Northern Pike Management in Washington State

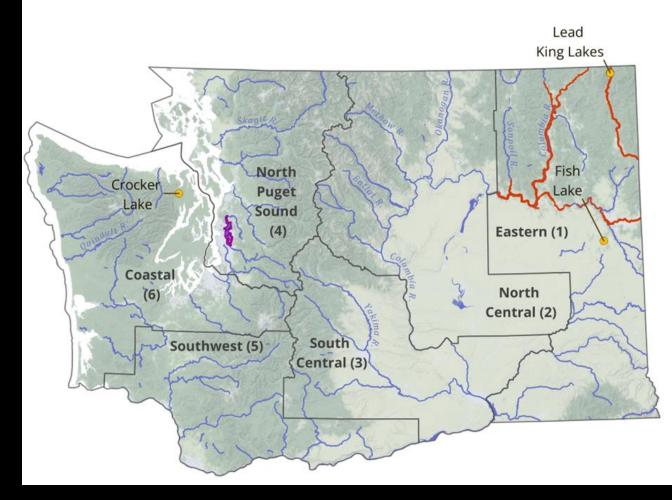




Washington Department of Fish and Wildlife: Charles Lee and Tyler Parsons

Current Suppression and Monitoring

- Box Canyon Reservoir (Pend Oreille River)
 - Kalispell Tribe, WDFW
 - Monitoring (SPIN) 2010-Present
 - Suppression 2012-Present
- Boundary Reservoir (Pend Oreille River)
 - Kalispell Tribe, WDFW
 - Monitoring and Suppression 2016-Present
- Lake Roosevelt (Columbia River)
 - CTCR, STI, WDFW
 - Monitoring (2015 Present)
 - Suppression (2017 Present)
- Lake Spokane (Spokane River)
 - WDFW
 - Suppression (2020-Present)

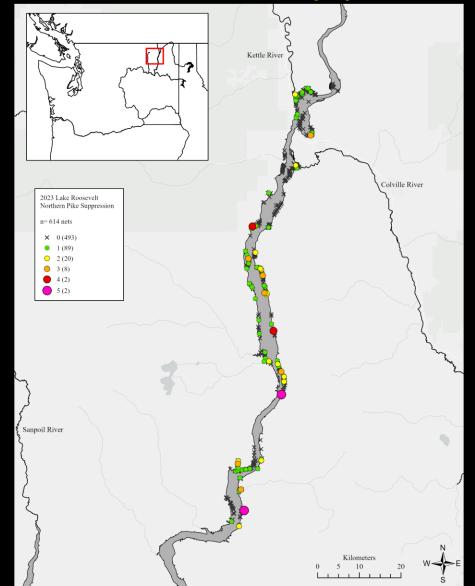


Washington Department of Fish and Wildlife Northern Pike Suppression



2023 FDR Suppression

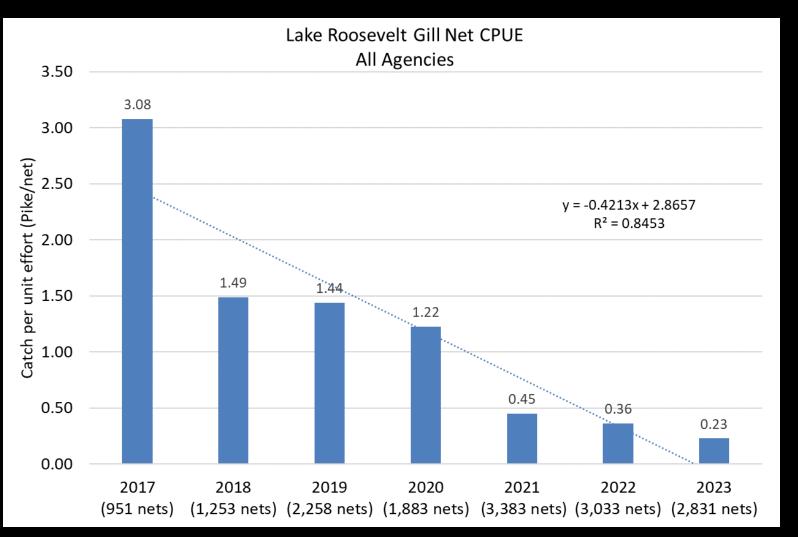
- Effort: 614 Nets
- Total NP: 171
- CPUE: 0.28 NP/Net
- Proportion Positive Catch: 0.20
- Mean TL: 485 mm; (19.1 in)
- TL Range: 320-745 mm; (12.6–29.3 in)
- Mean WT: 927 g (2.0 lbs)
- WT: 150-3,100 g (0.3-6.8 lbs)
- Sex Ratio: 1.1:1 (M:F)
- 23 Species: 6,637 Total Fish



| Year | Nets | NP | |
|-------|-------|-------|--|
| 2019 | 30 | 34 | |
| | | | |
| 2020 | 90 | 200 | |
| | | | |
| 2021 | 1,203 | 608 | |
| | Seine | 209 | |
| | | | |
| 2022 | 1,055 | 463 | |
| | | | |
| 2023 | 614 | 171 | |
| | | | |
| Total | 2,378 | 1,514 | |



Collaborative Northern Pike Suppression



Confederated Tribes of the Colville Reservation

Spokane Tribe of Indians

Washington Department of Fish and Wildlife

> All Hands Participants

<u>2015-Present</u>

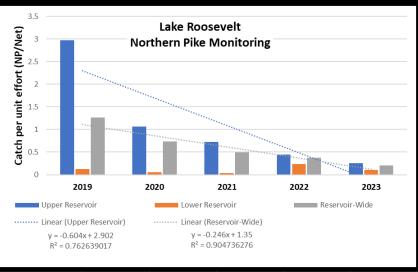
19,559 NP Removed All Gears (Approximately 14K removed via Gill Net)

Other gears include: EF, Seine, Fishery, Reward, Fyke, Angling

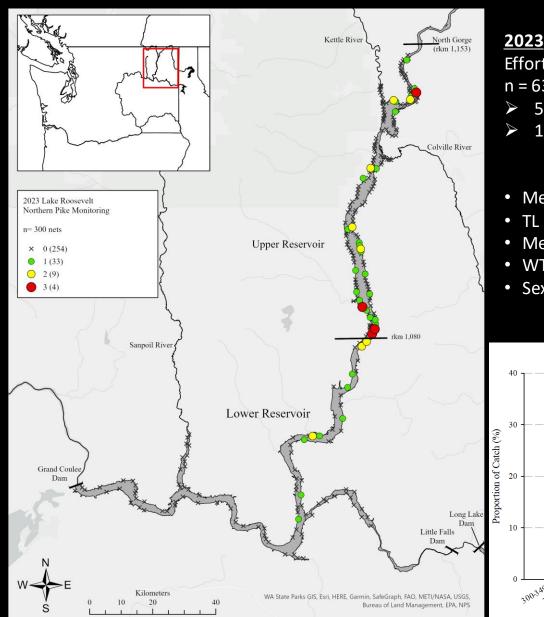
Lake Roosevelt Northern Pike Monitoring

Monitoring Survey Design

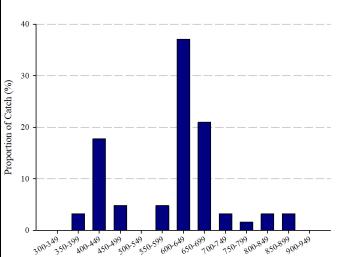
- Fall Season (first week of November)
- Geospatial Random-Tessellation Stratified (GRTS)
- Stratified
 - Upper Reservoir (200 nets)
 Lower Reservoir (100 nets)
- Spatially Balanced
- Equal Probability
- Northern Pike Habitat
 - Slope 25%
 - Depth <50 ft



| | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------|------|------|------|------|------|
| | | | | | |
| Upper Reservoir | 2.97 | 1.06 | 0.72 | 0.44 | 0.26 |
| Lower Reservoir | 0.13 | 0.06 | 0.04 | 0.24 | 0.11 |
| Lower Reservoir | 0.15 | 0.00 | 0.04 | 0.24 | 0.11 |
| Reservoir-Wide | 1.26 | 0.73 | 0.49 | 0.37 | 0.21 |

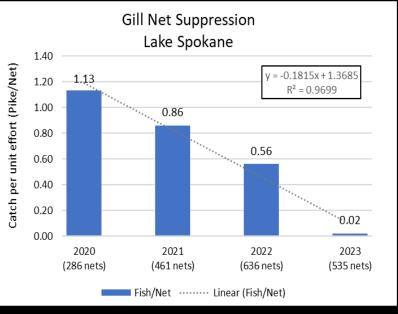


- Effort = 300 Nets n = 63 Total Northern Pike 52 Upper Reservoir 11 Lower Reservoir
- Mean TL: 600 mm (23.6 in)
- TL Range 355-880 mm (14.0-34.6 in)
- Mean WT: 1,769 g (3.9 lbs)
- WT: 330 6,220 g (0.7 13.7 lbs)
- Sex Ratio: 0.9:1.0 (M:F)



Total Length (mm)

Northern Pike Suppression at Lake Spokane

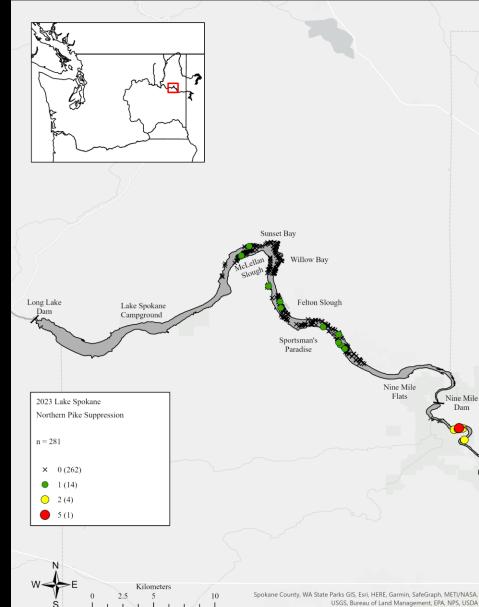


2023 Lake Spokane Efforts = 535 Nets N = 11 Northern Pike CPUE = 0.02 NP/Net

- Mean TL: 624 mm (24.6 in)
- TL Range: 472-754 mm (18.6-29.7 in)
- Mean WT: 1,964 g (4.3 lbs)
- WT Range 1,964 g (1.4-7.8 lbs)

<u>2020-2023</u>

1,918 Nets Set 1,087 Northern Pike Removed



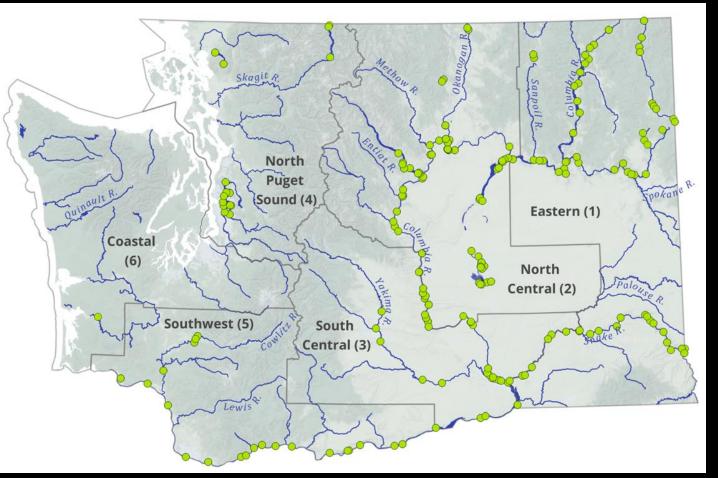


2023 Nine Mile Reservoir Effort = 12 Nets N = 16 Northern Pike CPUE = 1.33 NP/Net

- Mean TL: 784 mm (30.9 in)
- TL Range: 666-1,080 mm (26.2-42.5 in)
- Mean WT: 4,383 g (9.7 lbs)
- WT Range 2,190 10,580 g (4.8-23.3 lbs)

Early Detection

eDNA Sampling Initiated in 2019

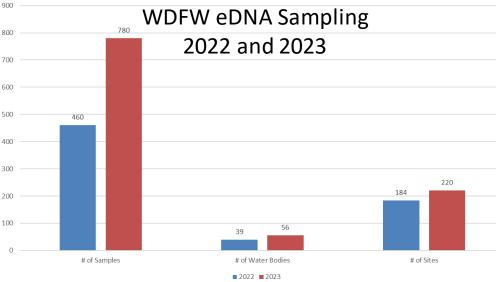


WDFW 2023

- 56 Water Bodies throughout Washington State
- 220 Sites
- 780 Samples

No New Detections





Northern Pike Rapid Response

STATE OF WASHINGTON INTERAGENCY NORTHERN PIKE RAPID RESPONSE PLAN

June 2023

FOUR PEAKS

ENVIRONMENTAL

Prepared for

Washington Department of Fish and Wildlife Natural Resources Building 111 Washington St SE Olympia, Washington 98501

Prepared by

Four Peaks Environmental Science & Data Solutions 338 South Mission Street Wenatchee, Washington 98801

Prevention and Early Detection

► Rapid Response Activities

Extended Response Activities

Thanks to our many partners.



Questions?

