

Lake Spokane Fishery Enhancement and Creel Survey

Spokane River Forum

April 26, 2023

Purpose

- Enhance recreational fishing opportunities in Lake Spokane
 - Stock 155,000 sterile rainbow trout annually for 10 years starting in 2014
 - Put and take fishery
- Creel surveys in 2011, 2016, 2018, 2020, 2022







Methods

• Survey March - November

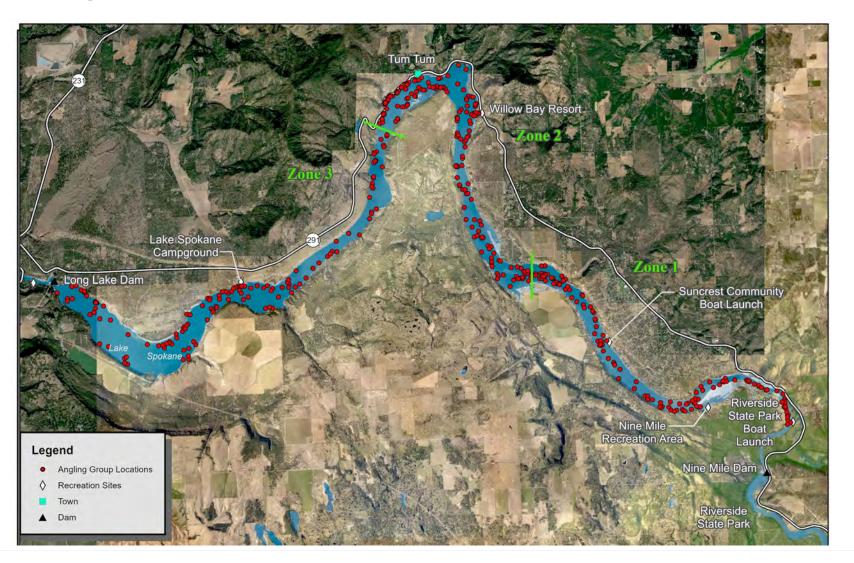
Angler surveys and angler counts





Angler Counts

Angler effort



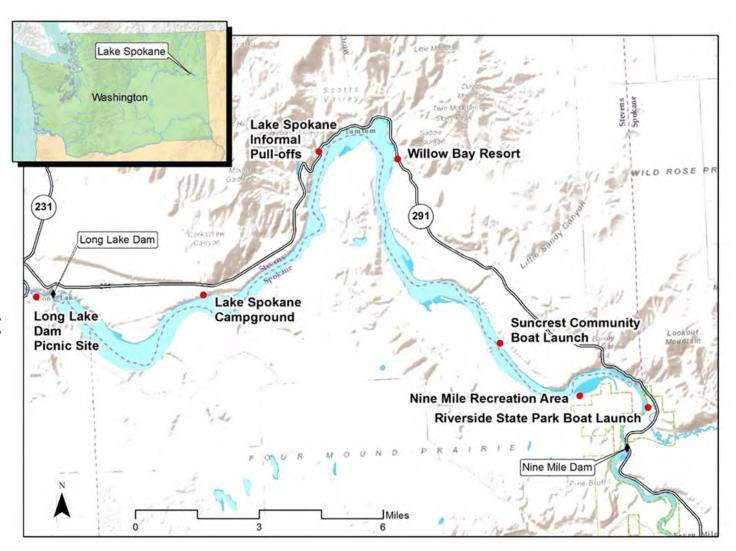


Angler Surveys

• 7 locations

Angler catch and harvest rates

Total catch and harvest rates





Target Species

Species	% of 2022 Anglers	% of 2020 Anglers	% of 2018 Anglers	% of 2016 Anglers	% of 2011 Anglers
Rainbow Trout	36%	33%	30%	27%	
Bass	36%	34%	45%	40%	82%
Any Species	19%	24%	19%	34%	16%
Other Species	20%	18%	18%	9%	
Yellow Perch	3%	4%	10%	8%	
Crappie	2%	2%	3%	6%	
Northern Pikeminnow	<1%	<1%	<1%	1%	
Carp	1%	<1%		1%	2%



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Size of Trout Harvested

Total Length Measured to Nearest Inch of Rainbow Trout	% of Harvested Rainbow Trout								
Harvested	2022	2020	2018	2016					
Up to 10"	7%	15%	4%	16%					
11"	1%	2%	3%	7%					
12"	3%	17%	5%	15%					
13"	1%	5%	20%	9%					
14"	8%	13%	26%	11%					
15"	8%	7 %	12%	20%					
16"	9%	16%	16%	20%					
17"	29%	5%	5%	2%					
18"	27%	10%	10%	4%					
19"+	6%	0%	0%	0%					



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14"	8%	13%	26%	11%				
15"	8%	7%	12%	20%				
16"	9%	16%	16%	20%				
17"	29%	5%	5%	2%				
18"	27%	10%	10%	4%				
19"+	6%	0%	0%	0%				



Satisfaction and Likelihood to Return

	1 Very	2	3	4	5 Very
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied
Percent of 2022 Surveys	27%	61%	7%	5%	<1%
Mean 2022 Response	1.9	_			
Percent of 2020 Surveys	14%	62%	12%	8%	5%
Mean 2020 Response	2.3				
Percent of 2018 Surveys	31%	49%	11%	8%	1%
Mean 2018 Response	2.0				
Percent of 2016 Surveys	34%	38%	20%	6%	2%
Mean 2016 Response	2.0				
Percent of 2011 Surveys	21%	48%			

	% of 2022 Anglers Targeting Trout	% of 2020 Anglers Targeting Trout	% of 2018 Anglers Targeting Trout	% of 2016 Anglers Targeting Trout
Likely to Return to Fish for Trout	84%	80%	96%	78%
Not Likely to Return to Fish for Trout	16%	20%	4%	22%

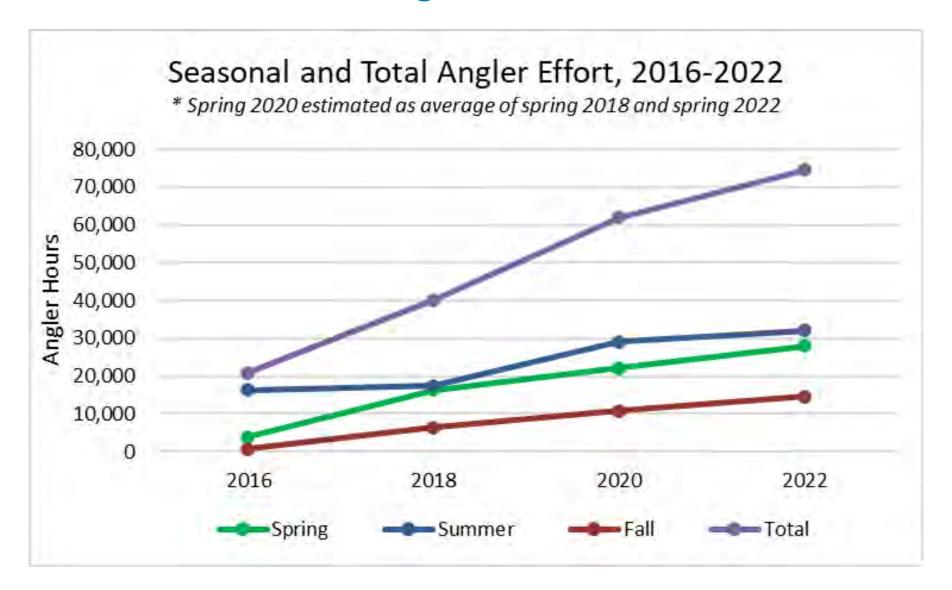


Number of Groups and Anglers Encountered

	Total # 0	Group Men	nbers (Indi	Total	Total # Anglers (Individuals)			
Group Size	2022	2020	2018	2016	2022	2020	2018	2016
1	154	142	135	108	154	142	135	108
2	492	500	482	316	467	455	439	256
3	237	213	162	153	225	194	147	124
4	88	80	68	64	84	73	62	52
5	20	50	25	20	19	46	23	16
6	6		12	6	6		11	5
7	0		14		0		13	
Total	997	985	898	667	955	909	830	561



Angler Effort





Catch and Harvest Rates

Rainbow Trout Catch and Harvest Rates, All Anglers, June-Nov

Mode	Catch Rate per ode Angler-Hour		Harves per Ang	st Rate ler-Hour	Days in Period 2020 and	Total Es Rainbo Cat	w Trout	Rainbo	stimated w Trout vest
	2022	2020	2022	2020	2022	2022	2020	2022	2020
Boat	0.11	0.06	0.02	0.03	187	494	269	90	135
Shore	0.02	0.07	0.02	0.05	187	224	314	90	224
					TOTAL	718	583	180	359

	Catch Rate per Angler-Hour		Angler Heim ner Angler Heim		Days in Period 2016 and	Total Estimated Rainbow Trout Catch		Total Estimated Rainbow Trout Harvest	
Mode	2018	2016	2018	2016	2018	2018	2016	2018	2016
Boat	0.20	0.14	0.07	0.10	187	898	628	314	449
Shore	0.28	0.01	0.28	0.01	187	1,257	45	1,257	45
					TOTAL	2,155	673	1,571	494



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Conclusions

- More anglers targeting rainbow trout
- Bigger fish being caught
- More anglers are satisfied with their fishing experience and most would likely return
- The number of anglers and angler effort has increased
- Catch and harvest rates are low
- Stocking in 2023



Questions?



