

Sutherland Reservoir

2022 Fall Survey Summary



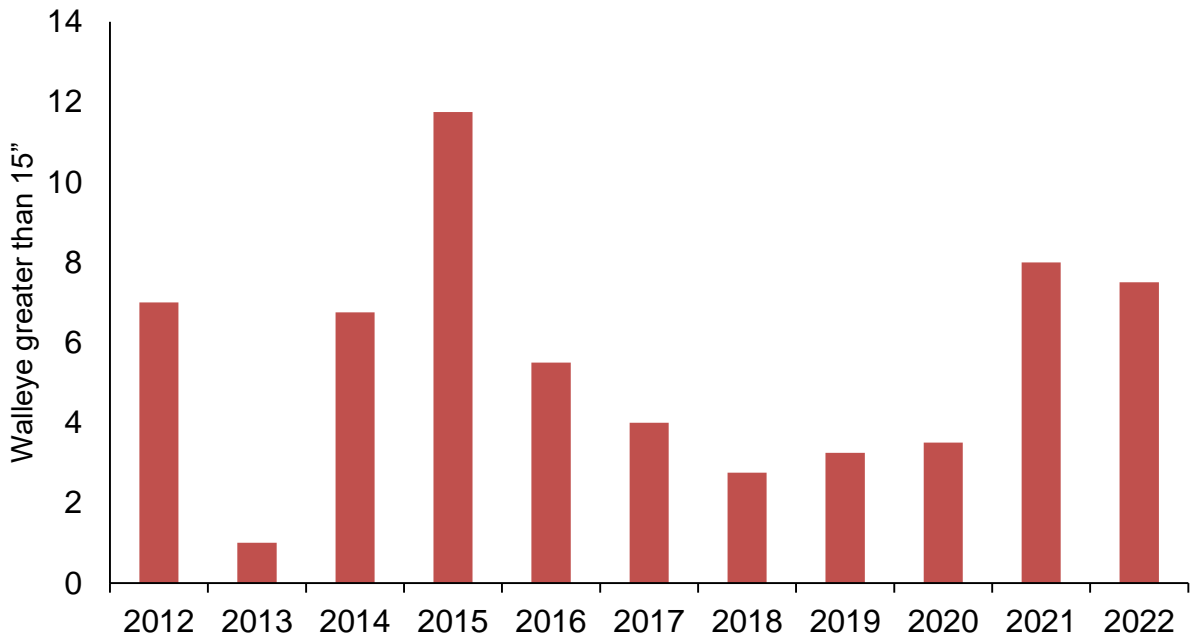
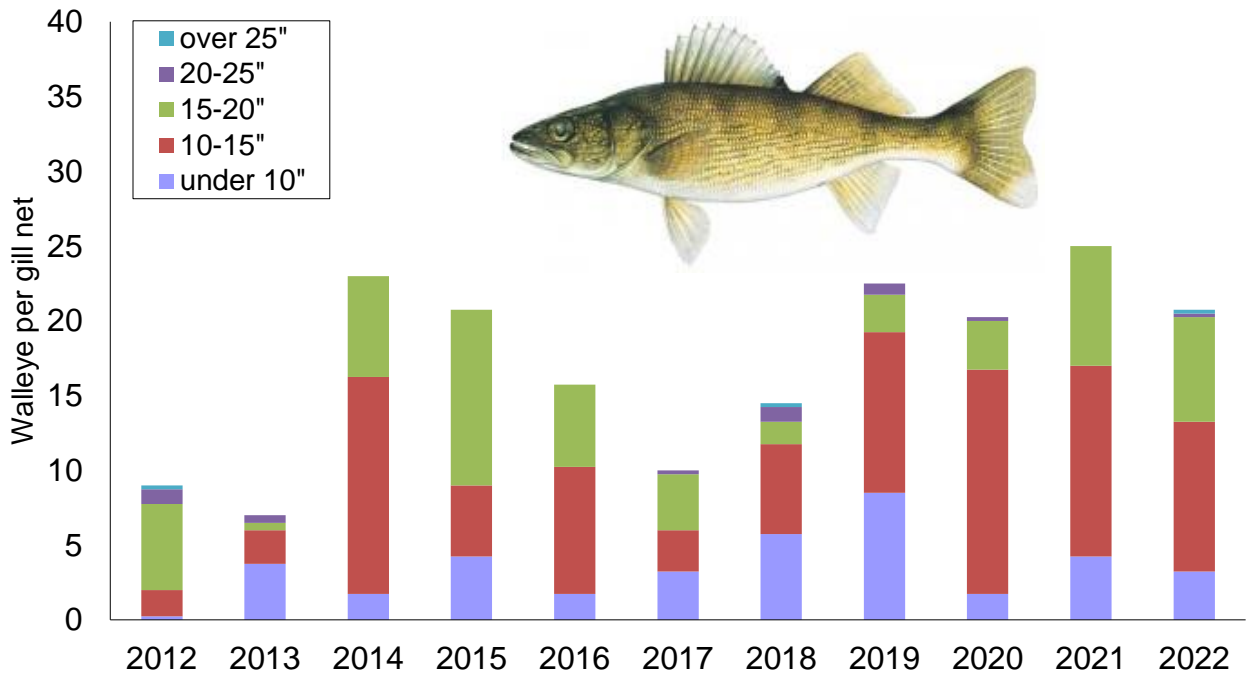
Jared Lorensen, Fisheries Biologist

Sutherland Reservoir is the first canal reservoir downstream from Lake McConaughy. This 3,000 acre reservoir is utilized for cooling Nebraska Public Power District's (NPPD) Gerald Gentleman Station. This results in warmer water temperatures earlier in the spring and later into the fall. Sutherland Reservoir offers additional unique fishing opportunities as it has characteristics not found at many other waterbodies such as inlet, outlet and cooling pond fisheries. Check the [2023 Fishing Guide](#) for regulations concerning Sutherland's Fishery.



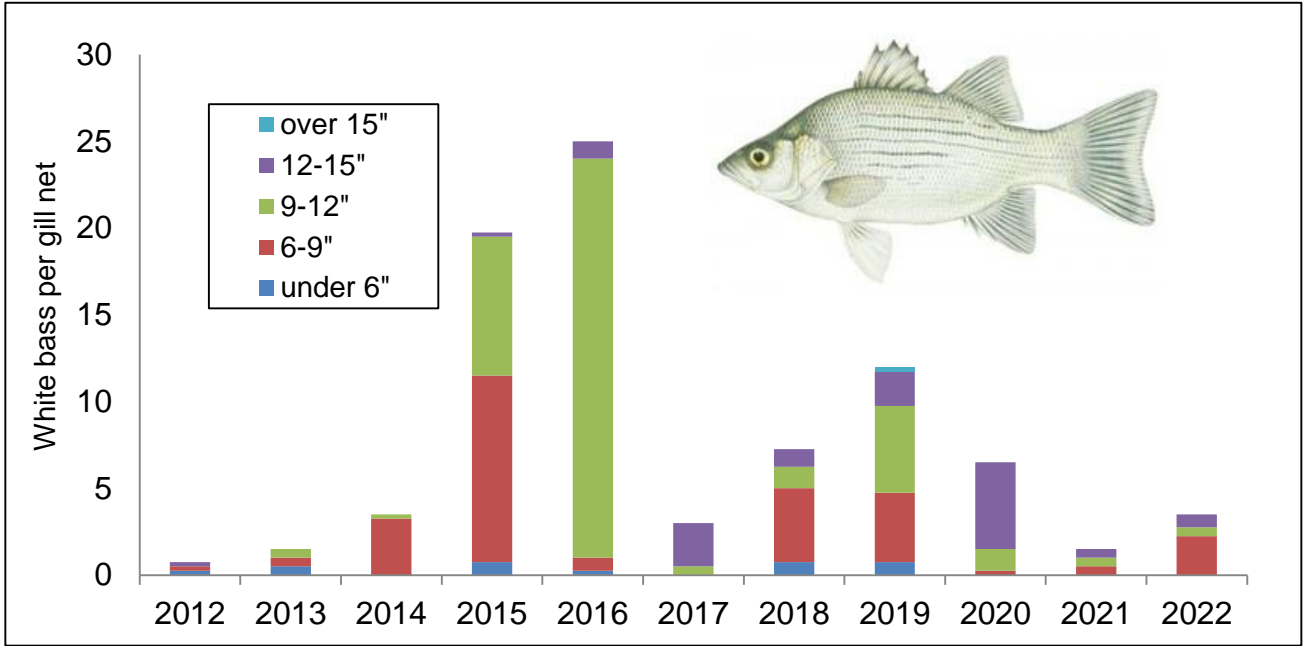
Information collected from standard surveys allows biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations. This information also assists Game and Parks staff in guiding anglers to waterbodies that have the desired populations. For more explanation of what constitutes a fisheries survey read the [Survey Says](#) article.

Walleye



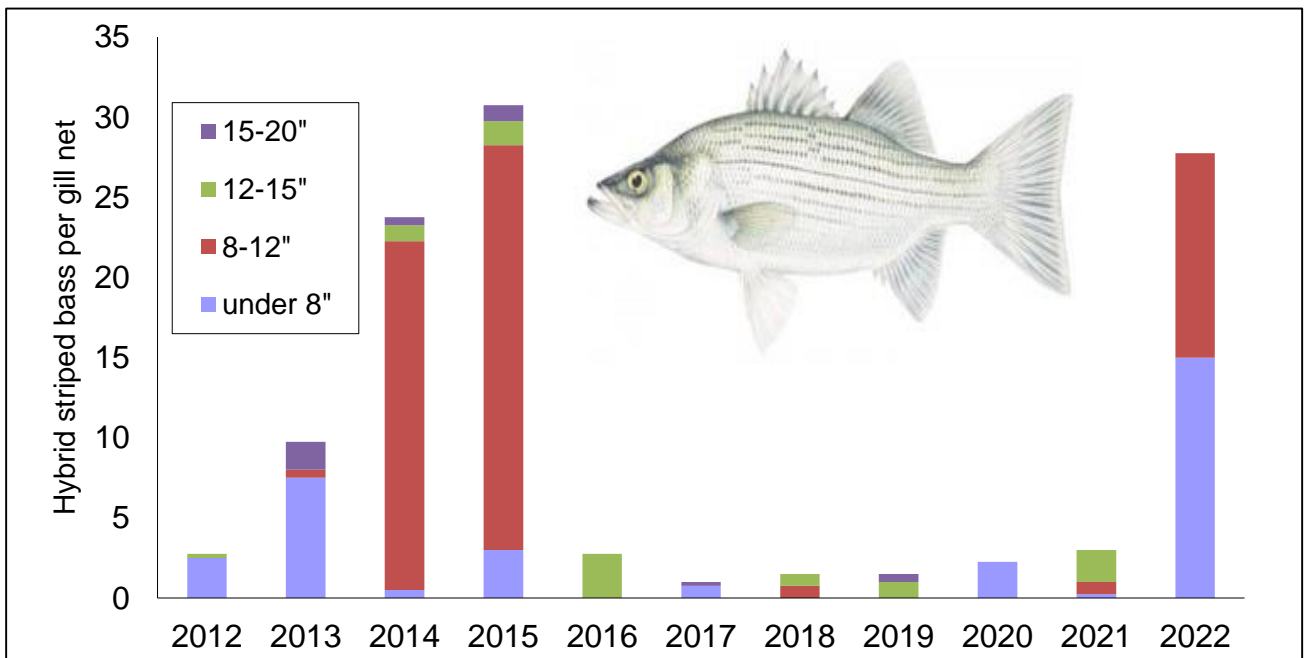
In 2022, 20.5 walleye were sampled per gill net. This catch was higher than the ten year average of 17. Abundance of young-of-year walleye in the 2022 survey is encouraging for future angling. Current age data analysis indicates that Sutherland's walleye reach 15 inches in two years.

White bass



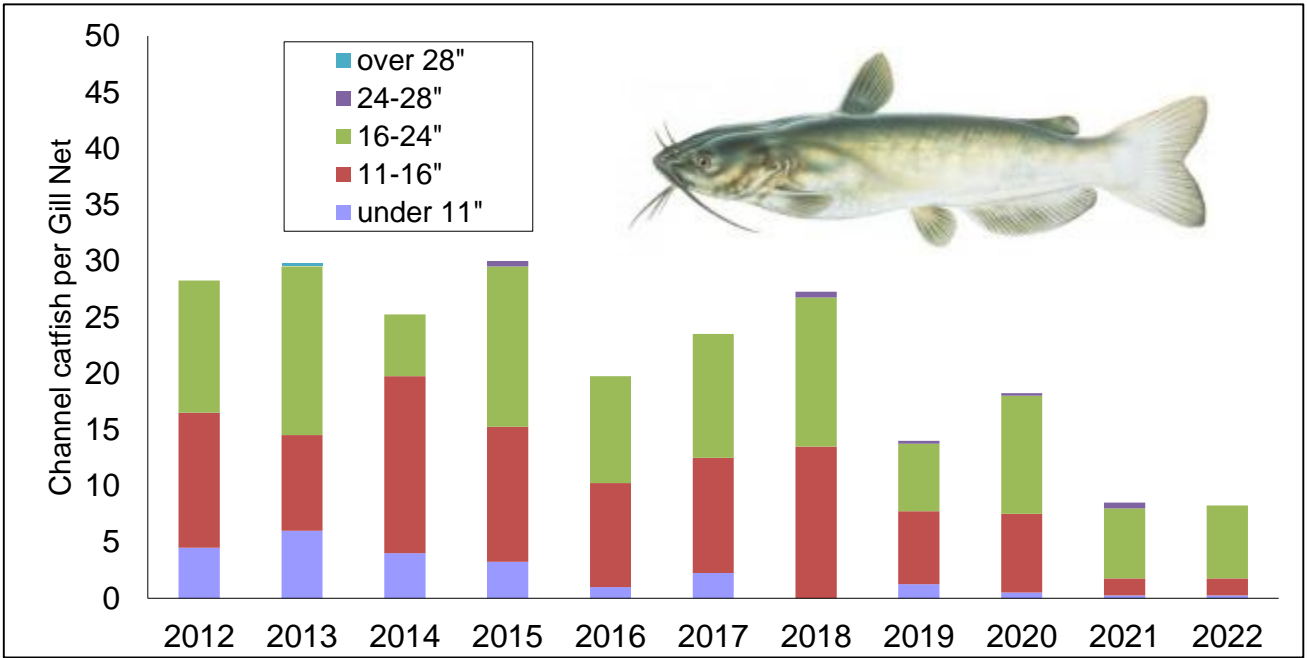
A slight increase in white bass abundance was observed with 3.5 white bass per gill net but this value is lower than the 10 year average of 7.7. The white bass surveyed during 2022 had a mean length of 9". The longest sampled (13.5") was three years old.

Hybrid striped bass (Wiper)



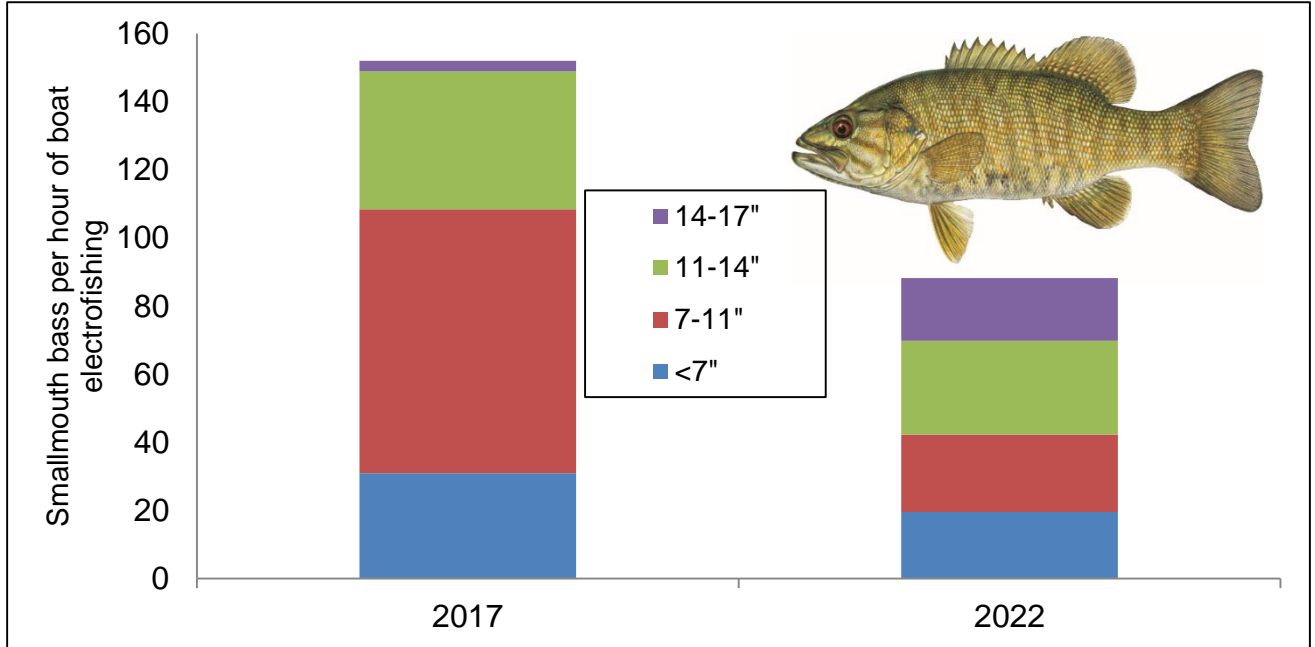
The 2022 survey captured 27.75 per net. All were young-of-year attributed to 2022's stocking of 700,000 fry. Anglers should differentiate between wiper and white bass as wiper have much greater growth potential and can reach 15 inches in two years.

Channel catfish



During 2022, 8.25 channel catfish were sampled per net. Of these, 4% were less than 11 inches, 18% 11 to 16 inches and 78% 16 to 24 inches. Channel catfish are not stocked into Sutherland Reservoir as natural recruitment supports the fishery.

Smallmouth bass



The 2022 smallmouth bass survey was smaller in quantity but produced more quality sized smallmouth than 2017's survey. The 2022 survey produced 22% less than 7 inches, 26% 7 to 11 inches, 31% 11 to 14 inches, and 21% 14 to 17 inches. The largest specimen sampled during the 2022 survey measured approximately 16" and weighed 2 lbs. Surveys that target smallmouth bass are expected to increase in frequency at Sutherland.

Stockings



Sutherland Reservoir receives stockings from NGPC's Hatchery System every year. In many cases, stocking requests come to fruition but many dynamics can affect the outcome and for this reason future stocking requests are tentative (*). For more stocking details access [NGPC's Stocking Reports](#).

<u>Stocking Year</u>	<u>Walleye</u>	<u>Hybrid Striped Bass</u>
2012	74,308-1.35"	9,889-2"
2013	75,048-1.3"	29,594-1"
2014	75,840-1.4"	30,000-1.3"
2015	105,000-1.5"	30,300-1.5-2"
2016	75,524-1.5"	
2017	104,960-1.25"	22,500-1"
2018	75,000-1.25" & 2,800,000-fry	15,370-1.25"
2019	133,890-1.25"	15,393-1"
2020	15,772-0.75"&59,202-1"	15,000-1.25"
2021	121,156-1"	
2022	75,600-1.25"	700,000-fry
*2023	105,000-2"	

Angler Survey

The Nebraska Cooperative Wildlife and Fisheries Research Unit in conjunction with NPPD conducted an angler creel survey of Sutherland. Another creel survey will take place during 2024.

From April through October 2022, 729 angler parties were interviewed about their angling trip. The below tables reflect values from these interviews and the comparable survey that happened in 2021. The first table compares values of the total caught while the second table compares total harvested. During 2021, $9,696 \pm 653$ hours of angling effort was made by bank anglers and $10,782 \pm 1,225$ hours by boat anglers. During 2022, $11,437 \pm 519$ hours of angling effort was made by bank and $22,598 \pm 2,318$ hours from boat.

	Total caught 2021	Total Caught 2022
Walleye	9,091	12,075
White bass	3,359	866
Hybrid Striped bass	297	264
Channel catfish	4,037	5,074
Smallmouth bass	2,593	3,345

	Total Harvest 2021	Total Harvest 2022
Walleye	2,366	4,176
White bass	947	322
Hybrid Striped bass	180	138
Channel catfish	2,079	2,197
Smallmouth bass	95	63



Angler Access

During November 2022, the Hershey Beach boat ramp at Sutherland's State Recreation Area (SRA) was repaired to address erosion issues. This project also included, installation of a light near the ramp to aid in boat launching activities.



Pre-Project



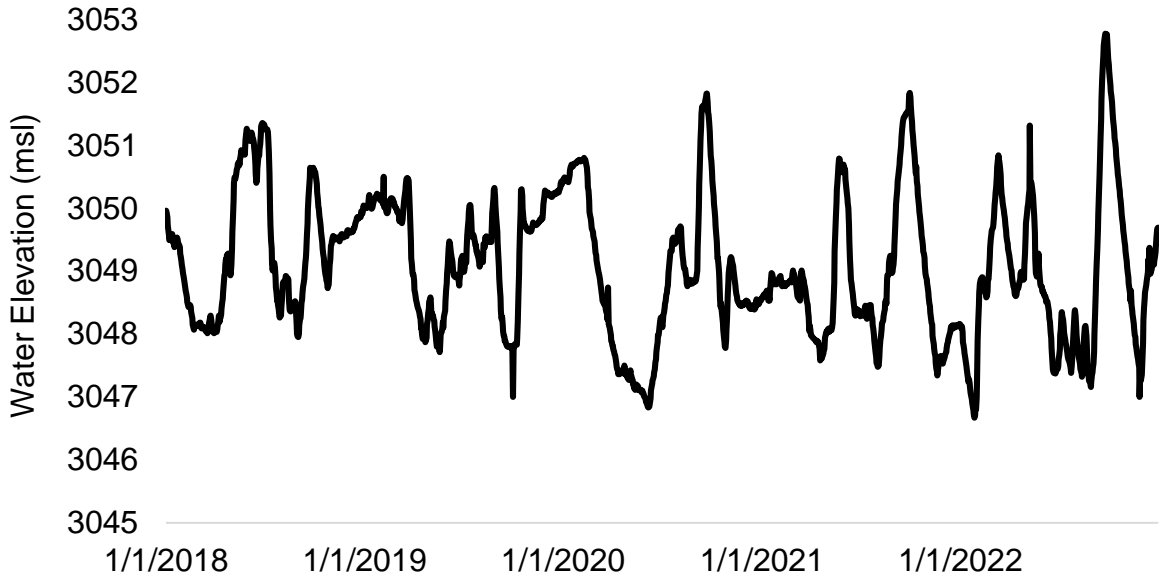
Post-Project



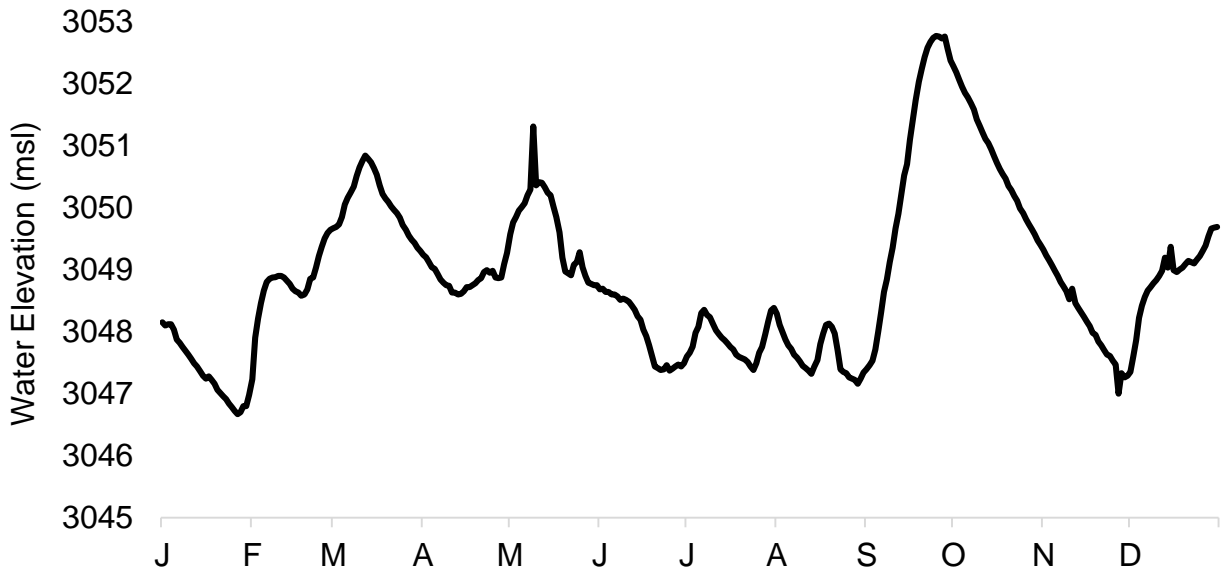
Post-Project

Water Elevation

2018-2022

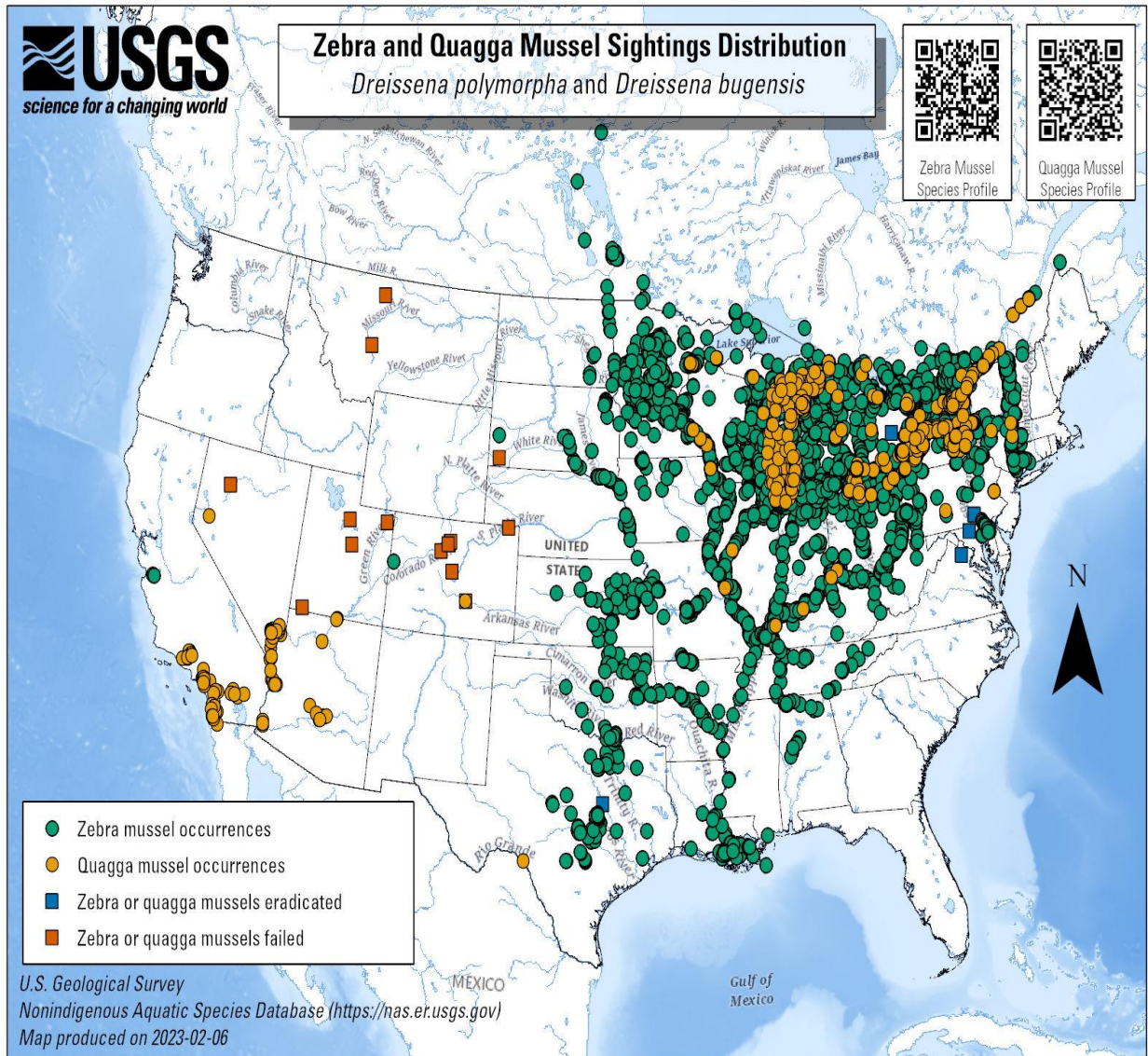


2022



Sutherland Reservoir's water level fluctuates often due to its usage in cooling Gerald Gentleman Station and providing downstream flows. Access [NPPD's Water Data](#) to follow water level fluctuations.

Aquatic Invasive Species (AIS)



- [Zebra mussel](#) distribution is expanding, especially in Kansas and South Dakota. Currently the only waterbodies in Nebraska with confirmed zebra mussel infestations are the Missouri River, Lewis and Clark Lake, Lake Yankton and Offutt Base Lake.
- NGPC employs technicians to inspect watercraft for AIS with the goal of preventing infestations. In 2022, 6,627 watercraft were inspected statewide and more are planned in 2023.
- **To report AIS utilize 402-471-7602 or ngpc.ais@nebraska.gov**

If you have questions or concerns about Sutherland Reservoir's fishery please contact Jared Lorensen, Biologist 308-535-8025, jared.lorensen@nebraska.gov
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