

# Sutherland Reservoir

## 2012 Fall Survey Summary



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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 than other reservoirs. Sutherland Reservoir offers unique fishing opportunities as a result of its functionality. Notice these aspects and special regulations at [http://www.nppd.com/assets/public\\_recreation.pdf](http://www.nppd.com/assets/public_recreation.pdf) and water level dynamics at [http://v1.nppd.com/About\\_Us/Energy\\_Facilities/facilities/water\\_data2.aspx](http://v1.nppd.com/About_Us/Energy_Facilities/facilities/water_data2.aspx).

Every fall the fishery at Sutherland Reservoir is sampled using experimental gill nets, a method commonly used to sample fish found primarily in open water, such as walleye, white bass, channel catfish and hybrid striped bass. These nets are made of clear monofilament mesh strung between a weighted line and a floating line. This mesh ranges in size from  $\frac{3}{4}$  of an inch to 3 inches and the nets are typically set perpendicular to the shoreline in 6 to 12 feet of depth during late afternoon with an orange floating buoy on the ends to deter boats from being entangled and for ease of retrieval. Gill nets create an invisible wall in the water column that fish cannot sense so they are entangled by their gills as they attempt to move through this mesh.

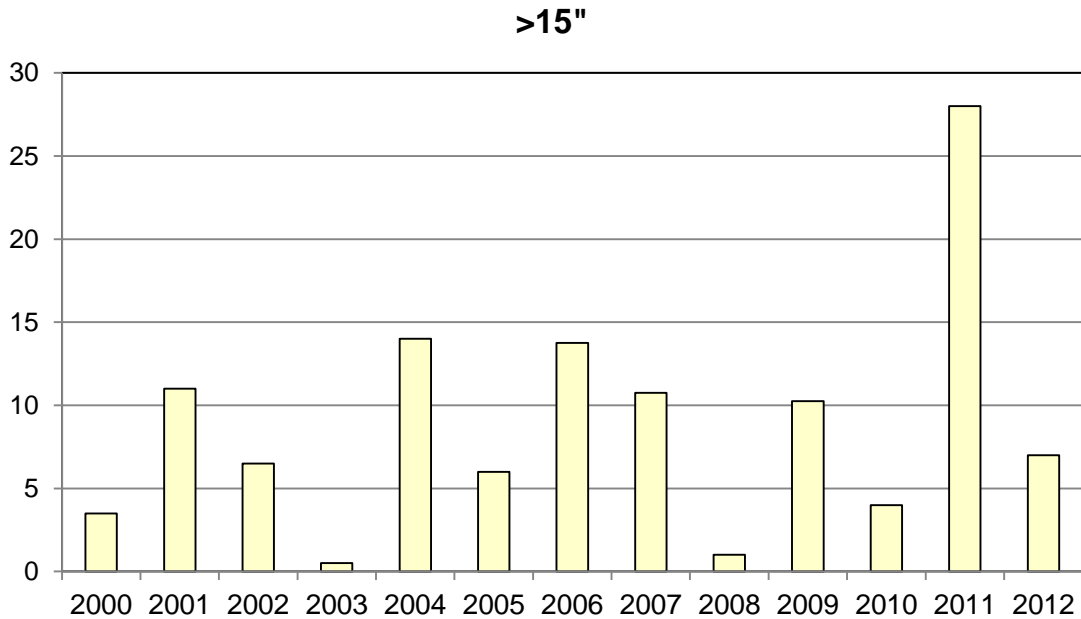
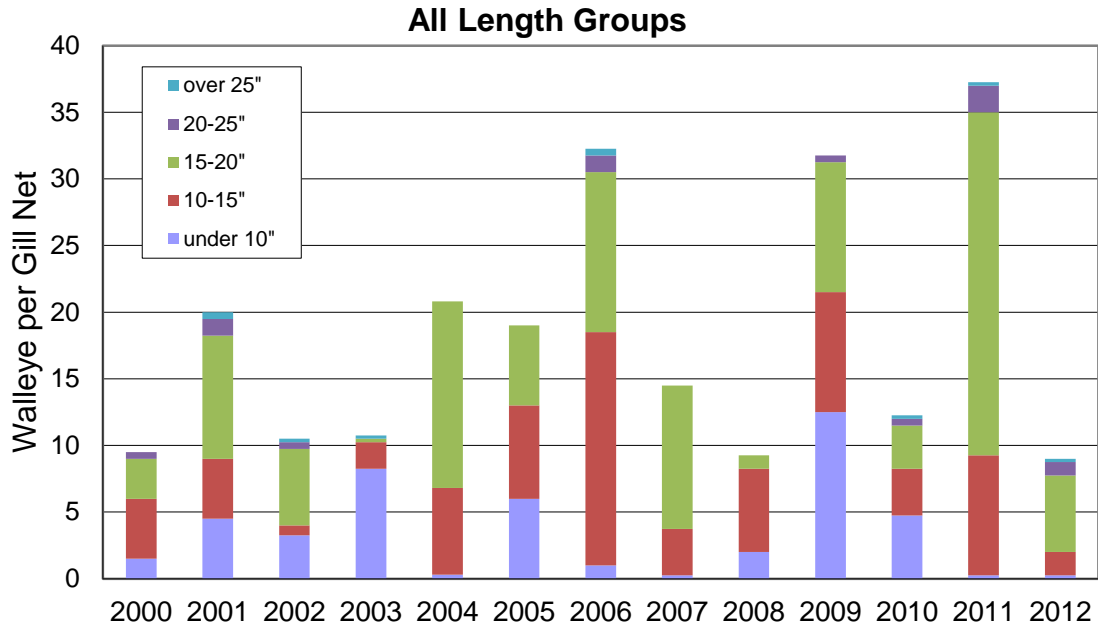
Data collected from these surveys allow biologists to evaluate the population density, size structure, and growth rates for several species. This data provides valuable information to guide decision making scenarios that include fish species stocked, stocking rates and fishing regulations. This information also assists Game and Parks staff in guiding anglers to waterbodies that have the desired populations for fishing.

The following text and graphs are the result of the 2012 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.

**The statewide one-over length daily bag limit regulation has changed for striped bass, white bass and their hybrids. Starting January 1, 2013 only one may be kept over 16 inches.** This regulation change was made to decrease harvest of hybrid striped bass greater than 16 inches. Notice fishing regulation changes in the 2013-2014 Fishing Guide at this link <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf> or pick up a print copy at your local vendor or NGPC office.

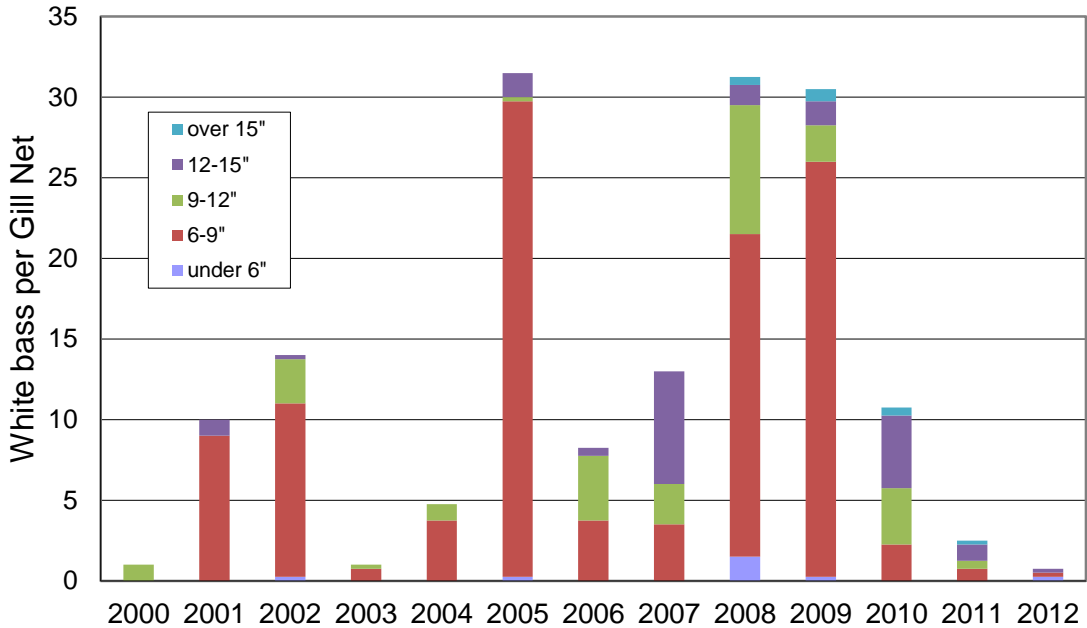
# Standard Population Survey Results

## Walleye



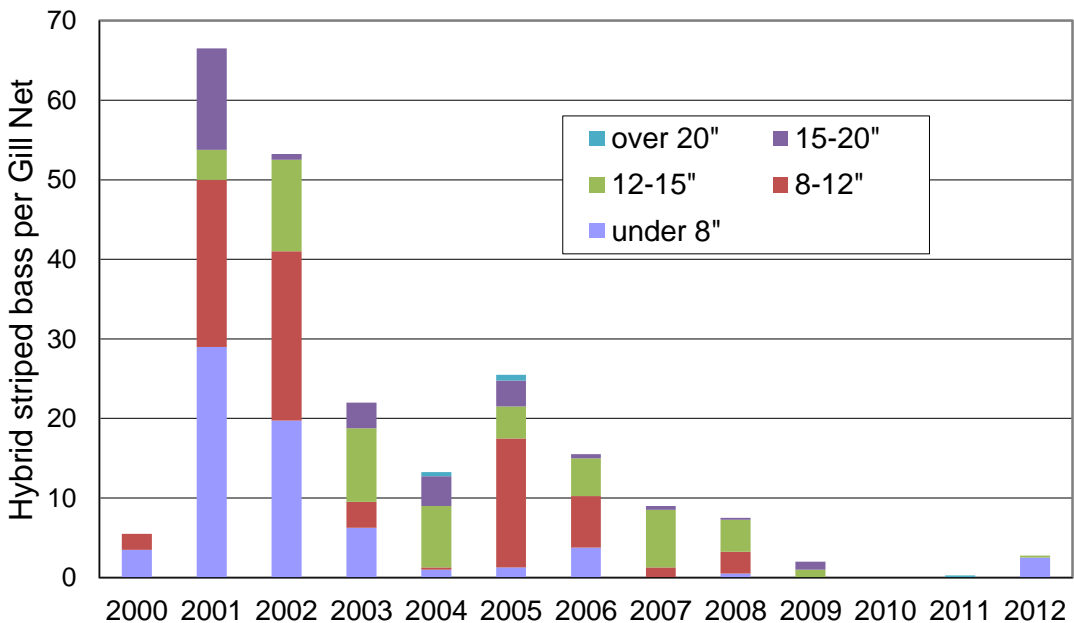
In 2012, nine walleye were sampled per gill net with 78% of them over 15" and 14% over 20". The mean length was 17.5". Walleye are stocked annually into Sutherland. In 2012, 74,308 fingerlings (1.3") were stocked and a stocking of 75,000 is requested for 2013. Although these stockings occur on an annual basis, migration of walleye from the canal system likely influences density.

# White bass



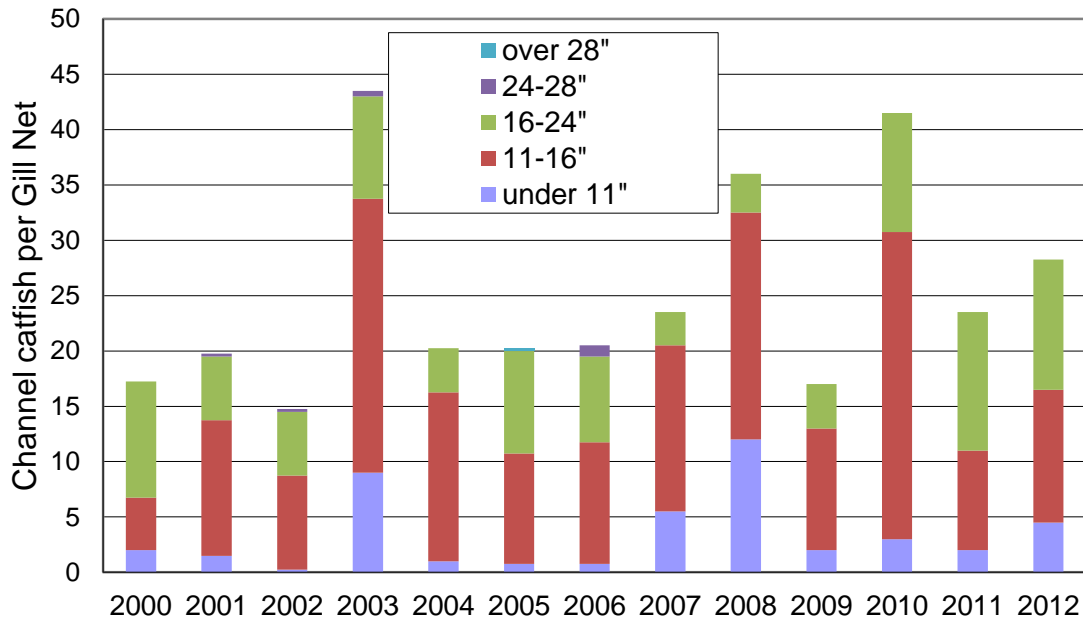
White bass catch rate was low with only three sampled (in total) with a mean length of 8.6". Natural recruitment and movement downstream from Lake McConaughy supports the white bass fishery. Angling success is typically observed by bank anglers at the inlet.

# Hybrid striped bass



In 2012, 9,889 hybrid striped bass fingerlings (2") were stocked into Sutherland. The 2012 survey was comprised of individuals from this stocking. A low density population consisting of large individuals (> 20") is desired. In 2013, 30,000 hybrid striped bass fingerlings are requested to be stocked.

# Channel catfish



Channel catfish were sampled in above average quantity in 2012 with approximately 28 sampled per gill net with an average length of 14". Approximately 42% were longer than 16". Channel catfish are not stocked into Sutherland Reservoir as natural recruitment supports the fishery.

If you have questions or concerns about the fishery of Sutherland Reservoir please contact

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# Zebra and Quagga Mussels

Anglers and boaters need to be aware of zebra and quagga mussels while using Nebraska Lakes and continue to **Clean, Drain and Dry** their equipment and boats prior to launching at a new waterbody. While no mussels have been identified at Sutherland Reservoir, zebra mussels have been found at Zorinsky Lake in Omaha and are present in several reservoirs in neighboring states. Monitoring was completed at several Nebraska reservoirs during 2011 and 2012. No evidence of zebra or quagga mussels was found.

Anglers and boaters using Nebraska waters this season need to be aware of **new regulations** dealing with aquatic invasive species. Starting January 1, 2013 the following regulations went into effect to help prevent the spread of unwanted species.

- Any watercraft that has been on a Nebraska waterbody must drain the lake water from their compartments, equipment or containers before leaving the launch area. It is illegal to dump baitfish into a Nebraska waterbody.
- Livewells need to be drained prior to leaving a launch area: plan ahead and bring a cooler for harvested fish.
- All aquatic vegetation from that waterbody attached to the watercraft and/or trailer must be removed before leaving the launch area.

For more information regarding these new regulations consult the 2013-2014 Fishing Guide at <http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf>.

Find more information concerning zebra and quagga mussels at <http://snr.unl.edu/invasives/> and <http://100thmeridian.org/zebras.asp>.

