

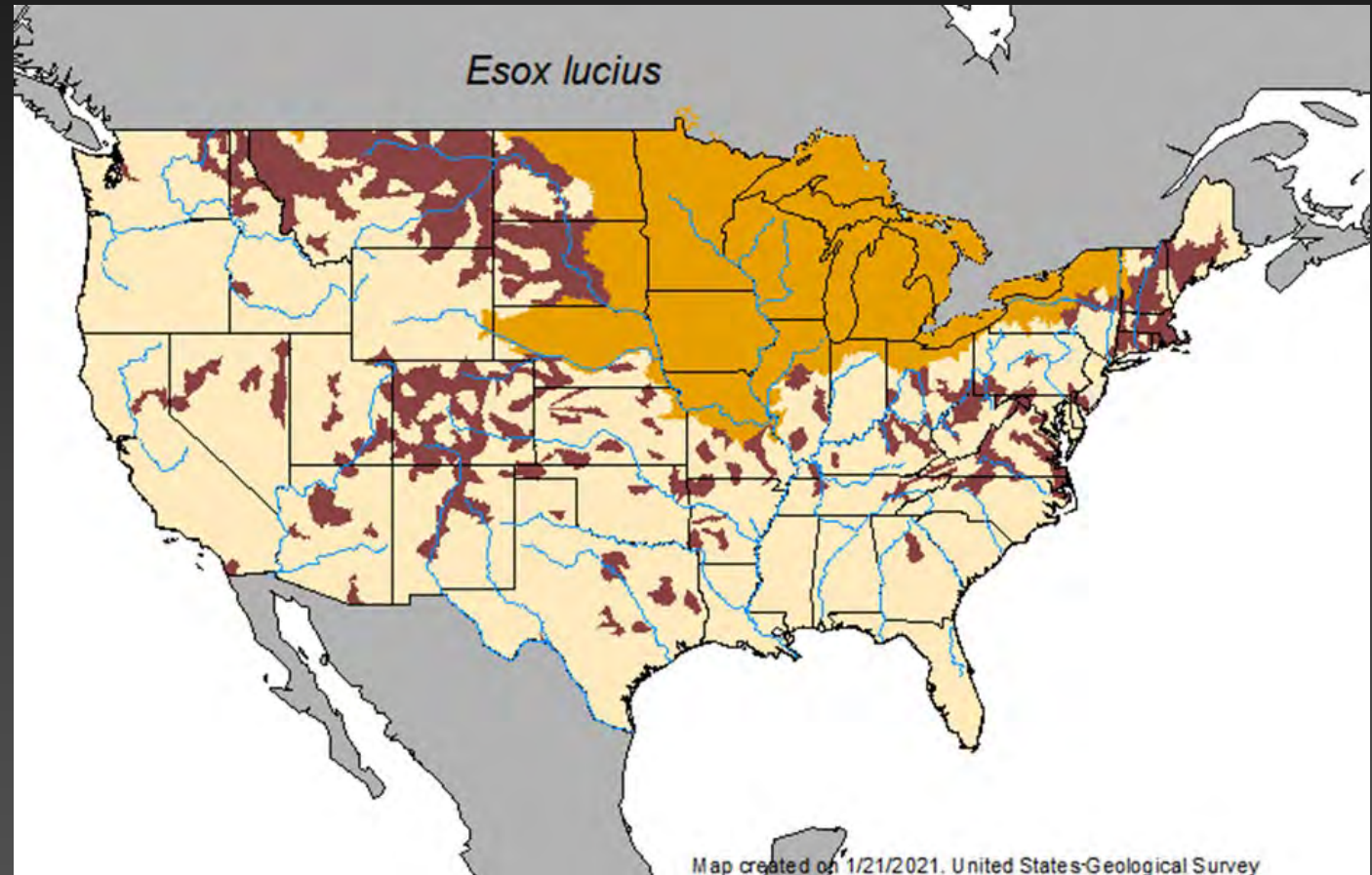
Northern Pike Suppression at Lake Spokane



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April 2023

Northern Pike Distribution

- Holarctic distribution
- US - Native to Northeast and Midwestern United States & Alaska
- Illegal introductions have led to expansion of their range west of the Continental Divide
 - Western Montana 1950s
 - Pend Oreille River (2004)
 - Upper Columbia River Canada (2009)
 - Lake Roosevelt (2007)
 - Coeur d'Alene River/Lake (early 1970s)
 - Lake Spokane (1970s to early 1980s)



Why Are Northern Pike a Threat?

Apex Predator

- Opportunistic feeders
- Prefer soft rayed fusiform fishes (Native Salmonids)
- Feed on fish > half body length
- Predatory impacts can alter entire fish communities, including elimination of entire species
- High Fecundity (250,000 eggs)
- Extremely fast growth rates
- Attain large size
- Tolerate a wide range of environmental conditions
- Very Adaptable



Lake Spokane

“Long Lake”

Impoundment of the Spokane River (38.6 km)

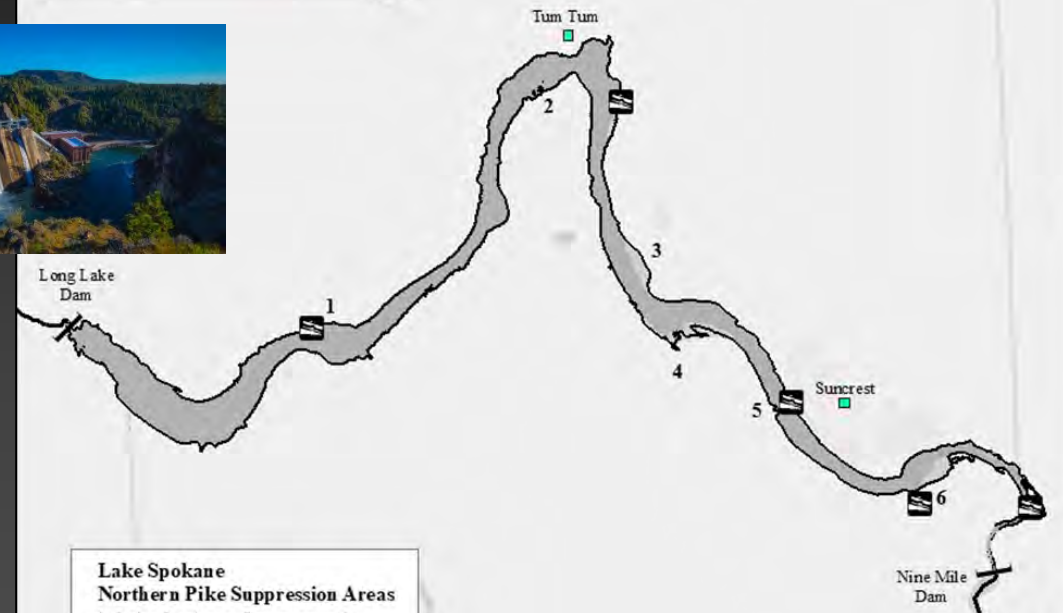
Long Lake Dam (1915)

Nine Mile Dam (1908)

Substantial Northern Pike Habitat primarily in the upper half of the reservoir.

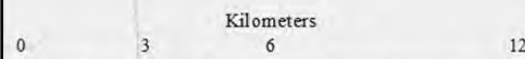
- Nine Mile Flats
- Sportsman’s Paradise
- Felton Slough
- McLellan Slough

- Vast Shallow Flats
- Low Gradient
- High macrophyte production
- Large fish prey base



**Lake Spokane
Northern Pike Suppression Areas**

1. Lake Spokane Campground
2. McLellan Slough
3. Felton Slough
4. Sportsman's Paradise
5. Suncrest
6. Nine Mile Flats



Northern Pike Abundance Begins to Boom

WDFW Warmwater Fisheries Survey

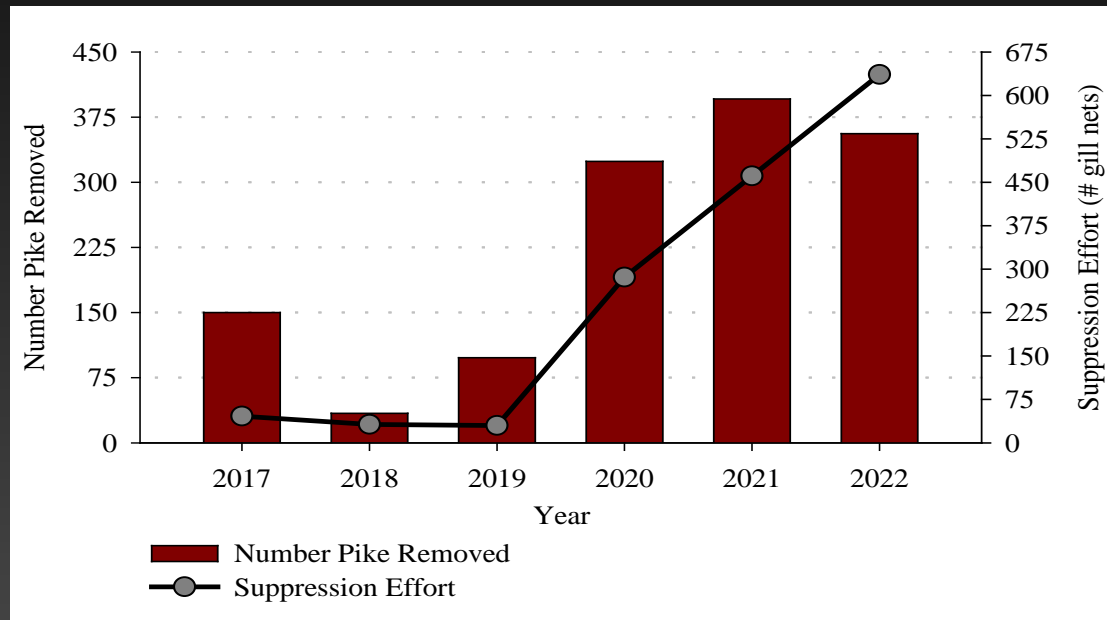
- 2001 (n=1)
- 2014 (n=3)

Avista Carp Gill Netting

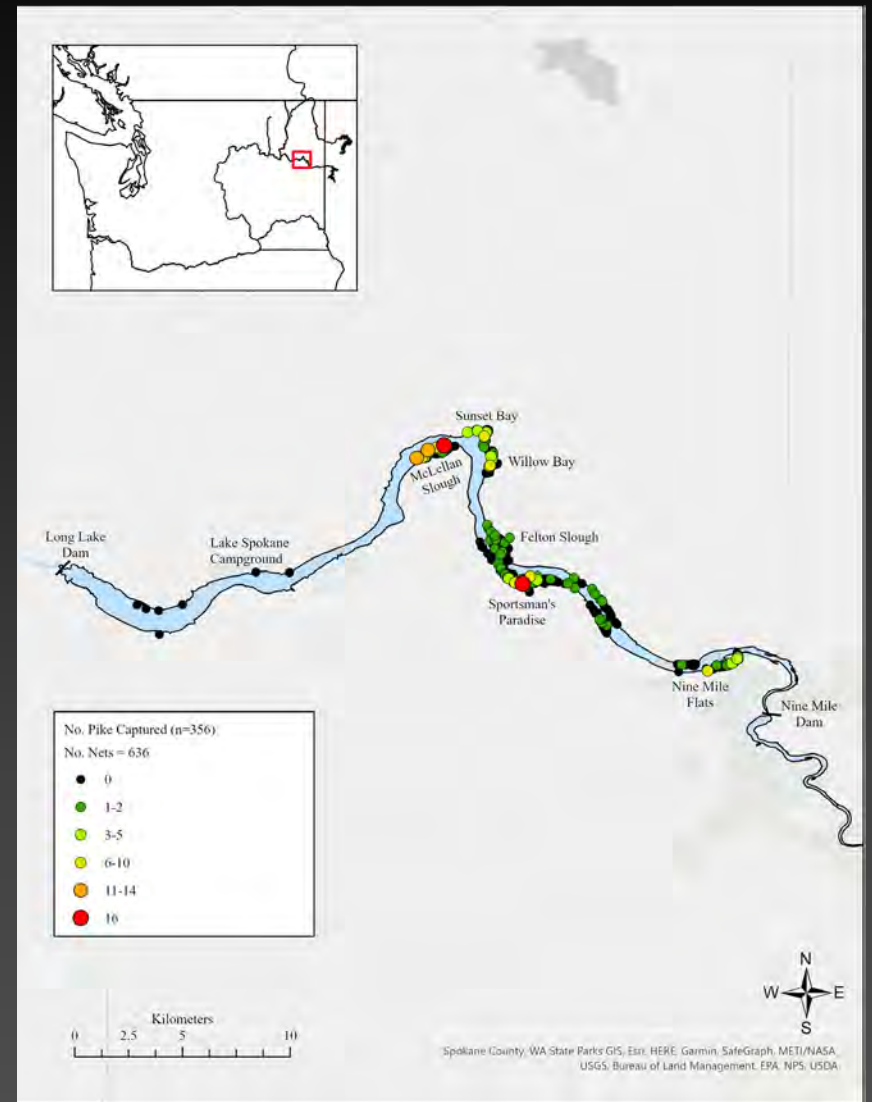
- 2017 (n=150; CPUE 3.26)
- 2018 (n=34; CPUE 1.06)
- 2019 (n=98; CPUE 4.29)



Northern Pike Suppression



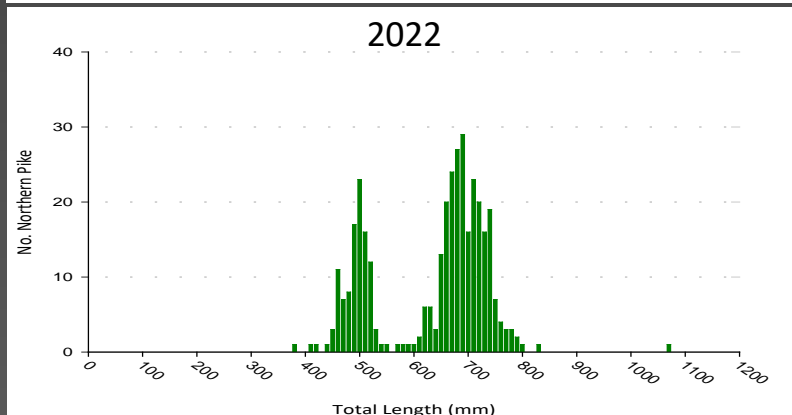
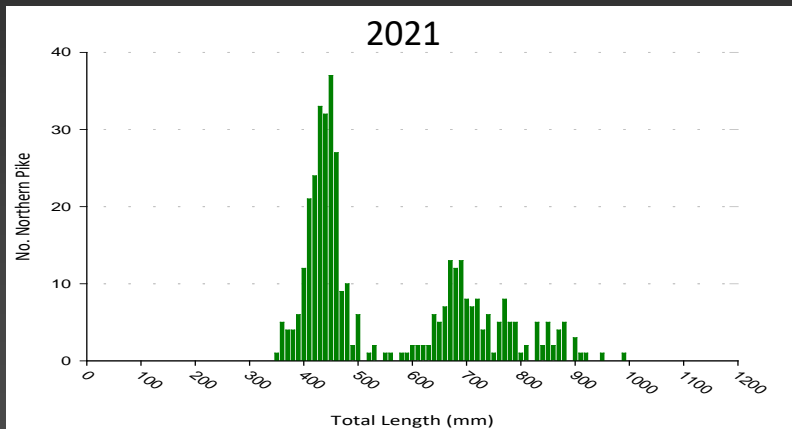
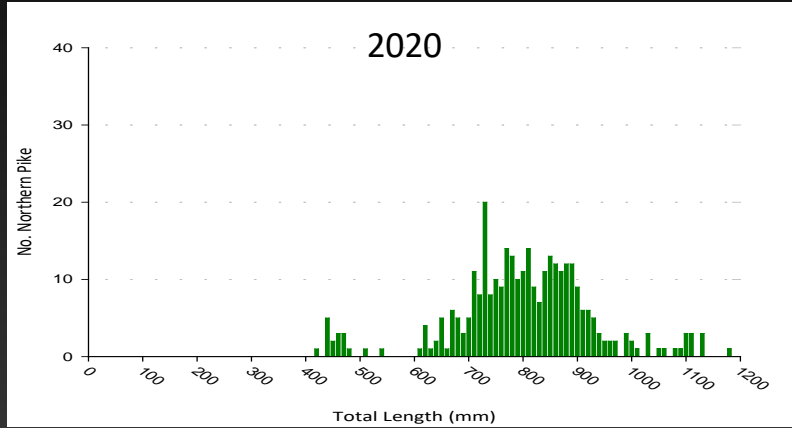
Year	Net Type	No. Nets	NP	CPUE (NP/Net)	Ep
2020	SPIN	40	54		
	Carp	246	270	1.13	0.47
	Total	286	324		
2021	SPIN	207	357		
	Carp	254	39	0.86	0.35
	Total	461	396		
2022	SPIN	273	330		
	Carp	363	26	0.56	0.21
	Total	636	356		



2022 Biometrics

- Mean TL: 638 mm (25.1 in)
- TL Range: 381-1,074 mm (15.0-42.3 in)
- Mean WT: 2,241 (4.9 lbs)
- WT Range 330-10,000 g (0.73-22.0 lbs)

Impacts of Suppression on the Northern Pike Population



Next Steps

Develop Standardized Monitoring Program to help guide management actions.

Limit Northern Pike abundance at Lake Spokane to a level where their impacts on resident and downstream fisheries are negligible.

Continue Public Outreach to educate the public regarding suppression activities.

Questions?

