# **Sutherland Reservoir 2014 Fall Survey Summary**



Jared Lorensen, Fisheries Biologist

Sutherland Reservoir is the first canal reservoir downstream from Lakes McConaughy and Ogallala. This 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. Notice these aspects and special regulations on NPPD's Recreation document.

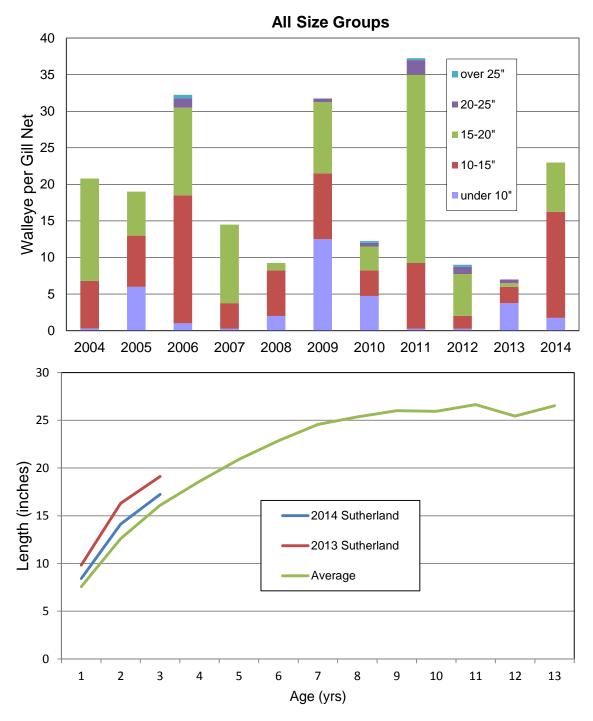


Information collected from standard surveys allows biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations. This information also assists Game and Parks staff in guiding anglers to waterbodies that have the desired populations for fishing. Every fall the fishery of Sutherland Reservoir is surveyed. For more information on survey techniques access <a href="NEBRASKAland's Fishery Survey Article">NEBRASKAland's Fishery Survey Article</a>.

The following text and graphs are the result of the 2014 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.

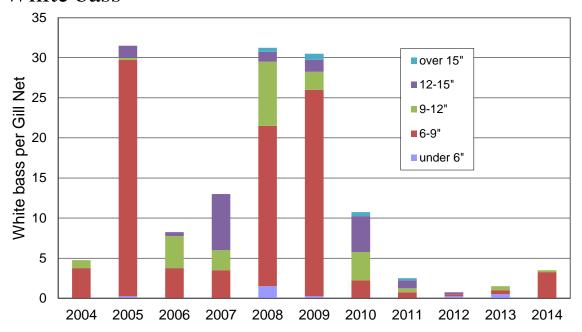
## Standard Population Survey Results

### Walleye



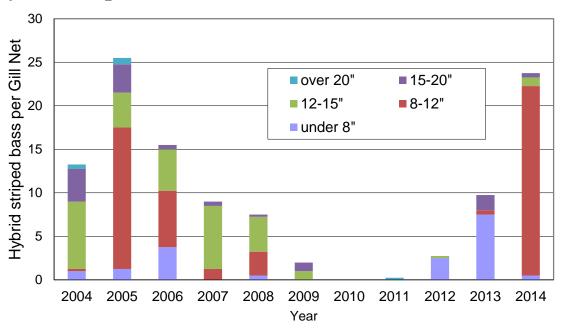
In 2014, 23 walleye were sampled per gill net with 8% less than 10", 63% 10-15", and 29% 15-20". Average length was 12". The abundance of 10-15" walleye observed in this survey bodes well for future walleye angling. NGPC personnel are able to calculate length at age of sampled fish. Walleye in Sutherland typically grow faster than average.

#### White bass



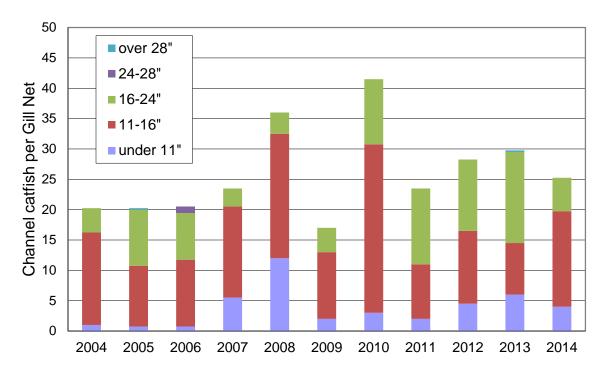
White bass catch rate was low with only 3.5 sampled per net with a mean length of 8". Natural recruitment supports the white bass fishery and angling success is typically observed by anglers at the inlet and boat anglers follow gulls to find feeding white bass.

### Hybrid striped bass



The 2014 survey was comprised of individuals from the 2012 and 2013 stockings. A low density population consisting of large individuals (> 20") is desired. Average length of those sampled was 9". Due to this abundance of small hybrid striped bass, anglers need to identify species of catch to differentiate between white bass and hybrid striped bass. Access the <a href="MSPC Fish Identification Guide">MSPC Fish Identification Guide</a> for tips on identifying these species prior to harvest.

#### Channel catfish



Channel catfish were sampled at or above above average quantity in 2014 with approximately 25 sampled per gill net with an average length of 13.4". Approximately 22% were longer than 16" and they ranged from 6 to 23". Channel catfish are not stocked into Sutherland Reservoir as natural recruitment supports the fishery.

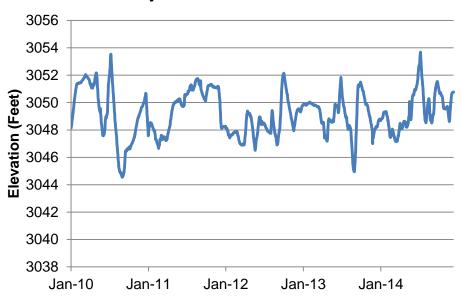
The daily bag limit of channel catfish at Sutherland Reservoir is 10 per day with a possession limit of 20 as of January 1, 2015. This regulation change was made to allow more harvest of channel catfish in this reservoir and canal reservoir system that supports abundant channel catfish populations. Notice fishing regulation changes in the 2015 Fishing Guide.



Sutherland Reservoir receives stockings from NGPC's Hatchery System every year. Many factors are at play when stocking selections are made. Below you will find Sutherland's stocking history for the past eleven years excluding some adult stockings during 2009. For this and more stocking details on Sutherland and other public waterbodies access <a href="MGPC's">MGPC's</a> Stocking Reports.

Stocking Year	<u>Walleye</u>	<b>Hybrid Striped Bass</b>	White bass
2004	75,000-1.25"	30,000-1.25"	460,000-0.1"
2005	80,738-1.5"	30,000-1"	
2006	75,950-1"	30,000-1.25"	
2007	75,225-1"	60,000-1.25"	
2008	83,300-1"	21,000-1.25"	
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"	

# **Sutherland Reservoir Water Level January 2010-December 2014**



# Sutherland Reservoir Water Level December 2013-December 2014



Sutherland Reservoir's water level fluctuates often. Access <u>NPPD's Water</u> Data to follow water level fluctuations.



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**

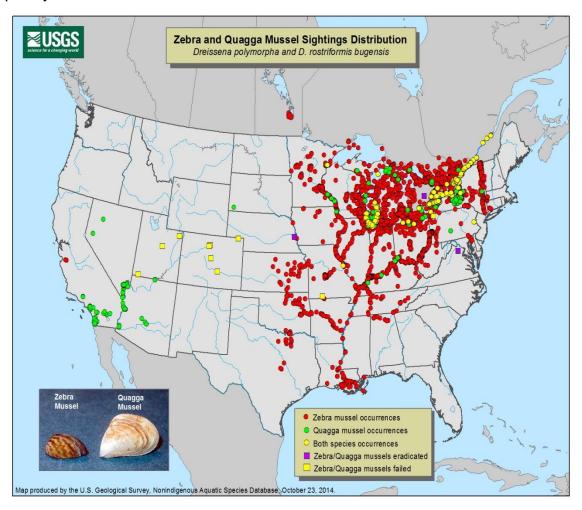
All aquatic vegetation must be removed from watercraft and trailers before leaving a launch area.

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



**New in 2015** - In addition to and to clarify the above regulation concerning Aquatic Hitchhikers - it is unlawful to arrive at or leave any waterbody in Nebraska with water other than from a domestic source (such as a water supply system, well, or bottled), except for fire-fighting purposes. This applies especially to boats, their compartments, equipment or containers that may hold water **but also** applies to bank anglers if using water holding devices to transport harvested fish.

Distribution of zebra and quagga mussels is getting nearer to SW Nebraska. The most recent finding in Nebraska was at Louis and Clark Reservoir during the fall of 2014. <u>USGS's Zebra and Quagga Mussel Sightings Distribution Map</u> is updated frequently.



If you have questions or concerns about Sutherland's fishery please contact

Jared Lorensen, Biologist 308-535-8025

jared.lorensen@nebraska.gov

Brad Newcomb, District Mgr. 308-865-5330

brad.newcomb@nebraska.gov