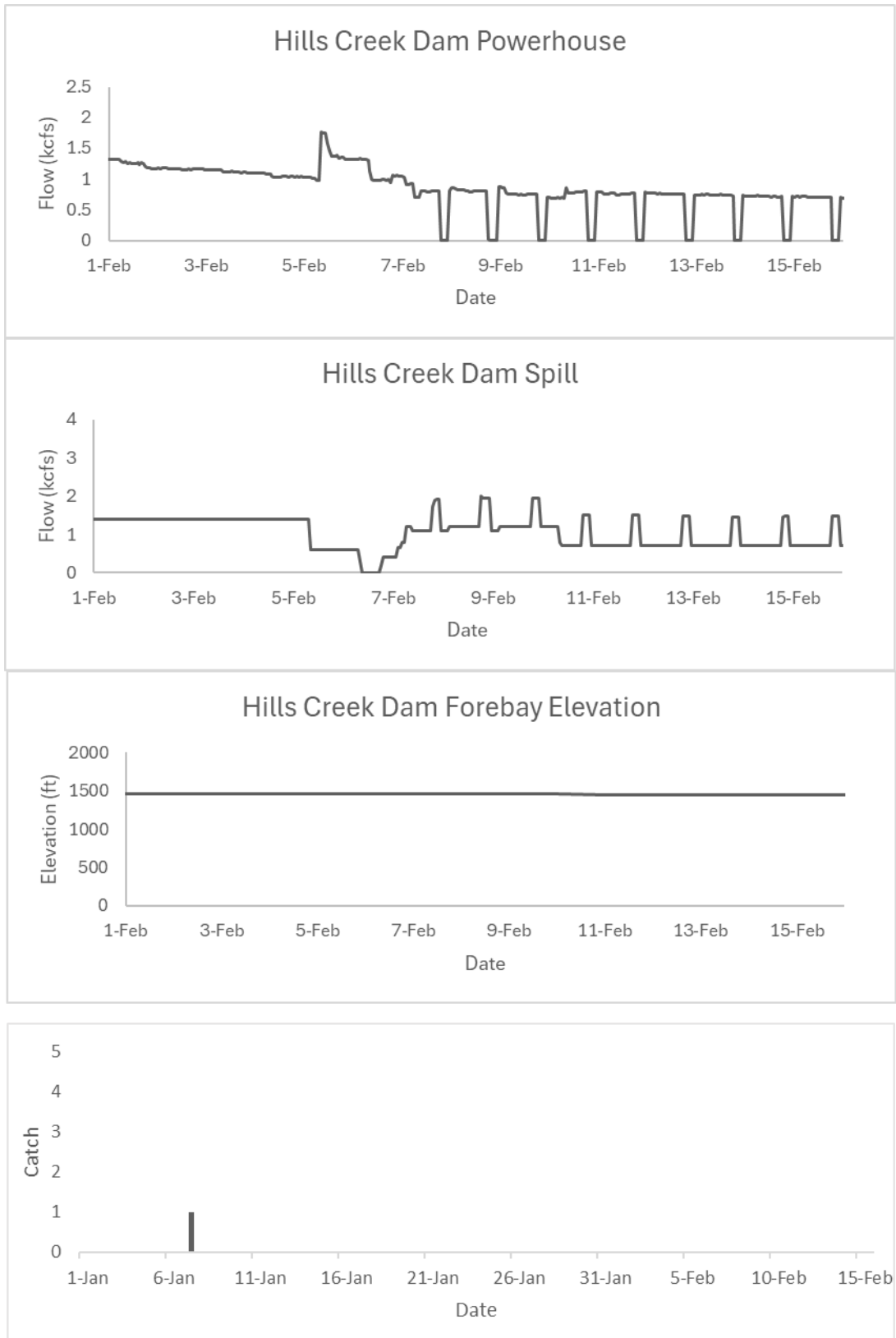


## Hills Creek Head of Reservoir-Middle Fork Willamette River Flow and Capture in 2025

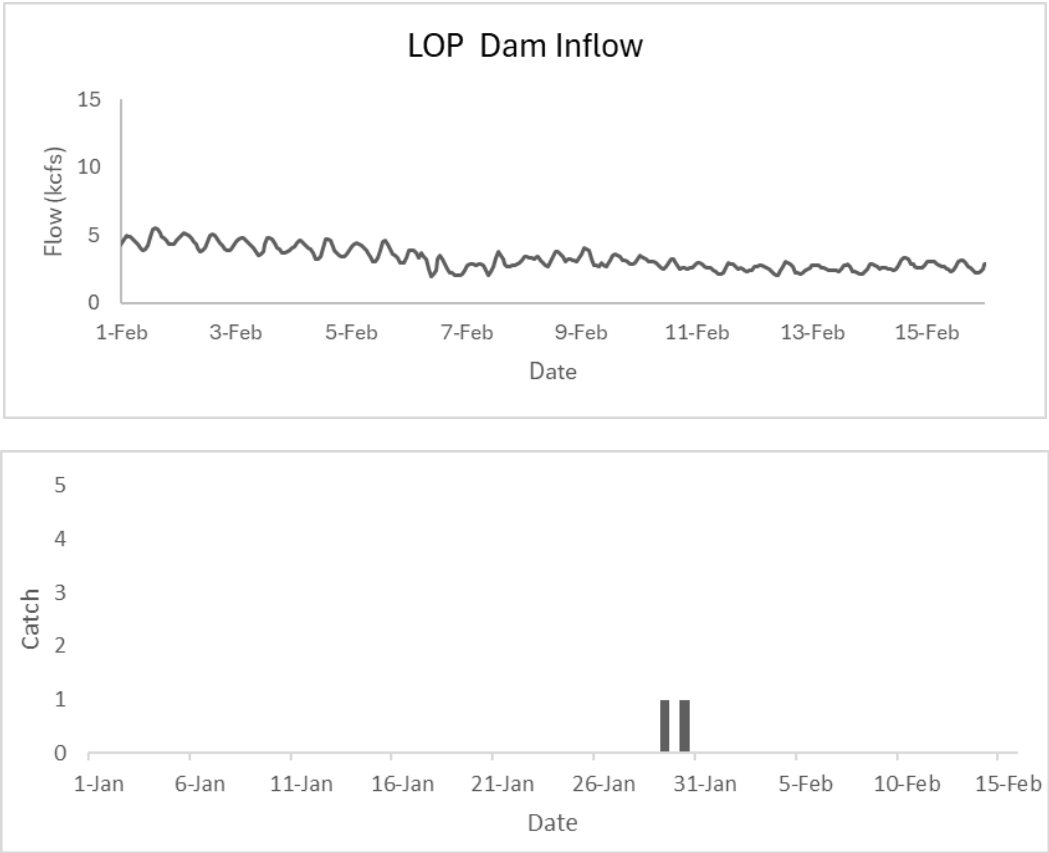




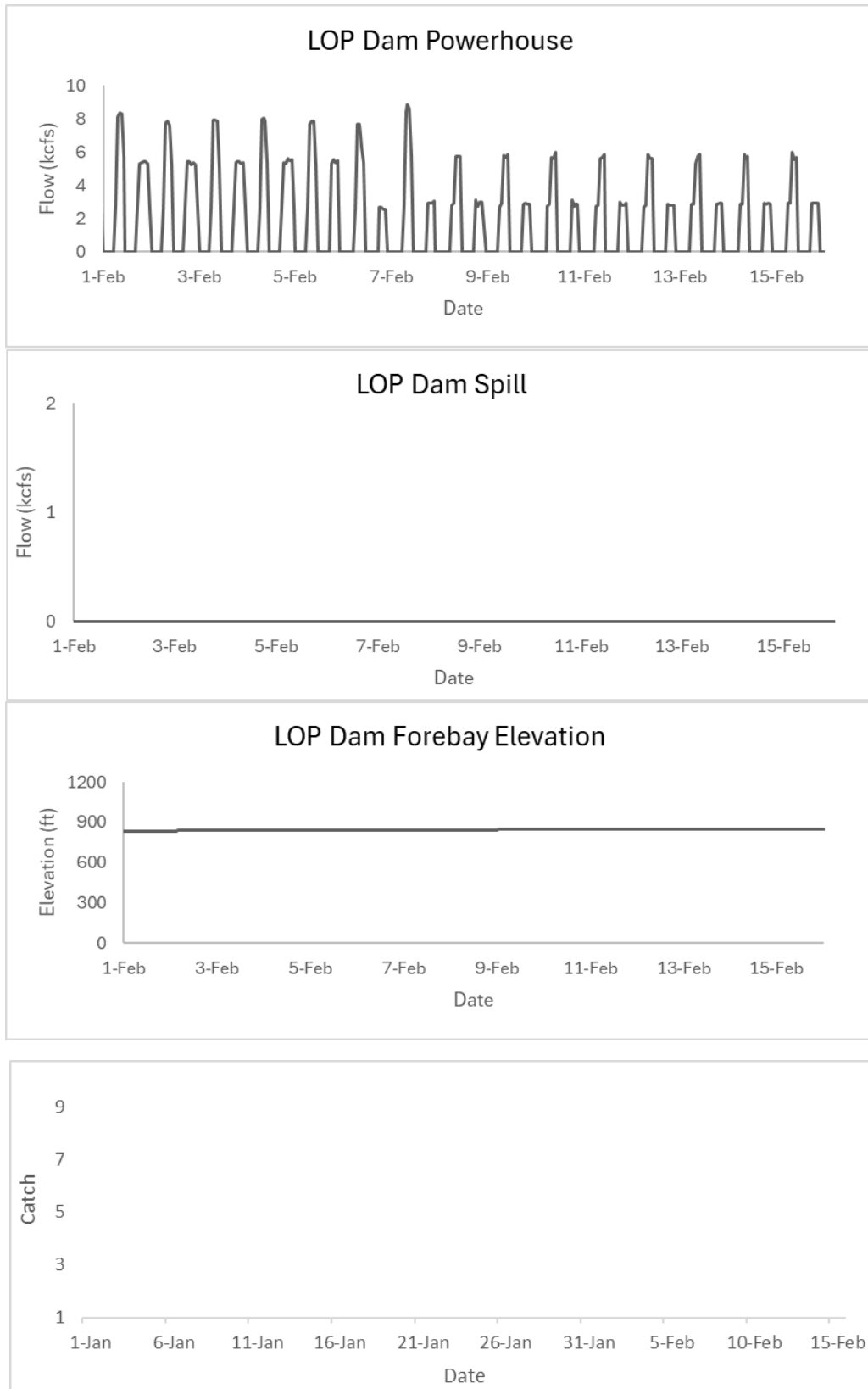
### Hills Creek Dam Operational and Capture Data in 2025



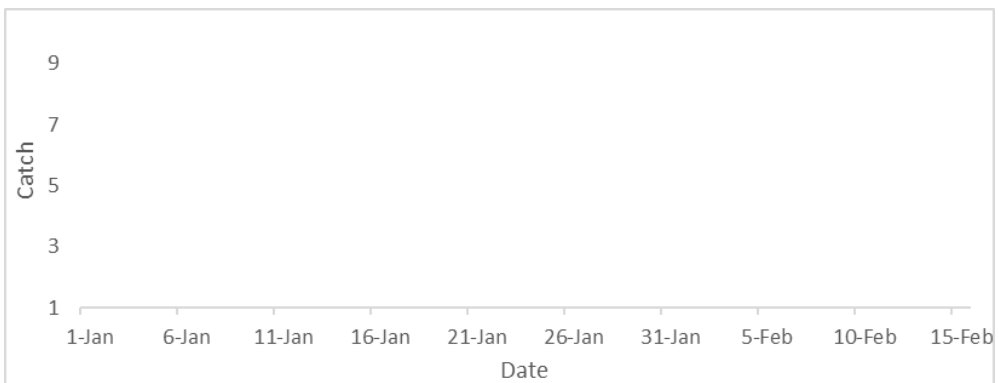
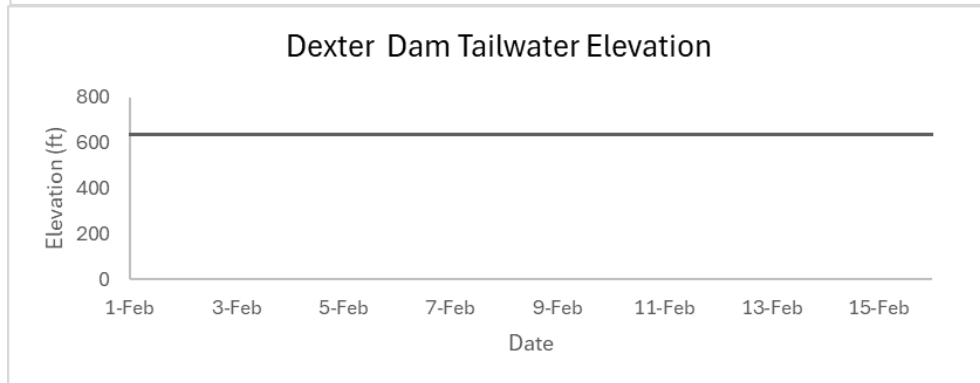
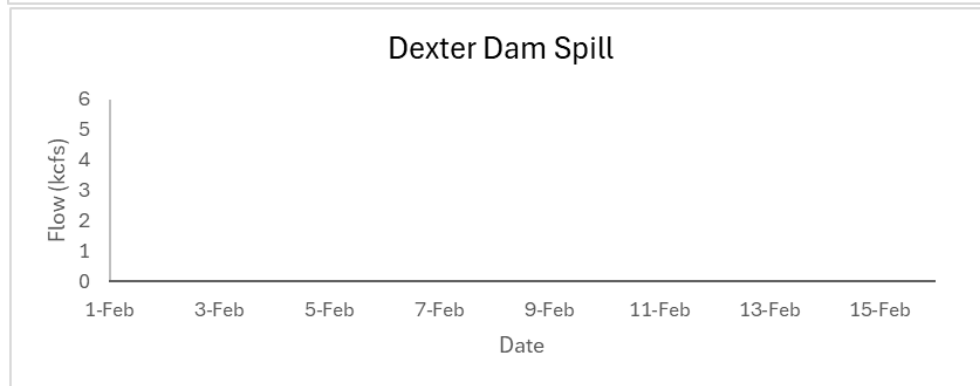
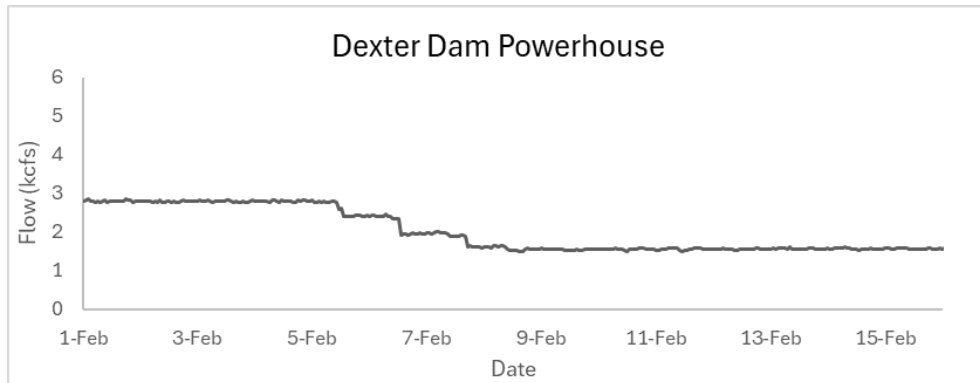
Lookout Point Head of Reservoir Operational and Capture Data in 2025



### Lookout Dam Operational and Capture Data in 2025



### Dexter Dam Operational and Capture Data in 2025



## Appendix C

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Breitenbush River	6/21/2023	231.0	749	53	7.1%
Breitenbush River	7/6/2023	525.0	763	25	3.3%
Breitenbush River	8/2/2023	2230.0	791	12	1.5%
Breitenbush River	9/20/2023	776.0	756	7	0.9%
Breitenbush River	10/5/2023	370.0	789	18	2.3%
Breitenbush River	10/25/2023	539.0	750	51	6.8%
Breitenbush River	11/10/2023	820.0	750	152	20.3%
Breitenbush River	11/21/2023	405.0	900	55	6.1%
Breitenbush River	2/7/2024	730.0	750	15	2.0%
Breitenbush River	2/21/2024	715.0	750	135	18.0%
Breitenbush River	3/6/2024	540.0	748	78	10.4%
Breitenbush River	3/25/2024	822.0	243	11	4.5%
Breitenbush River	5/15/2024	819.0	692	9	1.3%
Breitenbush River	6/25/2024	297.0	752	45	6.0%
Breitenbush River	7/16/2024	188.0	764	18	2.3%
Breitenbush River	8/2/2024	151.0	684	16	2.3%
Breitenbush River	9/10/2024	122.0	774	11	1.4%
Breitenbush River	10/30/2024	193.0	786	29	3.7%
Breitenbush River	11/26/2024	750.0	718	120	16.7%
Detroit Head of Reservoir- North Santiam	6/6/2023	833.0	540	28	5.2%
Detroit Head of Reservoir- North Santiam	6/20/2023	653.0	750	61	8.1%
Detroit Head of Reservoir- North Santiam	7/6/2023	171.0	750	13	1.7%
Detroit Head of Reservoir- North Santiam	8/2/2023	431.0	750	19	2.5%
Detroit Head of Reservoir- North Santiam	9/6/2023	1800.0	700	19	2.7%
Detroit Head of Reservoir- North Santiam	10/5/2023	135.0	750	24	3.2%
Detroit Head of Reservoir- North Santiam	10/25/2023	289.0	757	72	9.5%
Detroit Head of Reservoir- North Santiam	11/10/2023	578.0	813	91	11.2%
Detroit Head of Reservoir- North Santiam	11/21/2023	601.0	1,014	111	10.9%
Detroit Head of Reservoir- North Santiam	2/7/2024	1290.0	749	8	1.1%
Detroit Head of Reservoir- North Santiam	2/21/2024	1030.0	749	117	15.6%
Detroit Head of Reservoir- North Santiam	3/6/2024	968.0	751	83	11.0%
Detroit Head of Reservoir- North Santiam	5/15/2024	1400.0	749	30	4.0%
Detroit Head of Reservoir- North Santiam+	6/6/2024	1200.0	450	13	2.9%
Detroit Head of Reservoir- North Santiam	6/18/2024	786.0	836	32	3.8%
Detroit Head of Reservoir- North Santiam	7/19/2024	492.0	843	39	4.6%
Detroit Head of Reservoir- North Santiam	8/2/2024	470.0	749	30	4.0%
Detroit Head of Reservoir- North Santiam	9/5/2024	401.0	733	21	2.9%
Detroit Head of Reservoir- North Santiam	10/30/2024	492.0	750	90	12.0%
Detroit Head of Reservoir- North Santiam	11/15/2024	998.0	686	110	16.0%
Detroit Head of Reservoir- North Santiam	2/12/2025	610.0	827	90	10.9%
Big Cliff Dam Tailrace*	12/22/2021	3080.0	997	39	3.9%
Big Cliff Dam Tailrace*	5/25/2022	3050.0	995	21	2.1%
Big Cliff Dam Tailrace*	8/9/2022	1060.0	1000	92	9.2%
Big Cliff Dam Tailrace*	9/30/2022	1590.0	995	48	4.8%
Big Cliff Dam Tailrace*	10/13/2022	2820.0	500	15	3.0%
Big Cliff Dam Tailrace*	10/24/2022	5520.0	535	25	4.7%
Big Cliff Dam Tailrace*	11/2/2022	5450.0	949	40	4.2%



Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Big Cliff Dam Tailrace*	11/16/2022	2790.0	509	15	2.9%
Big Cliff Dam Tailrace*	12/14/2022	1380.0	502	60	12.0%
Big Cliff Dam Tailrace*	12/19/2022	1330.0	1010	92	9.1%
Big Cliff Dam Tailrace*	12/21/2022	1350.0	1014	33	3.3%
Big Cliff Dam Tailrace*	12/27/2022	1520.0	704	47	6.7%
Big Cliff Dam Tailrace*	12/29/2022	1480.0	452	22	4.9%
Big Cliff Dam Tailrace*	1/25/2023	1330.0	500	56	11.2%
Big Cliff Dam Tailrace*	2/17/2023	1470.0	499	38	7.6%
Big Cliff Dam Tailrace**	3/7/2023	1080.0	2,968	61	2.1%
Big Cliff Dam Tailrace*	3/10/2023	1180.0	541	112	20.7%
Big Cliff Dam Tailrace*	4/28/2023	1310.0	498	34	6.8%
Big Cliff Dam Tailrace*	5/23/2023	2440.0	500	6	1.2%
Big Cliff Dam Tailrace*	6/21/2023	2740.0	500	8	1.6%
Big Cliff Dam Tailrace*	7/5/2023	1580.0	500	33	6.6%
Big Cliff Dam Tailrace*	8/3/2023	1080.0	474	42	8.9%
Big Cliff Dam Tailrace*	9/19/2023	1580.0	424	64	15.1%
Big Cliff Dam Tailrace*	10/6/2023	1590.0	500	56	11.2%
Big Cliff Dam Tailrace	10/25/2023	1730.0	633	99	15.6%
Big Cliff Dam Tailrace	11/16/2023	4050.0	527	0	0.0%
Big Cliff Dam Tailrace	11/21/2023	3450.0	500	30	6.0%
Big Cliff Dam Tailrace	12/28/2023	1990.0	550	56	10.2%
Big Cliff Dam Tailrace	2/14/2024	1550.0	500	16	3.2%
Big Cliff Dam Tailrace	2/21/2024	1060.0	464	52	11.2%
Big Cliff Dam Tailrace	3/6/2024	1810.0	556	18	3.2%
Big Cliff Dam Tailrace**	3/7/2024	1820.0	1,959	1	0.05%
Big Cliff Dam Tailrace	3/12/2024	1780.0	550	18	3.3%
Big Cliff Dam Tailrace	5/7/2024	3310.0	493	1	0.2%
Big Cliff Dam Tailrace	6/18/2024	1440.0	499	18	3.6%
Big Cliff Dam Tailrace	7/26/2024	1300.0	497	23	4.6%
Big Cliff Dam Tailrace	8/16/2024	1080.0	500	48	9.6%
Big Cliff Dam Tailrace	9/5/2024	1640.0	500	31	6.2%
Big Cliff Dam Tailrace	9/11/2024	1610.0	1,054	80	7.6%
Big Cliff Dam Tailrace	10/30/2024	2230.0	500	24	4.8%
Big Cliff Dam Tailrace	11/15/2024	4600.0	500	17	3.4%
Big Cliff Dam Tailrace	12/03/2024	1300.0	500	89	17.8%
Big Cliff Dam Tailrace	1/21/2025	2850.0	500	10	2.0%
Big Cliff Dam Tailrace	2/12/2025	1050.0	500	84	16.8%
Green Peter Head of Reservoir- Middle Santiam (dead fish)	6/7/2023	2.0	1,000	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	6/7/2023	2.0	750	1	0.1%
Green Peter Head of Reservoir- Middle Santiam	7/28/2023	1.0	750	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	8/30/2023	0.9	749	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	9/27/2023	1.3	741	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	10/11/2023	2.9	750	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	10/31/2023	1.5	750	0	0.0%
Green Peter Head of Reservoir- Middle Santiam (dead fish)	10/31/2023	1.5	1,000	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	11/15/2023	2.5	749	1	0.1%
Green Peter Head of Reservoir- Middle Santiam	2/8/2024	3.2	753	4	0.5%
Green Peter Head of Reservoir- Middle Santiam+	3/6/2024	3.1	2500	26	1.0%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Green Peter Head of Reservoir- Middle Santiam	3/14/2024	3.4	800	4	0.5%
Green Peter Head of Reservoir- Middle Santiam	4/2/2024	3.4	754	2	0.3%
Green Peter Head of Reservoir- Middle Santiam (dead fish)	4/2/2024	3.4	1,002	1	0.1%
Green Peter Head of Reservoir- Middle Santiam+	4/12/2024	3.0	2,500	23	0.9%
Green Peter Head of Reservoir- Middle Santiam (dead fish)	4/19/2024	2.6	1,000	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	5/15/2024	3.2	998	35	3.5%
Green Peter Head of Reservoir- Middle Santiam	6/5/2024	3.5	1083	10	0.9%
Green Peter Head of Reservoir- Middle Santiam	7/9/2024	1.4	1,001	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	8/14/2024	1.0	1,001	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	9/10/2024	0.9	999	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	10/9/2024	0.8	998	0	0.0%
Green Peter Head of Reservoir- Middle Santiam	11/5/2024	2.7	996	3	0.3%
Green Peter Head of Reservoir- Middle Santiam (dead fish)	11/12/2024	2.8	1,000	1	0.1%
Green Peter Head of Reservoir- Middle Santiam	2/10/2025	2.3	2,001	7	0.003%
Green Peter Dam Tailrace- Spill*	3/29/2022	970.0	643	4	0.6%
Green Peter Dam Tailrace- Spill*	4/30/2022	1310.0	518	9	1.7%
Green Peter Dam Tailrace- Spill*	5/11/2023	1910.0	999	9	0.9%
Green Peter Dam Tailrace- Spill (dead fish) *	5/11/2023	1910.0	1,001	0	0.0%
Green Peter Dam Tailrace- PH*	5/25/2023	1980.0	1,000	10	1.0%
Green Peter Dam Tailrace- PH*	6/30/2023	2000.0	1,000	9	0.9%
Green Peter Dam Tailrace- PH (dead fish)*	6/30/2023	50.0	1,000	10	1.0%
Green Peter Dam Tailrace- PH*	7/27/2023	49.4	1,009	13	1.3%
Green Peter Dam Tailrace- PH*	8/16/2023	3905.0	1,008	7	0.7%
Green Peter Dam Tailrace- PH*	8/31/2023	34.6	1,000	8	0.8%
Green Peter Dam Tailrace- PH*	10/4/2023	3060.0	1,005	0	0.0%
Green Peter Dam Tailrace*	11/1/2023	1430.0	1,000	22	2.2%
Green Peter Dam Tailrace*	11/14/2023	1300.0	1,000	7	0.7%
Green Peter Dam Tailrace- Spill*	11/29/2023	630.0	1,000	28	2.8%
Green Peter Dam Tailrace- Spill (dead fish) *	11/29/2023	630.0	3,999	11	0.3%
Green Peter Dam Tailrace*	12/8/2023	3700.0	1,000	25	2.5%
Green Peter Dam Tailrace- Spill*	12/19/2023	50.0	1,000	3	0.3%
Green Peter Dam Tailrace- PH	1/9/2024	3590.0	1,003	9	0.9%
Green Peter Dam Tailrace- Spill	2/16/2024	500.0	1,000	1	0.1%
Green Peter Dam Tailrace- PH	3/26/2024	2120.0	1,014	1	0.1%
Green Peter Dam Tailrace- Spill	3/26/2024	1100.0	1,004	2	0.2%
Green Peter Dam Tailrace- Spill (dead fish)	3/26/2024	1100.0	3,000	0	0.0%
Green Peter Dam Tailrace- Spill	4/18/2024	1270.0	1,011	3	0.3%
Green Peter Dam Tailrace- Spill (dead fish)	4/24/2024	1270.0	3,000	2	0.1%
Green Peter Dam Tailrace- Spill	4/24/2024	1270.0	1,000	2	0.2%
Green Peter Dam Tailrace- PH	6/11/2024	1890.0	1,000	3	0.3%
Green Peter Dam Tailrace- PH	6/18/2024	2010.0	1,001	1	0.1%
Green Peter Dam Tailrace- PH	8/7/2024	2009.0	1,000	12	1.2%
Green Peter Dam Tailrace- PH	8/21/2024	1097.0	1,000	2	0.2%
Green Peter Dam Tailrace- PH	9/4/2024	2070.0	999	0	0.0%
Green Peter Dam Tailrace- PH	10/1/2024	2000.0	1,000	14	1.4%
Green Peter Dam Tailrace- Spill	10/30/2024	2400.0	1,003	28	2.8%
Green Peter Dam Tailrace- Spill	11/1/2024	2500.0	1,000	21	2.1%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Green Peter Dam Tailrace- Spill	12/11/2024	800.0	1,000	6	0.6%
Green Peter Dam Tailrace- PH	1/21/2025	4200.0	1,000	8	0.8%
Foster Dam Head of Reservoir- South Santiam*	9/29/2022	51.0	1,063	0	0.0%
Foster Dam Head of Reservoir- South Santiam*	10/25/2022	211.0	821	116	14.1%
Foster Dam Head of Reservoir- South Santiam*	11/1/2022	261.0	1006	263	26.1%
Foster Dam Head of Reservoir- South Santiam*	11/9/2022	560.0	1007	68	6.8%
Foster Dam Head of Reservoir- South Santiam*	11/15/2022	240.0	1009	55	5.5%
Foster Dam Head of Reservoir- South Santiam*	11/22/2022	165.0	933	163	17.5%
Foster Dam Head of Reservoir- South Santiam*	2/27/2023	376.0	1,002	21	2.1%
Foster Dam Head of Reservoir- South Santiam*	3/9/2023	313.0	995	62	6.2%
Foster Dam Head of Reservoir- South Santiam*	3/15/2023	966.0	1,025	0	0.0%
Foster Dam Head of Reservoir- South Santiam*	5/11/2023	1130.0	985	20	2.0%
Foster Dam Head of Reservoir- South Santiam*	6/2/2023	317.0	1,003	79	7.9%
Foster Dam Head of Reservoir- South Santiam*	6/29/2023	89.0	1,000	22	2.2%
Foster Dam Head of Reservoir- South Santiam*	7/27/2023	1980.0	989	0	0.0%
Foster Dam Head of Reservoir- South Santiam*	8/31/2023	1630.0	1,000	0	0.0%
Foster Dam Head of Reservoir- South Santiam*	9/27/2023	48.1	1,000	6	0.6%
Foster Dam Head of Reservoir- South Santiam*	10/10/2023	50.6	1,016	55	5.4%
Foster Dam Head of Reservoir- South Santiam*	11/14/2023	446.0	1,000	102	10.2%
Foster Dam Head of Reservoir- South Santiam*	11/22/2023	321.0	1,001	79	7.9%
Foster Dam Head of Reservoir- South Santiam	2/2/2024	1290.0	1,005	46	4.6%
Foster Dam Head of Reservoir- South Santiam	3/19/2024	1310.0	1,000	12	1.2%
Foster Dam Head of Reservoir- South Santiam	4/3/2024	923.0	1,003	16	1.6%
Foster Dam Head of Reservoir- South Santiam+	4/4/2024	774.0	1,909	28	1.5%
Foster Dam Head of Reservoir- South Santiam	5/15/2024	753.0	999	30	3.0%
Foster Dam Head of Reservoir- South Santiam	6/5/2024	1160.0	1,000	5	0.5%
Foster Dam Head of Reservoir- South Santiam	8/13/2024	53.2	998	0	0.0%
Foster Dam Head of Reservoir- South Santiam	8/22/2024	50.6	999	0	0.0%
Foster Dam Head of Reservoir- South Santiam	9/18/2024	44.5	1,005	0	0.0%
Foster Dam Head of Reservoir- South Santiam	10/2/2024	36.6	1,000	0	0.0%
Foster Dam Head of Reservoir- South Santiam	11/8/2024	285.0	1,000	16	1.6%
Foster Dam Head of Reservoir- South Santiam	2/3/2025	713.0	1,000	15	1.5%
Cougar Head of Reservoir*	3/8/2022	774.0	806	40	5.0%
Cougar Head of Reservoir*	5/19/2022	1385.0	498	23	4.6%
Cougar Head of Reservoir*	6/23/2022	711.0	486	7	1.4%
Cougar Head of Reservoir*	9/22/2022	225.0	551	56	10.2%
Cougar Head of Reservoir*	10/5/2022	207.0	608	47	7.7%
Cougar Head of Reservoir*	11/10/2022	340.0	704	33	4.7%
Cougar Head of Reservoir*	11/16/2022	259.0	719	28	3.9%
Cougar Head of Reservoir*	11/23/2022	292.0	752	48	6.4%
Cougar Head of Reservoir*	11/29/2022	295.0	620	48	7.7%
Cougar Head of Reservoir*	4/14/2023	482.0	506	10	2.0%
Cougar Head of Reservoir*	5/10/2023	950.0	508	7	1.4%
Cougar Head of Reservoir*	5/16/2023	1140.0	497	23	4.6%
Cougar Head of Reservoir*	6/8/2023	1670.0	510	23	4.5%
Cougar Head of Reservoir*	7/27/2023	486.0	758	27	3.6%
Cougar Head of Reservoir**	8/30/2023	211.0	5,151	127	2.5%
Cougar Head of Reservoir*	9/21/2023	194.0	745	41	5.5%
Cougar Head of Reservoir*	10/19/2023	211.0	750	42	5.6%
Cougar Head of Reservoir*	11/14/2023	343.0	756	21	2.8%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Cougar Head of Reservoir*	11/28/2023	266.0	760	67	8.8%
Cougar Head of Reservoir	2/6/2024	894.0	768	53	6.9%
Cougar Head of Reservoir	3/12/2024	720.0	756	26	3.4%
Cougar Head of Reservoir	4/1/2024	760.0	754	24	3.2%
Cougar Head of Reservoir	5/22/2024	859.0	760	41	5.4%
Cougar Head of Reservoir	6/12/2024	445.0	750	17	2.3%
Cougar Head of Reservoir	7/10/2024	256.0	749	20	2.5%
Cougar Head of Reservoir	10/8/2024	194.0	751	27	3.6%
Cougar Head of Reservoir	11/25/2024	807.0	749	33	4.4%
Cougar Dam Tailrace- PH*	1/19/2022	925.0	405	37	9.1%
Cougar Dam Tailrace- PH*	4/20/2022	860.0	357	67	18.8%
Cougar Dam Tailrace- PH*	7/19/2022	310.0	495	148	29.9%
Cougar Dam Tailrace- PH*	8/11/2022	700.0	501	29	5.8%
Cougar Dam Tailrace- PH*	1/12/2023	500.0	843	159	18.9%
Cougar Dam Tailrace- PH*	3/23/2023	500.0	500	49	9.8%
Cougar Dam Tailrace- PH*	3/30/2023	490.0	497	95	19.1%
Cougar Dam Tailrace- PH*	4/18/2023	585.0	297	14	4.7%
Cougar Dam Tailrace- PH*	5/10/2023	750.0	499	5	1.0%
Cougar Dam Tailrace- PH*	6/6/2023	370.0	507	65	12.8%
Cougar Dam Tailrace- PH*	7/26/2023	370.0	510	63	12.4%
Cougar Dam Tailrace- PH*	9/21/2023	350.0	500	53	10.6%
Cougar Dam Tailrace- PH*	10/11/2023	2.7	500	83	16.6%
Cougar Dam Tailrace- PH	1/30/2024	1000.0	502	70	13.9%
Cougar Dam Tailrace- PH	2/7/2024	1000.0	493	43	8.7%
Cougar Dam Tailrace- PH	3/11/2024	650.0	499	33	6.6%
Cougar Dam Tailrace- PH	4/4/2024	1010.0	501	33	6.6%
Cougar Dam Tailrace- PH	5/22/2024	330.0	500	38	7.6%
Cougar Dam Tailrace- PH	6/12/2024	500.0	501	102	20.4%
Cougar Dam Tailrace- PH	7/10/2024	300.0	503	94	18.7%
Cougar Dam Tailrace- RO*	1/19/2022	1000.0	410	26	6.3%
Cougar Dam Tailrace- RO*	4/20/2022	400.0	378	16	4.2%
Cougar Dam Tailrace- RO*	5/15/2022	2570.0	987	64	6.5%
Cougar Dam Tailrace- RO*	10/14/2022	890.0	442	49	11.1%
Cougar Dam Tailrace- RO*	11/22/2022	350.0	504	24	4.8%
Cougar Dam Tailrace- RO*	12/13/2022	430.0	506	42	8.3%
Cougar Dam Tailrace- RO*	12/15/2022	360.0	1015	56	5.5%
Cougar Dam Tailrace- RO*	12/20/2022	360.0	500	61	12.2%
Cougar Dam Tailrace- RO*	12/28/2022	900.0	443	14	3.2%
Cougar Dam Tailrace- RO*	1/30/2023	500.0	509	6	1.2%
Cougar Dam Tailrace- RO*	3/23/2023	810.0	511	3	0.6%
Cougar Dam Tailrace- RO*	3/30/2023	800.0	491	31	6.3%
Cougar Dam Tailrace- RO*	4/18/2023	800.0	501	2	0.4%
Cougar Dam Tailrace- RO*	5/10/2023	600.0	499	0	0.0%
Cougar Dam Tailrace- RO*	10/11/2023	290.0	518	14	2.7%
Cougar Dam Tailrace- RO*	11/8/2023	1100.0	508	43	8.5%
Cougar Dam Tailrace- RO*	11/30/2023	310.0	505	26	5.1%
Cougar Dam Tailrace- RO	12/18/2023	1200.0	505	2	0.4%
Cougar Dam Tailrace- RO	1/11/2024	890.0	505	65	12.9%
Cougar Dam Tailrace- RO	2/7/2024	2000.0	505	9	1.8%
Cougar Dam Tailrace- RO	3/12/2024	720.0	499	16	3.2%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Cougar Dam Tailrace- RO	4/1/2024	950.0	502	52	10.4%
Cougar Dam Tailrace- RO	10/8/2024	480.0	501	19	3.8%
Cougar Dam Tailrace- RO	11/15/2024	700.0	500	12	2.4%
Fall Creek Head of Reservoir*	5/5/2023	3.8	756	15	2.0%
Fall Creek Head of Reservoir*	5/10/2023	3.8	750	23	3.1%
Fall Creek Head of Reservoir*	5/18/2023	3.5	511	7	1.4%
Fall Creek Head of Reservoir*	5/24/2023	3.3	760	4	0.5%
Fall Creek Head of Reservoir	1/2/2024	3.8	755	137	18.1%
Fall Creek Head of Reservoir	2/2/2024	4.1	751	51	6.8%
Fall Creek Head of Reservoir	3/5/2024	4.2	750	74	9.9%
Fall Creek Head of Reservoir	3/26/2024	3.9	998	99	9.9%
Fall Creek Head of Reservoir	4/15/2024	4.1	2,000	241	12.1%
Fall Creek Head of Reservoir	5/21/2024	3.5	749	24	3.2%
Fall Creek Head of Reservoir	5/29/2024	3.4	749	111	14.8%
Fall Creek Head of Reservoir	6/13/2024	3.4	750	120	16.0%
Fall Creek Dam Tailrace- RO*	6/8/2022	957.0	517	11	2.1%
Fall Creek Dam Tailrace- RO*	6/30/2022	231.0	513	0	0.0%
Fall Creek Dam Tailrace- RO*	7/13/2022	228.0	498	0	0.0%
Fall Creek Dam Tailrace- RO*	5/11/2023	83.0	998	0	0.0%
Fall Creek Dam Tailrace- RO*	6/28/2023	3240.0	992	0	0.0%
Fall Creek Dam Tailrace- RO	10/3/2023	103.0	1,006	0	0.0%
Fall Creek Dam Tailrace- RO	10/17/2023	2630.0	1,020	14	1.4%
Fall Creek Dam Tailrace- RO	7/11/2023	460.0	1,011	0	0.0%
Fall Creek Dam Tailrace- RO	1/22/2024	1028.0	999	12	1.2%
Fall Creek Dam Tailrace- RO	2/13/2024	1700.0	1,004	48	4.8%
Fall Creek Dam Tailrace- RO	3/5/2024	1000.0	1,001	14	1.4%
Fall Creek Dam Tailrace- RO	3/26/2024	55.0	1,600	0	0.0%
Fall Creek Dam Tailrace- RO	4/8/2024	124.0	2,000	0	0.0%
Hills Creek Head of Reservoir- Middle Fork Willamette	5/18/2023	11.1	519	44	8.5%
Hills Creek Head of Reservoir- Middle Fork Willamette	6/19/2023	9.0	760	6	0.8%
Hills Creek Head of Reservoir- Middle Fork Willamette	2/15/2024	10.0	761	0	0.0%
Hills Creek Head of Reservoir- Middle Fork Willamette	2/20/2024	10.1	749	18	2.4%
Hills Creek Head of Reservoir- Middle Fork Willamette	3/20/2024	10.8	752	16	2.1%
Hills Creek Head of Reservoir- Middle Fork Willamette	4/9/2024	9.5	2,001	9	0.4%
Hills Creek Head of Reservoir- Middle Fork Willamette	5/1/2024	9.8	750	32	4.3%
Hills Creek Head of Reservoir- Middle Fork Willamette	5/23/2024	9.6	749	11	1.5%
Hills Creek Head of Reservoir- Middle Fork Willamette	6/20/2024	8.9	750	7	0.9%
Hills Creek Dam Tailrace- PH*	1/6/2022	810.0	596	20	3.4%
Hills Creek Dam Tailrace- PH*	2/16/2022	410.0	600	12	2.0%
Hills Creek Dam Tailrace- PH*	2/25/2022	410.0	604	6	1.0%
Hills Creek Dam Tailrace- PH*	12/7/2022	890.0	514	29	5.6%
Hills Creek Dam Tailrace- PH*	2/25/2023	910.0	519	15	2.9%
Hills Creek Dam Tailrace- PH*	4/26/2023	540.0	506	62	12.3%



Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Hills Creek Dam Tailrace- PH*	5/17/2023	440.0	505	57	11.3%
Hills Creek Dam Tailrace- PH*	6/3/2023	710.0	508	36	7.1%
Hills Creek Dam Tailrace- PH*	6/27/2023	720.0	507	22	4.3%
Hills Creek Dam Tailrace- PH	9/27/2023	400.0	510	9	1.8%
Hills Creek Dam Tailrace- PH	10/17/2023	460.0	509	8	1.6%
Hills Creek Dam Tailrace- PH	10/31/2023	470.0	503	8	1.6%
Hills Creek Dam Tailrace- PH	11/15/2023	660.0	500	46	9.2%
Hills Creek Dam Tailrace- PH	1/23/2024	910.0	505	8	1.6%
Hills Creek Dam Tailrace- PH	2/22/2024	410.0	1,473	31	2.1%
Hills Creek Dam Tailrace- PH	3/13/2024	430.0	1,494	11	0.7%
Hills Creek Dam Tailrace- PH	4/11/2024	830.0	3,996	68	1.7%
Hills Creek Dam Tailrace- PH	6/4/2024	200.0	1,250	45	3.6%
Hills Creek Dam Tailrace PH- RO Trial*	1/6/2022	810.0	596	5	0.8%
Hills Creek Dam Tailrace PH- RO Trial*	2/16/2022	410.0	600	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial*	2/25/2022	410.0	604	1	0.2%
Hills Creek Dam Tailrace PH- RO Trial*	12/7/2022	890.0	514	3	0.6%
Hills Creek Dam Tailrace PH- RO Trial*	2/25/2023	910.0	519	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial*	4/26/2023	530.0	506	12	2.4%
Hills Creek Dam Tailrace PH- RO Trial*	5/17/2023	450.0	505	2	0.4%
Hills Creek Dam Tailrace PH- RO Trial*	6/3/2023	710.0	508	2	0.4%
Hills Creek Dam Tailrace PH- RO Trial*	6/27/2023	720.0	507	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial	9/27/2023	400.0	510	1	0.2%
Hills Creek Dam Tailrace PH- RO Trial	10/17/2023	2630.0	509	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial	10/31/2023	461.0	503	2	0.4%
Hills Creek Dam Tailrace PH- RO Trial	11/15/2023	660.0	500	1	0.2%
Hills Creek Dam Tailrace PH- RO Trial	2/22/2024	420.0	1,473	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial	3/13/2024	450.0	1,494	0	0.0%
Hills Creek Dam Tailrace PH- RO Trial	4/11/2024	830.0	3,996	6	0.2%
Hills Creek Dam Tailrace PH- RO Trial	6/4/2024	200.0	1,250	6	0.5%
Hills Creek Dam Tailrace- RO*	1/6/2022	820.0	605	13	2.1%
Hills Creek Dam Tailrace- RO*	2/16/2022	410.0	593	19	3.2%
Hills Creek Dam Tailrace- RO*	2/25/2022	420.0	625	6	1.0%
Hills Creek Dam Tailrace- RO*	12/13/2022	610.0	516	1	0.2%
Hills Creek Dam Tailrace- RO*	2/25/2023	870.0	478	0	0.0%
Hills Creek Dam Tailrace- RO*	6/13/2023	500.0	760	0	0.0%
Hills Creek Dam Tailrace- RO	11/21/2023	1800.0	503	3	0.6%
Hills Creek Dam Tailrace- RO	11/29/2023	1800.0	504	2	0.4%
Hills Creek Dam Tailrace- RO	12/26/2023	110.0	505	10	2.0%
Hills Creek Dam Tailrace- RO	1/4/2024	100.0	503	5	1.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	4/5/2022	3620.0	993	53	5.3%
Lookout Point Head of Reservoir- Middle Fork Willamette*	4/14/2022	3821.0	987	19	1.9%
Lookout Point Head of Reservoir- Middle Fork Willamette*	5/18/2022	4100.0	1004	125	12.5%
Lookout Point Head of Reservoir- Middle Fork Willamette*	7/20/2022	1110.0	1005	9	0.9%
Lookout Point Head of Reservoir- Middle Fork Willamette*	10/27/2022	1680.0	506	9	1.8%
Lookout Point Head of Reservoir- Middle Fork Willamette*	11/17/2022	1520.0	510	0	0.0%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Lookout Point Head of Reservoir- Middle Fork Willamette*	12/12/2022	1510.0	510	0	0.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	1/13/2023	3040.0	516	10	1.9%
Lookout Point Head of Reservoir- Middle Fork Willamette*	6/2/2023	2690.0	760	15	2.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	6/15/2023	1550.0	765	6	0.8%
Lookout Point Head of Reservoir- Middle Fork Willamette*	6/29/2023	92.9	769	2	0.3%
Lookout Point Head of Reservoir- Middle Fork Willamette*	7/19/2023	932.0	765	0	0.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	8/22/2023	1350.0	677	13	1.9%
Lookout Point Head of Reservoir- Middle Fork Willamette*	8/31/2023	3950.0	751	0	0.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	9/20/2023	103.0	787	1	0.1%
Lookout Point Head of Reservoir- Middle Fork Willamette*	10/26/2023	1220.0	755	0	0.0%
Lookout Point Head of Reservoir- Middle Fork Willamette*	11/15/2023	1600.0	755	3	0.4%
Lookout Point Head of Reservoir- Middle Fork Willamette*	11/29/2023	3020.0	760	2	0.3%
Lookout Point Head of Reservoir- Middle Fork Willamette	12/19/2023	5720.0	1,504	9	0.6%
Lookout Point Head of Reservoir- Middle Fork Willamette	1/3/2024	2010.0	1,505	2	0.1%
Lookout Point Head of Reservoir- Middle Fork Willamette	2/14/2024	2120.0	761	2	0.3%
Lookout Point Head of Reservoir- Middle Fork Willamette	3/13/2024	3170.0	1,498	15	1.0%
Lookout Point Head of Reservoir- Middle Fork Willamette	4/8/2024	2670.0	1,997	7	0.4%
Lookout Point Head of Reservoir- Middle Fork Willamette	4/15/2024	4130.0	2,002	20	1.0%
Lookout Point Head of Reservoir- Middle Fork Willamette	5/1/2024	4620.0	751	35	4.7%
Lookout Point Head of Reservoir- Middle Fork Willamette	5/23/2024	2440.0	751	14	1.9%
Lookout Point Head of Reservoir- Middle Fork Willamette	6/19/2024	1300.0	756	0	0.0%
Lookout Point Head of Reservoir- Middle Fork Willamette	9/5/2024	1885.0	750	6	0.8%
Lookout Dam Tailrace- PH*	4/13/2022	2925.0	1000	0	0.0%
Lookout Dam Tailrace- PH*	5/23/2023	2900.0	3,999	32	0.8%
Lookout Dam Tailrace- PH*	6/1/2023	2950.0	4,011	6	0.1%
Lookout Dam Tailrace- PH*	6/14/2023	3130.0	4,010	4	0.1%
Lookout Dam Tailrace- PH*	6/28/2023	1340.0	4,010	3	0.1%
Lookout Dam Tailrace- PH*	7/18/2023	2700.0	4,012	9	0.2%
Lookout Dam Tailrace- PH	12/20/2023	4962.5	16,007	29	0.2%
Lookout Dam Tailrace- PH	1/10/2024	6986.0	17,553	3	0.0%
Lookout Dam Tailrace- Spill	9/13/2023	1850.0	3,636	0	0.0%
Lookout Dam Tailrace- Spill	9/14/2023	1850.0	3,998	0	0.0%

Release Location	Date of Release	Flow at Release	# of Fish Released	# of Fish Recaptured	% Efficiency
Lookout Dam Tailrace- Spill	10/25/2023	1630.0	4,042	0	0.0%
Lookout Dam Tailrace- Spill	11/16/2023	1600.0	4,005	12	0.3%
Lookout Dam Tailrace- Spill	12/6/2023	2450.0	8,007	18	0.2%
Lookout Dam Tailrace- Spill	12/13/2023	6900.0	8,011	148	1.8%
Lookout Dam Tailrace- Spill	3/27/2024	3600.0	7,800	11	0.1%
Lookout Dam Tailrace- Spill	4/3/2024	3100.0	6,599	7	0.1%
Dexter Dam Tailrace- PH*	7/21/2022	1560.0	976	2	0.2%
Dexter Dam Tailrace- PH*	10/26/2022	2950.0	1007	1	0.1%
Dexter Dam Tailrace- PH*	11/1/2022	3670.0	755	1	0.1%
Dexter Dam Tailrace- PH*	11/17/2022	3450.0	991	4	0.4%
Dexter Dam Tailrace- PH*	12/6/2022	1610.0	1010	10	1.0%
Dexter Dam Tailrace- PH*	12/15/2022	1540.0	1025	1	0.1%
Dexter Dam Tailrace- PH*	3/16/2023	1520.0	1,200	2	0.2%
Dexter Dam Tailrace- PH*	5/25/2023	3040.0	4,003	14	0.3%
Dexter Dam Tailrace- PH*	6/7/2023	3200.0	4,010	4	0.1%
Dexter Dam Tailrace- PH*	6/21/2023	1270.0	4,028	15	0.4%
Dexter Dam Tailrace- PH*	7/6/2023	2640.0	4,000	5	0.1%
Dexter Dam Tailrace- PH*	8/23/2023	1710.0	4,012	14	0.3%
Dexter Dam Tailrace- PH*	9/6/2023	398.0	4,037	13	0.3%
Dexter Dam Tailrace- PH*	10/4/2023	1680.0	4,001	5	0.1%
Dexter Dam Tailrace- PH	12/28/2023	1755.0	8,032	46	0.6%
Dexter Dam Tailrace- PH	1/9/2024	3360.0	4,004	6	0.1%
Dexter Dam Tailrace- Spill*	3/23/2022	1240.0	988	2	0.2%
Dexter Dam Tailrace- Spill*	5/4/2022	5040.0	995	43	4.3%
Dexter Dam Tailrace- Spill*	5/24/2022	2620.0	1018	67	6.6%
Dexter Dam Tailrace- Spill*	3/29/2023	1590.0	1,199	5	0.4%
Dexter Dam Tailrace- Spill*	8/2/2023	128.0	1,505	3	0.2%
Dexter Dam Tailrace- Spill*	10/24/2023	1590.0	1,514	18	1.2%
Dexter Dam Tailrace- Spill*	11/1/2023	1800.0	1,506	9	0.6%
Dexter Dam Tailrace- Spill*	11/22/2023	3500.0	1,516	0	0.0%
Dexter Dam Tailrace- Spill*	12/5/2023	2060.0	4,006	10	0.2%
Dexter Dam Tailrace- Spill*	12/12/2023	3850.0	4,001	13	0.3%
Dexter Dam Tailrace- Spill	2/8/2024	8500.0	2,067	0	0.0%
Dexter Dam Tailrace- Spill	2/28/2024	1200.0	1,959	17	0.9%
Dexter Dam Tailrace- Spill	3/6/2024	1250.0	2000	4	0.2%
Dexter Dam Tailrace- Spill	4/2/2024	3370.0	1,962	0	0.0%
Dexter Dam Tailrace- Spill	4/10/2024	2800.0	6,000	10	0.2%
Dexter Dam Tailrace PH - Spill	12/21/2023	2400.0	4,005	3	0.1%

\*Release performed by EAS for the USACE under contract W9127N19D0007. \*\*Release performed by ODFW. +Release performed by Cramer Fish Sciences.

## Appendix D

### Summary of PIT Tagged Fish by EAS in 2025

Site	Trap	Species	# of PIT Tagged Fish (Reporting Period)	# of PIT Tagged Fish (To-Date)
Breitenbush River	5 ft	Chinook	9	9
Breitenbush River	5 ft	<i>O. mykiss</i>	1	1
Detroit Head of Reservoir – North Santiam	5 ft	Chinook	11	11
Detroit Head of Reservoir – North Santiam	5 ft	<i>O. mykiss</i>	0	0
Big Cliff Dam Tailrace	8 ft	Chinook	0	0
Big Cliff Dam Tailrace	8 ft	<i>O. mykiss</i>	0	0
Green Peter Head of Reservoir – Middle Santiam	5 ft	Chinook	0	0
Green Peter Head of Reservoir – Middle Santiam	5 ft	<i>O. mykiss</i>	0	0
Green Peter Dam Tailrace	8 ft	Chinook	0	0
Green Peter Dam Tailrace	8 ft	<i>O. mykiss</i>	0	0
Foster Dam Head of Reservoir – South Santiam	5 ft	Chinook	0	0
Foster Dam Head of Reservoir – South Santiam	5 ft	<i>O. mykiss</i>	1	1
Cougar Head of Reservoir	5 ft	Chinook	0	0
Cougar Dam Tailrace	PH	Chinook	0	0
Cougar Dam Tailrace	RO	Chinook	0	0
Fall Creek Head of Reservoir	8 ft	Chinook	0	0
Fall Creek Dam Tailrace	8 ft	Chinook	0	0
Hills Creek Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	0
Hills Creek Dam Tailrace	RO	Chinook	0	0
Hills Creek Dam Tailrace	PH	Chinook	0	0
Lookout Point Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	0
Lookout Dam Tailrace	Spill	Chinook	0	0
Lookout Dam Tailrace	PH	Chinook	0	0
Dexter Dam Tailrace	5 ft	Chinook	0	0

### Summary of EAS VIE Marked Fish by EAS in 2025

Site	Trap	Species	# VIE Marked Fish (Reporting Period)	# VIE Marked Fish (To-Date)
Breitenbush River	5 ft	Chinook	42	42
Breitenbush River	5 ft	<i>O. mykiss</i>	1	1
Detroit Head of Reservoir- North Santiam	5 ft	Chinook	60	60
Detroit Head of Reservoir- North Santiam	5 ft	<i>O. mykiss</i>	0	0
Green Peter Head of Reservoir- Middle Santiam	5 ft	Chinook	85	85
Green Peter Head of Reservoir- Middle Santiam	5 ft	<i>O. mykiss</i>	0	0
Cougar Dam Head of Reservoir	5 ft	Chinook	0	0
Fall Creek Head of Reservoir	8 ft	Chinook	1	1
Hills Creek Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	0
Hills Creek Dam Tailrace	RO	Chinook	0	0
Hills Creek Dam Tailrace	PH	Chinook	0	0
Lookout Point Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	1
Lookout Dam Tailrace	Spill	Chinook	0	0
Lookout Dam Tailrace	PH	Chinook	0	0

**List of downstream redetections for fish PIT tagged at RST sites in 2025.**

PIT Tag #	Mark Date	Mark Site	Recap Date	Travel Time (# of days)	Encountered Site
N/A	N/A	N/A	N/A	N/A	N/A

**Summary of fish containing PIT tags encountered by EAS in 2025.**

Site	Trap	Species	# Encountered Fish (Reporting Period)	# Encountered Fish (To-Date)
Breitenbush River	5 ft	Chinook	0	0
Breitenbush River	5 ft	<i>O. mykiss</i>	0	0
Detroit Head of Reservoir – North Santiam	5 ft	Chinook	0	0
Detroit Head of Reservoir – North Santiam	5 ft	<i>O. mykiss</i>	0	0
Big Cliff Dam Tailrace	8 ft	Chinook	0	0
Big Cliff Dam Tailrace	8 ft	<i>O. mykiss</i>	0	0
Green Peter Head of Reservoir – Middle Santiam	5 ft	Chinook	0	0
Green Peter Head of Reservoir – Middle Santiam	5 ft	<i>O. mykiss</i>	0	0
Green Peter Tailrace	8 ft	Chinook	0	0
Green Peter Tailrace	8 ft	<i>O. mykiss</i>	0	0
Foster Dam Head of Reservoir – South Santiam	5 ft	Chinook	0	0
Foster Dam Head of Reservoir – South Santiam	5 ft	<i>O. mykiss</i>	0	0
Cougar Head of Reservoir	5 ft	Chinook	0	0
Cougar Dam Tailrace	PH	Chinook	0	0
Cougar Dam Tailrace	RO	Chinook	0	0
Fall Creek Head of Reservoir	8 ft	Chinook	0	0
Fall Creek Dam Tailrace	8 ft	Chinook	0	0
Hills Creek Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	0
Hills Creek Dam Tailrace	RO	Chinook	0	0
Hills Creek Dam Tailrace	PH	Chinook	0	0
Lookout Point Head of Reservoir- Middle Fork Willamette	5 ft	Chinook	0	0
Lookout Dam Tailrace	Spill	Chinook	0	0
Lookout Dam Tailrace	PH	Chinook	0	0
Dexter Dam Tailrace	5 ft	Chinook	0	0

*\*PIT tagged fish used for trapping efficiency trials, Radio Tagged fish, and Bull Trout excluded*

**List of Bull Trout captured at RST sites and collected data in 2025.**

Site	Date	Length (est. mm)	Tag(s)	Condition
N/A	N/A	N/A	None	N/A

**List of radio or acoustic tagged Chinook captured at RST sites in 2025.**

Site	Trap	PIT Tag Number	Date	Species
Dexter Dam Tailrace	5 ft	3DD.003BD61E0D	1/6/2025	CHS
Dexter Dam Tailrace	5 ft	3DD.003BD61DB8	1/10/2025	CHS
Green Peter Tailrace	8 ft	3DD.003BD2B97E	1/1/2025	CHS
Green Peter Tailrace	8 ft	3DD.003BD2C59C	1/21/2025	CHS