Sutherland Reservoir
2019 Fall Survey Summary

Jared Lorensen, Fisheries Biologist

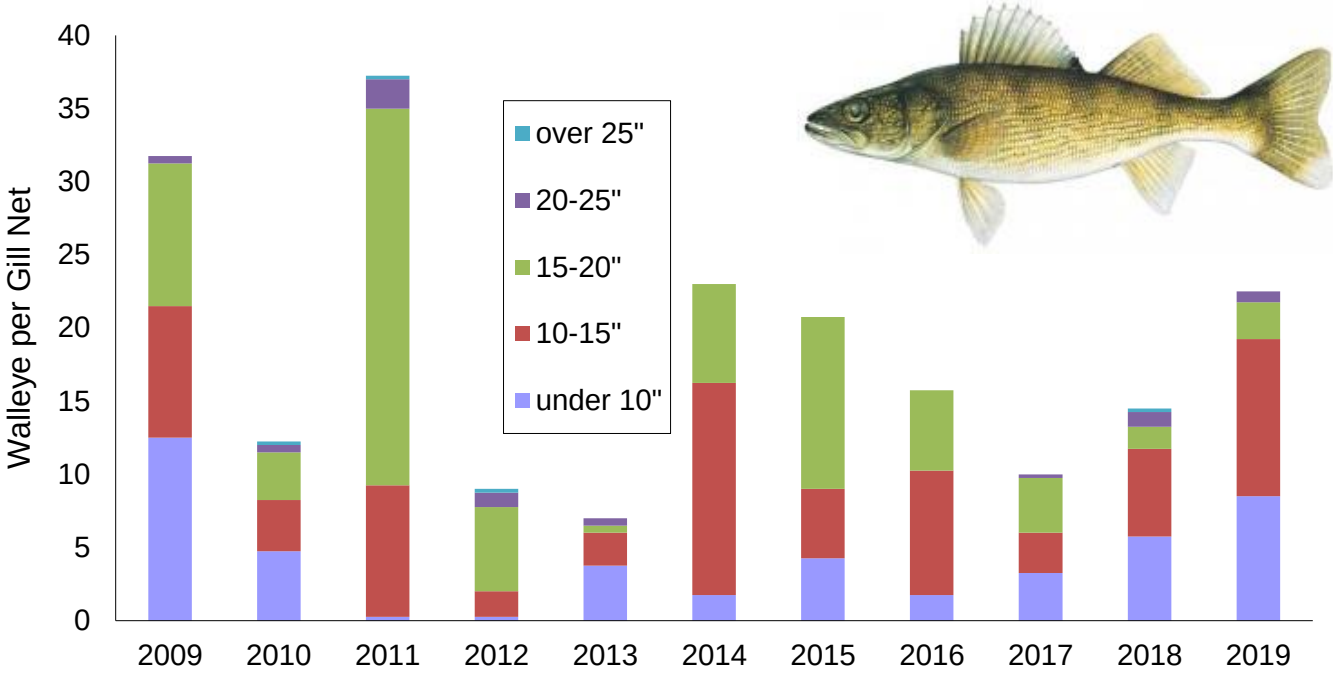
Sutherland Reservoir is the first canal reservoir downstream from Lakes McConaughy and Ogallala. This 3,000 acre reservoir is utilized for cooling of Nebraska Public Power District's (NPPD) Gerald Gentleman Station. This results in warmer water temperatures earlier in the spring and later into the fall. Sutherland Reservoir offers unique fishing opportunities as a result of its functionality. Check the 2020 Fishing Guide for regulations concerning Sutherland's Fishery.

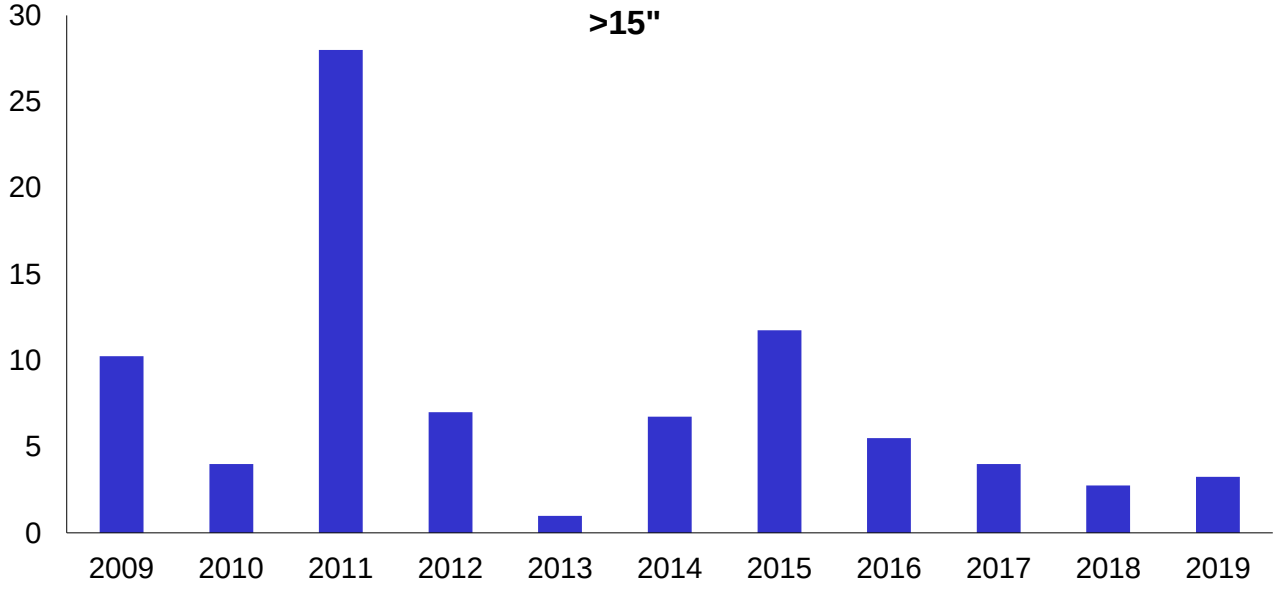
Information collected from standard surveys allows biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations.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

The following text and graphs are the result of the 2019 gill netting survey at Sutherland Reservoir. Graphs represent number of each species captured per gill net by length group. For comparative purposes it also shows results from previous years.

Standard Population Survey Results

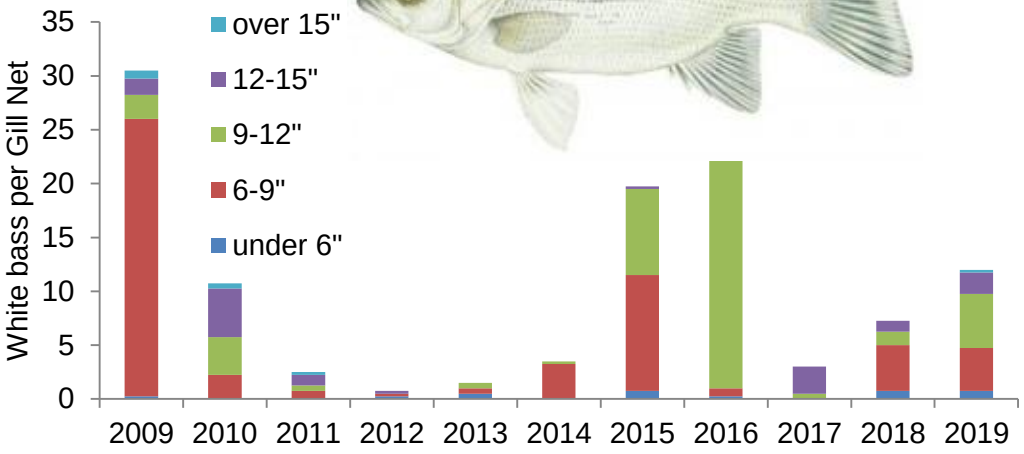
Walleye





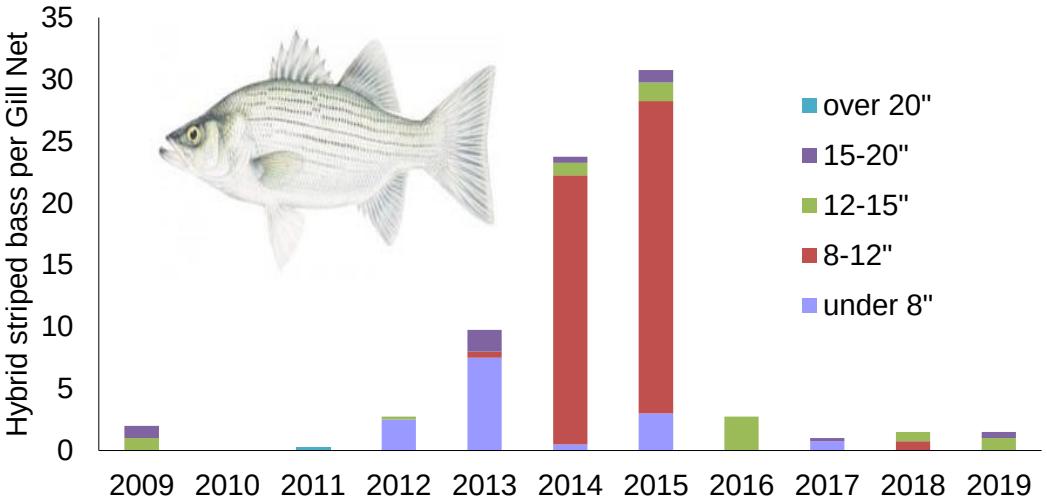
An upward trend in walleye abundance was continued with 2019's survey data. In 2019, 22.5 walleye were sampled per gill net with 38% less than 10", 48% 10-15", 11% 15-20", 3% 20-25" and 0% over 25". Abundance of young-of-year walleye in the survey is encouraging for future angling. Current age data analysis data indicates that Sutherland's walleye reach 15" in approximately two years.

White bass



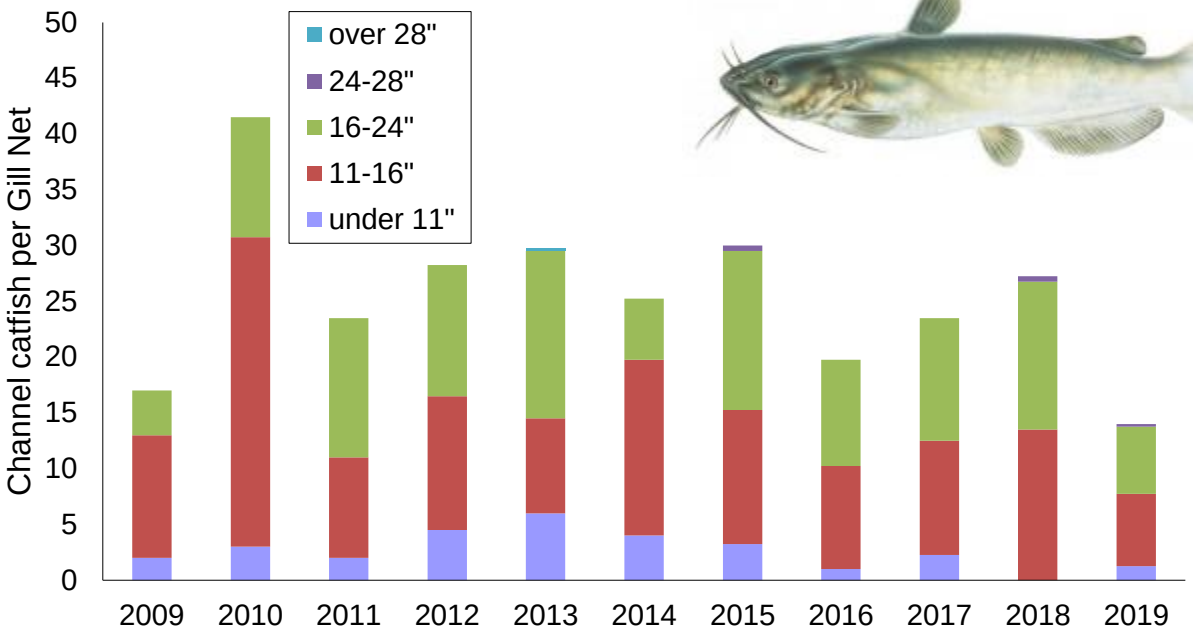
An increase was observed in 2019's survey with 12 white bass per gill net. The white bass surveyed during 2019 had a mean length of 9.6". This sample contained 6% under 6", 33% 6-9", 42% 9-12", 17% 12-15" and 2% greater than 15". Natural reproduction supports this cyclical white bass fishery (42% of 2019's sample were produced during 2018)

Hybrid striped bass (aka wiper)



The 2019 survey captured 1.5 wiper per net. A low density population consisting of large individuals (> 20") is desired. Anglers need to identify species of catch to differentiate between white bass and hybrid striped bass. Release of hybrid striped bass will allow these fish to reach their growth potential. Access the NGPC Fish Identification Guide for tips on identifying these species prior to harvest. In addition to what this website states, hybrid striped bass have more than one stripe that extends to the tail.

Channel catfish



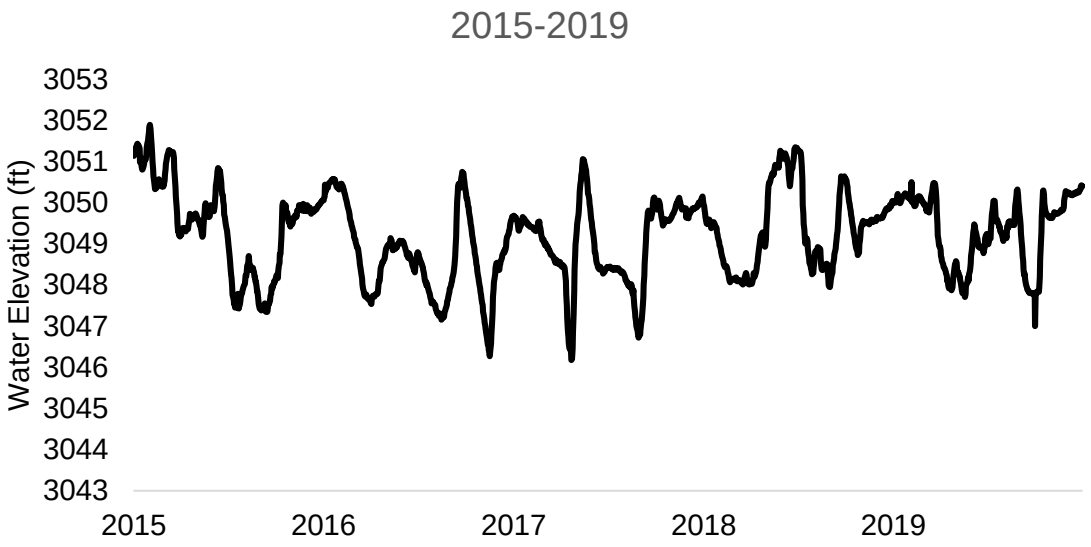
Channel catfish were sampled in below average quantity during 2019 with 27.25 sampled per gill net. Of these, 9% were <11", 46% 11-16", and 43% 16-24" and 2% 24-28". Sutherland has one of the largest and most stable channel catfish fisheries in the state so this lower catch occurrence is likely an outlier. Channel catfish are not stocked into Sutherland Reservoir as natural recruitment supports the fishery.

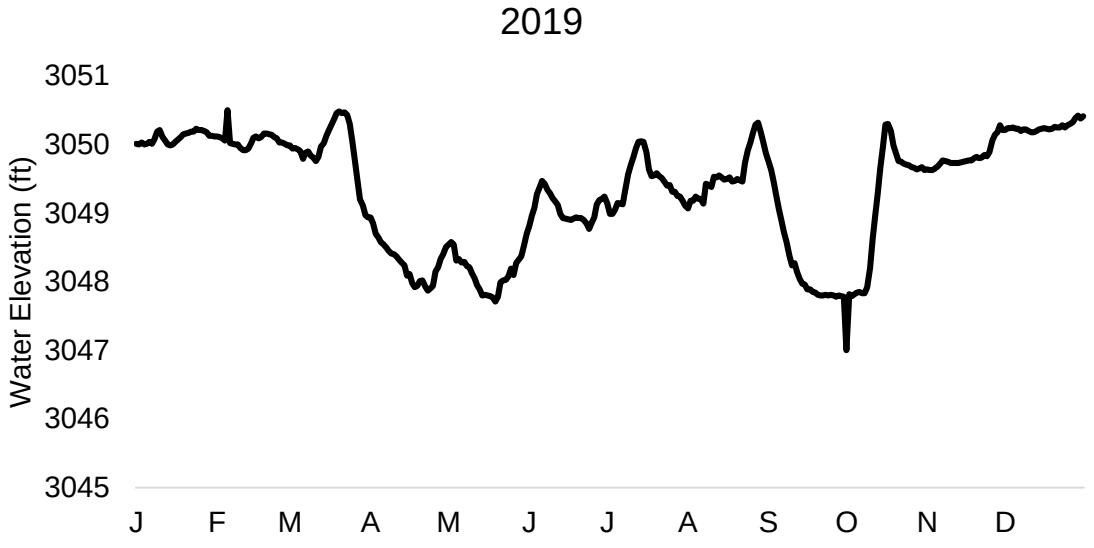
Stockings

Sutherland Reservoir receives stockings from NGPC's Hatchery System every year. For more stocking details access NGPC's Stocking Reports.

Stocking Year	Walleye	Hybrid Striped Bass	White bass
2009	79,299-1.5"		
2010	76,842-1.3"		
2011	79,988-1"		400,000-0.1"
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"	

Water Elevation





Sutherland Reservoir's water level fluctuates often and plays a vital role on the fishery. Access NPPD's Water Data to follow water level fluctuations.

If you have questions or concerns about Sutherland Reservoir's fishery please contact
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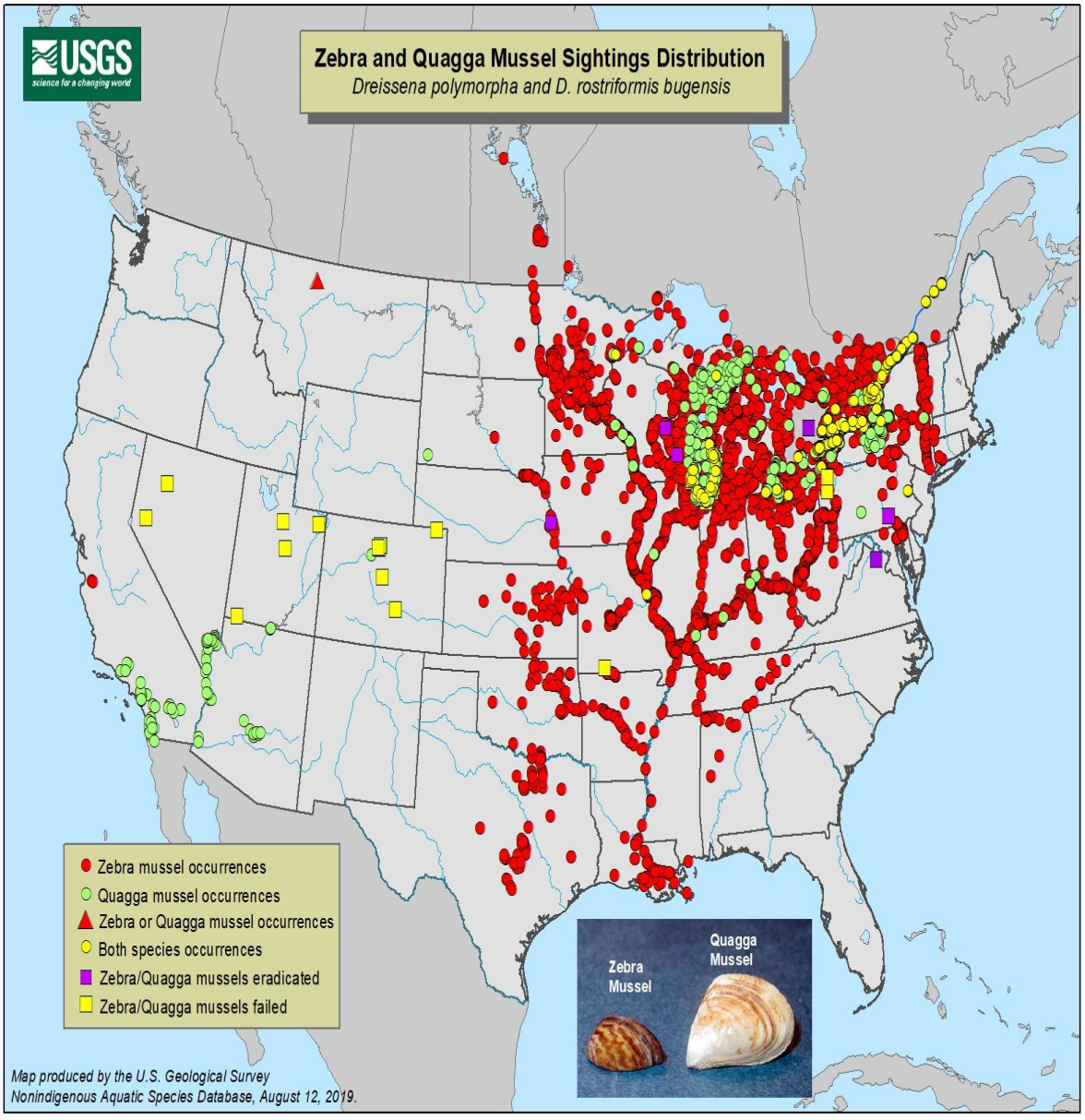
Aquatic Invasive Species (AIS)

Distribution of zebra and quagga mussels is growing. The most recent finding in Nebraska was Glen Cunningham Lake in Omaha during 2018. The below map portrays the spread of these invasive mussels. Access U.S. Geological Society's Site for more information.

In 2016, Nebraska boaters became required to possess a Aquatic Invasive Species (AIS) Stamp. Residents acquire the stamp when registering their watercraft. Nonresidents have to purchase a physical sticker that must be displayed on their watercraft.



Aquatic Invasive Species (AIS)

STOP AQUATIC HITCHHIKERS!™

According to Nebraska State Law, it is illegal for watercraft to enter a Nebraska waterbody or leave a launch area while containing water. This includes all containers, compartments, and equipment that are permanently attached to the watercraft.

AND

All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

Protect Your Waters—Remember to *CLEAN*, *DRAIN*, and *DRY!*

NEBRASKA GAME PARKS