



February 9, 2022

Senator Kate Lieber, Chair
Senator Lynn Findley, Vice-Chair
Senate Committee on Energy and Environment

Re: Trout Unlimited Supports Senate Bill 1589

Dear Chair Lieber, Vice-Chair Findley, and Members of the Committee,

Trout Unlimited (“TU”) is a non-profit organization dedicated to the conservation of cold-water fish (such as trout, salmon, and steelhead) and their habitats. The organization has more than 350,000 members and supporters nationwide, including many members in Oregon. TU and its members are committed to caring for Oregon rivers and streams so future generations can experience the joy of wild and native trout and salmon. TU also supports recreational boating opportunity consistent with that paramount conservation goal.

TU supports SB 1589.

SB 1589 will take measures to protect water quality in the Willamette River, and thus, the habitat for native fish that inhabit and migrate through it (both downstream to the ocean as juveniles, and upstream to spawn in its tributaries as adults).

As recreational boats get larger and heavier, there is increasing evidence that the fish habitat in the Willamette River is suffering. The increasing numbers of large ballast capacity motorboats on the Willamette is creating erosion and water quality concerns in the Newberg Pool Congested Zone of the Willamette River (the “Newberg Pool”). Because the Willamette River is home to numerous runs of anadromous fish — many of which are struggling — water quality issues in the Newberg Pool affect native fish populations throughout the Willamette River basin.

To address this problem, the legislature enacted HB 2351 and HB 2352 in 2019 in effort to minimize the effects of artificial wave energy caused by boat wakes in the Willamette River. Thereafter, the Oregon State Marine Board established a 10,000 pound weight limit for motorboats (based on ramp capacity) in the Newberg Pool.

SB 1589 will reduce the maximum loading weight limit for motorboats that engage in towed watersports in the Newberg Pool to 5,000 pounds, and prohibit wake surfing in the Newberg Pool from a boat that uses methods to increase wake sizes. TU expects these changes to reduce wave energy in the Newberg Pool that damages the shoreline and riverbanks, and thereby reduce the ongoing erosion and related water quality issues.

Many native fish in the Willamette River basin depend on water quality in the Newberg Pool at some point in their life cycles. As examples only, wild spring chinook from the McKenzie River, and wild winter steelhead from the Molalla and Santiam River basins, migrate through this river corridor twice in their respective life cycles, and require sufficiently high water quality throughout their migration corridors

to ensure they return to their home streams as adults. Similarly, the wild coho salmon, winter steelhead, and spring chinook in the Clackamas River (which enters the Willamette about 1.5 miles downriver of the Newberg Pool, as the “Newberg Pool Congested Zone” would be redefined by Section 2 of SB 1589) need high water quality from upstream portions of the Willamette during their respective migrations. TU expects enactment of SB 1589 to improve the water quality these fish experience by reducing streambank erosion in the Newberg Pool.

Salmon are present in the Newberg Pool during the summer boating season. For the Committee’s reference, I have attached a spreadsheet showing upstream fish passage data collected at Willamette Falls and reported on the Oregon Department of Fish & Wildlife’s [website](#). This information – which I’ve included for 2021 only – shows that adult salmon migrate upstream into the Newberg Pool (as it would be redefined in SB 1589) in every month of the summer boating season. In 2021, this included: 8,812 adult chinook in June; 2,479 adult chinook in July; 1,182 adult chinook in August; and 9,602 adult coho and 1,932 adult chinook in September. Those figures do not include “jack” sub-adult size salmon. Further, juvenile salmon out-migrate though the reach (typically very close to the shoreline where they are vulnerable to the effects of large ballast boats), and lamprey may also be present seasonally in the Newberg Pool. Juvenile salmon, resident trout, and lamprey are not included in the attached fish count spreadsheet. Accordingly, the presence of native and migratory species in the Newberg Pool (as it would be redefined by this bill) is greater than what is reflected in [Exhibit A](#) alone.

Conclusion

TU supports passage of SB 1589. Thank you for this opportunity to provide comments on the bill, and please let me know if you have any questions.

Sincerely,

James Fraser
Oregon Policy Advisor
Trout Unlimited
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Exhibit A

2021 Upstream Fish Passage Numbers – Willamette Falls

(Attached.)

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: January

Date	Hydrological Data			Spring Chinook									Coho									Steelhead						Other Species			
				Adult			Jack			Mini Jack			Adult			Jack			Winter			Summer									
	Flow	Temp	Vis	Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily			Cum.	Total	Daily		Cum.	Total	Daily		Cum.	Species/Total					
				Total	Clipped	Unclip		Total	Clipped	Unclip				Total	Clipped	Unclip			Total	Clipped			Unclip	Total			Clipped	Unclip	Total	Clipped	Unclip
1	48,800			0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	11,804	0	0	0	3,204	10	0	10	190				
2	50,400			0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	11,806	0	0	0	3,204	29	4	25	219				
3	58,200			0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	11,807	0	0	0	3,204	15	0	15	234				
4	72,900	46		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,807	0	0	0	3,204	7	0	7	241					
5	82,000	46		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,807	0	0	0	3,204	1	0	1	242					
6	82,900	48		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,807	0	0	0	3,204	0	0	0	242					
7	77,400	48		0	0	0	0	0	0	0	0	0	0	0	1	0	1	11,808	0	0	0	3,204	3	0	3	245					
8	71,300	47		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	6	0	6	251					
9	67,000			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	7	0	7	258					
10	60,100			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	7	1	6	265					
11	54,900	45	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	23	0	23	288					
12	49,800	46	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	25	0	25	313					
13	74,400	48		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	0	0	0	313					
14	88,900	48		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	4	0	4	317					
15	78,800	48		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	1	0	1	318					
16	61,700			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	4	0	4	322					
17	55,600			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	21	0	21	343					
18	54,000			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	51	0	51	394					
19	50,000	47		0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	10	0	10	404					
20	45,500	45	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	23	0	23	427					
21	39,600	45	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	29	0	29	456					
22	35,200	43	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	26	1	25	482					
23	32,200			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	24	2	22	506					
24	29,700			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	13	4	9	519					
25	28,400	42	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	10	0	10	529					
26	27,000	42	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	6	0	6	535					
27	24,600	41	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	8	0	8	543					
28	24,300	41	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	4	0	4	547					
29	23,700	40	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	7	0	7	554					
30	22,100			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	11	0	11	565					
31	21,100			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,808	0	0	0	3,204	33	0	33	598					

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: March

Date	Hydrological Data			Spring Chinook										Coho										Steelhead								Other Species		
				Adult					Jack					Mini Jack		Adult					Jack					Winter				Summer				Species/Total
				Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily			Cum.	Daily			Cum.	Daily		Cum.	Daily		Cum.							
				Total	Clipped	Unclip	0	Total	Clipped	Unclip	0	Daily	Cum.	Total	Clipped	Unclip	0	Total	Clipped	Unclip	0	Total	Clipped	Unclip	1,251	Total	Clipped	Unclip	0					
1	28,800	46	2.6	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	26	1,277	1	1	0	1				
2	25,200	46	2.6	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	24	1,301	9	9	0	10				
3	23,600	46	2.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	1,326	3	3	0	13				
4	22,200	47	2.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	32	1,358	1	1	0	14				
5	20,900	47	2.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	1,372	2	2	0	16				
6	20,900			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	17	1,389	6	6	0	22				
7	22,100			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	1,400	1	1	0	23				
8	20,800	47	3.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	1,408	4	4	0	27				
9	19,000	47	3.8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12	1,420	2	2	0	29				
10	17,700			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	1,430	2	2	0	31				
11	17,100	48	4.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	1,443	4	4	0	35				
12	16,000	49	4.0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	1,461	3	3	0	38				
13	15,200			1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	21	1,482	3	3	0	41				
14	14,600			0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	17	1,499	5	5	0	46				
15	14,500	48	4.8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	1,510	5	5	0	51				
16	15,700	48	4.8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	1,523	3	3	0	54				
17	15,300	47	5.0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	28	1,551	9	9	0	63				
18	14,900	47	5.0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	1,559	14	14	0	77				
19	14,900	47	5.3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13	1,572	3	3	0	80				
20	15,000			3	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	1,581	7	7	0	87				
21	15,300			0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	1,589	4	4	0	91				
22	15,700	49	5.3	1	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	1,607	10	10	0	101				
23	16,700	49	5.5	1	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23	1,630	7	7	0	108				
24	17,700			0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	10	1,640	12	12	0	120				
25	17,400	49	5.3	1	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	1,654	7	7	0	127				
26	17,700	49	5.5	1	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	1,659	4	4	0	131				
27	17,300			0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	1,667	9	9	0	140				
28	16,400			1	0	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16	1,683	10	10	0	150				
29	15,900	49	5.8	5	4	1	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	12	1,695	18	18	0	168				
30	15,600			6	3	3	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	27	1,722	9	9	0	177				
31	15,000	49	5.8	6	3	3	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	29	1,751	16	16	0	193				

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: May

Date	Hydrological Data			Spring Chinook									Coho									Steelhead						Other Species
				Adult				Jack				Mini Jack	Adult			Jack			Winter			Summer			Species/Total			
	Flow	Temp	Vis	Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily			Cum.							
				Total	Clipped	Unclip		Total	Clipped	Unclip								Total	Clipped	Unclip		Total	Clipped	Unclip	Total	Clipped	Unclip	
1	10,300			417	367	50	6,258	29	24	5	277	0	0							2	0	2	1,991	9	9	0	424	
2	10,900			636	550	86	6,894	20	18	2	297	0	0							2	0	2	1,993	11	11	0	435	
3	11,200	60	9.0	592	528	64	7,486	22	22	0	319	0	0							5	0	5	1,998	12	12	0	447	
4	10,900	60	9.0	503	430	73	7,989	24	22	2	343	0	0							6	0	6	2,004	19	19	0	466	
5	10,500	61	8.9	325	279	46	8,314	12	10	2	355	0	0							2	0	2	2,006	15	15	0	481	
6	10,300	61	8.6	722	630	92	9,036	22	20	2	377	2	2							3	0	3	2,009	18	18	0	499	
7	10,300	61	8.6	474	428	46	9,510	19	19	0	396	1	3							4	0	4	2,013	13	13	0	512	
8	10,300			422	369	53	9,932	29	26	3	425	2	5							2	0	2	2,015	15	15	0	527	
9	10,200			562	485	77	10,494	24	24	0	449	0	5							3	0	3	2,018	20	20	0	547	
10	9,910	60	8.3	466	415	51	10,960	17	14	3	466	2	7							1	0	1	2,019	9	9	0	556	
11	9,550	59	8.3	384	336	48	11,344	13	13	0	479	2	9							3	0	3	2,022	11	11	0	567	
12	9,300	59	8.5	470	412	58	11,814	19	18	1	498	3	12							1	0	1	2,023	17	17	0	584	
13	9,250	60	8.6	575	510	65	12,389	20	19	1	518	3	15							4	0	4	2,027	19	19	0	603	
14	9,280	61	8.8	514	434	80	12,903	18	16	2	536	0	15							3	0	3	2,030	15	15	0	618	
15	9,150			368	322	46	13,271	12	10	2	548	2	17							3	0	3	2,033	10	10	0	628	
16	9,050			364	318	46	13,635	25	22	3	573	1	18							2	0	2	2,035	14	14	0	642	
17	8,920	68	8.6	453	396	57	14,088	16	15	1	589	4	22							4	0	4	2,039	17	17	0	659	
18	8,890	68	8.6	292	253	39	14,380	10	10	0	599	1	23							1	0	1	2,040	12	12	0	671	
19	8,830	66	8.6	239	194	45	14,619	10	10	0	609	0	23							3	0	3	2,043	12	12	0	683	
20	8,790	66	8.4	256	225	31	14,875	6	6	0	615	1	24							1	0	1	2,044	7	7	0	690	
21	8,960	64	8.2	169	149	20	15,044	11	11	0	626	0	24							2	0	2	2,046	4	4	0	694	
22	8,860			260	228	32	15,304	12	12	0	638	0	24							2	0	2	2,048	7	7	0	701	
23	8,890			233	202	31	15,537	15	15	0	653	0	24							2	0	2	2,050	15	15	0	716	
24	8,890	60	8.5	171	153	18	15,708	11	11	0	664	3	27							2	0	2	2,052	11	11	0	727	
25	8,960	60	8.8	204	182	22	15,912	14	12	2	678	2	29							2	0	2	2,054	20	20	0	747	
26	9,600	60	8.8	232	204	28	16,144	21	21	0	699	1	30							3	0	3	2,057	8	8	0	755	
27	10,300			214	176	38	16,358	15	14	1	714	0	30							1	0	1	2,058	19	19	0	774	
28	9,850			242	215	27	16,600	18	18	0	732	0	30							1	0	1	2,059	18	18	0	792	
29	9,880	61	8.6	197	168	29	16,797	7	7	0	739	0	30							0	0	0	2,059	13	13	0	805	
30	9,550		8.8	193	168	25	16,990	13	13	0	752	0	30							2	0	2	2,061	30	30	0	835	
31	9,480			230	184	46	17,220	7	7	0	759	0	30							5	0	5	2,066	18	18	0	853	

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: July

Date	Hydrological Data			Spring Chinook									Coho									Steelhead						Other Species
				Adult				Jack				Mini Jack	Adult			Jack			Winter			Summer						
	Flow	Temp	Vis	Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily			Cum.					
				Total	Clipped	Unclip		Total	Clipped	Unclip										Total	Clipped	Unclip		Total	Clipped	Unclip		
1	7,910	79	8.5	0	0	0	26,032	0	0	0	1,205	2	1,282							0	0	0	1,392					
2	7,480			0	0	0	26,032	2	1	1	1,207	0	1,282							0	0	0	1,392					
3	7,090			3	1	2	26,035	0	0	0	1,207	0	1,282							0	0	0	1,392					
4	6,790			11	10	1	26,046	0	0	0	1,207	0	1,282							0	0	0	1,392					
5	6,670			8	6	2	26,054	2	2	0	1,209	2	1,284							0	0	0	1,392					
6	6,560	75	7.7	37	26	11	26,091	2	2	0	1,211	10	1,294							1	1	0	1,393					
7	6,440	75	7.8	151	125	26	26,242	9	9	0	1,220	35	1,329							4	4	0	1,397					
8	6,600	75	7.8	70	56	14	26,312	4	2	2	1,224	26	1,355							1	1	0	1,398					
9	6,900	76	8.0	210	162	48	26,522	10	9	1	1,234	34	1,389							1	1	0	1,399					
10	6,730			380	307	73	26,902	16	13	3	1,250	35	1,424							0	0	0	1,399					
11	6,380			270	220	50	27,172	22	21	1	1,272	17	1,441							2	1	1	1,401					
12	6,470	78	8.2	305	258	47	27,477	18	17	1	1,290	24	1,465							0	0	0	1,401					
13	6,440	78	8.5	261	208	53	27,738	16	16	0	1,306	31	1,496							2	2	0	1,403					
14	6,200	78	8.5	128	103	25	27,866	10	10	0	1,316	33	1,529							2	0	2	1,405					
15	6,100	77	8.6	104	82	22	27,970	17	15	2	1,333	31	1,560							5	5	0	1,410					
16	6,070	77	8.6	82	65	17	28,052	3	2	1	1,336	25	1,585							2	2	0	1,412					
17	5,960			79	63	16	28,131	2	2	0	1,338	18	1,603							0	0	0	1,412					
18	5,930			29	21	8	28,160	1	1	0	1,339	10	1,613							1	1	0	1,413					
19	5,930	78	9.0	13	8	5	28,173	2	2	0	1,341	23	1,636							0	0	0	1,413					
20	5,930	79	9.0	10	9	1	28,183	0	0	0	1,341	17	1,653							1	1	0	1,414					
21	5,790	77	9.0	17	11	6	28,200	2	2	0	1,343	23	1,676							1	1	0	1,415					
22	5,790	75	9.0	44	28	16	28,244	4	2	2	1,347	29	1,705							4	4	0	1,419					
23	5,800	75	9.2	50	38	12	28,294	5	3	2	1,352	38	1,743							2	1	1	1,421					
24	5,760			48	32	16	28,342	5	4	1	1,357	29	1,772							6	3	3	1,427					
25	5,760			41	29	12	28,383	1	0	1	1,358	31	1,803							0	0	0	1,427					
26	5,760	77	9.3	37	22	15	28,420	5	4	1	1,363	21	1,824							2	2	0	1,429					
27	5,700	77	9.3	24	15	9	28,444	4	4	0	1,367	15	1,839							4	1	3	1,433					
28	5,650	78	9.5	15	7	8	28,459	2	2	0	1,369	18	1,857							0	0	0	1,433					
29	5,650	78	9.5	21	14	7	28,480	1	0	1	1,370	11	1,868							0	0	0	1,433					
30	5,620	78	9.3	17	13	4	28,497	1	1	0	1,371	12	1,880							2	2	0	1,435					
31	5,620			14	10	4	28,511	2	2	0	1,373	2	1,882							0	0		1,435					

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: October

Date	Hydrological Data			Fall Chinook									Coho									Steelhead						Other Species	
				Adult				Jack			Mini Jack	Adult			Jack			Winter			Summer								
	Flow	Temp	Vis	Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily			Cum.	Daily			Cum.	Daily			Cum.				
				Total	Clipped	Unclip		Total	Clipped	Unclip				Total	Clipped	Unclip		Total	Clipped	Unclip		Total	Clipped	Unclip		Total	Clipped		Unclip
1	9,900	62		18	0	18	2,997	4	0	4	533	0	2,721	913	3	910	10,532	84	0	84	2,252					1	0	1	1,677
2	9,700			8	0	8	3,005	0	0	0	533	1	2,722	983	4	979	11,515	144	0	144	2,396					2	1	1	1,679
3	9,580			5	0	5	3,010	0	0	0	533	0	2,722	835	5	830	12,350	90	1	89	2,486					1	0	1	1,680
4	9,380	61		6	1	5	3,016	1	0	1	534	0	2,722	866	17	849	13,216	85	0	85	2,571					2	1	1	1,682
5	9,400	60	7.3	6	0	6	3,022	0	0	0	534	0	2,722	476	11	465	13,692	59	0	59	2,630					1	1	0	1,683
6	9,480	59	7.3	6	0	6	3,028	0	0	0	534	0	2,722	645	2	643	14,337	63	0	63	2,693					1	0	1	1,684
7	9,500	59	7.1	10	0	10	3,038	2	0	2	536	0	2,722	693	1	692	15,030	41	0	41	2,734					0	0	0	1,684
8	9,480	58	7.1	8	0	8	3,046	0	0	0	536	0	2,722	623	3	620	15,653	31	0	31	2,765					0	0	0	1,684
9	9,400			15	0	15	3,061	2	0	2	538	0	2,722	429	1	428	16,082	33	0	33	2,798					3	1	2	1,687
10	9,300			11	0	11	3,072	0	0	0	538	0	2,722	472	2	470	16,554	19	0	19	2,817					0	0	0	1,687
11	9,380	58	7.0	3	0	3	3,075	0	0	0	538	0	2,722	389	10	379	16,943	34	0	34	2,851					0	0	0	1,687
12	9,500	56	7.0	2	0	2	3,077	0	0	0	538	0	2,722	324	8	316	17,267	18	0	18	2,869					0	0	0	1,687
13	9,550	56	7.0	0	0	0	3,077	0	0	0	538	0	2,722	311	4	307	17,578	40	0	40	2,909					1	0	1	1,688
14	9,580			0	0	0	3,077	0	0	0	538	0	2,722	329	4	325	17,907	11	0	11	2,920					1	0	1	1,689
15	9,500			1	0	1	3,078	0	0	0	538	0	2,722	252	5	247	18,159	21	0	21	2,941					0	0	0	1,689
16	9,120			12	0	12	3,090	2	0	2	540	0	2,722	271	1	270	18,430	10	0	10	2,951					0	0	0	1,689
17	8,320			12	0	12	3,102	1	0	1	541	0	2,722	255	2	253	18,685	12	0	12	2,963					0	0	0	1,689
18	7,780	55		9	0	9	3,111	0	0	0	541	0	2,722	232	1	231	18,917	19	0	19	2,982					2	0	2	1,691
19	7,600	55		6	0	6	3,117	0	0	0	541	0	2,722	180	0	180	19,097	10	0	10	2,992					1	0	1	1,692
20	7,820	55	8.5	6	0	6	3,123	0	0	0	541	0	2,722	146	0	146	19,243	4	0	4	2,996					0	0	0	1,692
21	7,420	56	8.5	3	0	3	3,126	0	0	0	541	0	2,722	195	0	195	19,438	9	0	9	3,005					3	1	2	1,695
22	8,030	58	8.5	0	0	0	3,126	0	0	0	541	0	2,722	182	0	182	19,620	20	0	20	3,025					0	0	0	1,695
23	9,600			2	0	2	3,128	0	0	0	541	0	2,722	240	3	237	19,860	15	0	15	3,040					1	0	1	1,696
24	11,700			2	0	2	3,130	0	0	0	541	0	2,722	220	1	219	20,080	15	0	15	3,055					1	1	0	1,697
25	12,800	56	8.3	4	0	4	3,134	0	0	0	541	0	2,722	124	1	123	20,204	14	0	14	3,069					4	4	0	1,701
26	13,400	56	8.3	1	0	1	3,135	0	0	0	541	0	2,722	105	1	104	20,309	6	0	6	3,075					0	0	0	1,701
27	14,800	55		2	0	2	3,137	0	0	0	541	0	2,722	83	1	82	20,392	7	0	7	3,082					3	2	1	1,704
28	16,100	53		4	1	3	3,141	0	0	0	541	0	2,722	117	0	117	20,509	17	0	17	3,099					1	1	0	1,705
29	15,700	52		0	0	0	3,141	0	0	0	541	0	2,722	70	0	70	20,579	1	0	1	3,100					2	2	0	1,707
30	16,600	54	4.8	0	0	0	3,141	0	0	0	541	0	2,722	54	0	54	20,633	9	0	9	3,109					1	1	0	1,708
31	16,600			0	0	0	3,141	0	0	0	541	0	2,722	70	0	70	20,703	10	0	10	3,119					1		1	1,709

WILLAMETTE FALLS FISHWAY COUNTS

Year: 2021
Month: December

Date	Hydrological Data			Fall Chinook										Coho										Steelhead						Other Species		
				Adult					Jack					Mini Jack		Adult					Jack					Winter			Summer			Species/Total
				Daily			Cum.	Daily			Cum.	Daily	Cum.	Daily		Cum.	Daily		Cum.	Total	Daily		Cum.	Total	Daily		Cum.					
				Total	Clipped	Unclip	3,141	Total	Clipped	Unclip	541	Daily	2,722	Total	Clipped	Unclip	21,070	Total	Clipped	Unclip	3,158	Total	Clipped	Unclip	125	Total	Clipped	Unclip				
1	22,700	50		0	0	0	3,141	0	0	0	541	0	2,722	2	0	2	21,072	0	0	0	3,158	16	0	16	141							
2	21,300	50		0	0	0	3,141	0	0	0	541	0	2,722	3	0	3	21,075	1	0	1	3,159	13	1	12	154							
3	18,700	50		0	0	0	3,141	0	0	0	541	0	2,722	6	0	6	21,081	1	0	1	3,160	6	0	6	160							
4	16,900			0	0	0	3,141	0	0	0	541	0	2,722	4	0	4	21,085	0	0	0	3,160	10	0	10	170							
5	15,800			0	0	0	3,141	0	0	0	541	0	2,722	-1	0	-1	21,084	1	0	1	3,161	6	0	6	176							
6	15,100	48		0	0	0	3,141	0	0	0	541	0	2,722	2	0	2	21,086	0	0	0	3,161	4	0	4	180							
7	16,200	48		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,086	-1	0	-1	3,160	6	0	6	186							
8	19,000	49		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,086	-1	0	-1	3,159	22	0	22	208							
9	18,600	49		0	0	0	3,141	0	0	0	541	0	2,722	2	0	2	21,088	0	0	0	3,159	17	0	17	225							
10	18,200	48		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,088	-1	0	-1	3,158	10	0	10	235							
11	18,300			0	0	0	3,141	0	0	0	541	0	2,722	1	0	1	21,089	-1	0	-1	3,157	27	0	27	262							
12	28,400			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,089	0	0	0	3,157	7	0	7	269							
13	44,800	47		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,089	0	0	0	3,157	6	0	6	275							
14	51,500	45		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,089	0	0	0	3,157	1	0	1	276							
15	49,800			0	0	0	3,141	0	0	0	541	0	2,722	-1	0	-1	21,088	0	0	0	3,157	0	0	0	276							
16	42,500	45		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,088	0	0	0	3,157	0	0	0	276							
17	37,500	43		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,088	0	0	0	3,157	7	0	7	283							
18	34,000			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,088	0	0	0	3,157	19	0	19	302							
19	34,100			0	0	0	3,141	0	0	0	541	0	2,722	1	0	1	21,089	0	0	0	3,157	7	0	7	309							
20	59,900	44		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,089	0	0	0	3,157	0	0	0	309							
21	88,900	43		0	0	0	3,141	0	0	0	541	0	2,722	6	0	6	21,095	0	0	0	3,157	0	0	0	309							
22	88,800	43		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,095	0	0	0	3,157	0	0	0	309							
23	78,200			0	0	0	3,141	0	0	0	541	0	2,722	2	0	2	21,097	0	0	0	3,157	-2	0	-2	307							
24	76,500			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,097	0	0	0	3,157	-1	0	-1	306							
25	77,200			0	0	0	3,141	0	0	0	541	0	2,722	1	0	1	21,098	0	0	0	3,157	-1	0	-1	305							
26	72,500			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,098	0	0	0	3,157	-1	0	-1	304							
27	63,300			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,098	0	0	0	3,157	3	0	3	307							
28	54,700	40		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,098	0	0	0	3,157	1	0	1	308							
29	48,100	39		0	0	0	3,141	0	0	0	541	0	2,722	2	0	2	21,100	0	0	0	3,157	16	0	16	324							
30	44,700	39		0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,100	0	0	0	3,157	11	0	11	335							
31	42,700			0	0	0	3,141	0	0	0	541	0	2,722	0	0	0	21,100	0	0	0	3,157	12	0	12	347							