

## 2022 NE District Flood Control Reservoir Fish Sampling Summary

Nebraska Game and Parks Commission

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### Background

Several flood control reservoirs dot the landscape of the Northeast District, ranging in size from approximately 25 to 700 surface acres. The primary species making up the fish communities in the smaller reservoirs are largemouth bass, bluegill, black crappie and channel catfish. Walleye are also found in relatively low numbers in some of the smaller reservoirs. Most of the flood control reservoirs receive annual stockings of channel catfish, while about half are annually stocked with walleye. Besides channel catfish and walleye, most other species in these lakes typically maintain their populations through natural reproduction and recruitment.

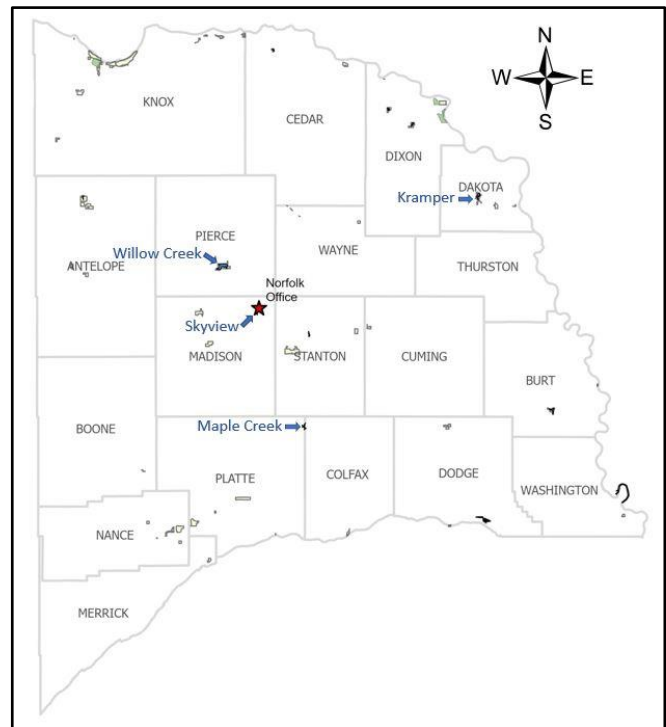
In 2022, four flood control reservoirs in the Northeast District were sampled, including Maple Creek, Kramper, Skyview and Willow Creek.

Maple Creek is in Colfax and Platte counties near Leigh and is 160 surface acres. The reservoir was opened to the public in 2011 and is surrounded by a recreational area which is owned and operated by the Lower Elkhorn NRD.

Kramper Lake is located within the Danish Alps State Recreation Area just east of Hubbard in Dakota county and is 226 surface acres. The reservoir was opened to the public in 2015.

Skyview is located within Norfolk city limits, was built in 1971 and is 50 surface acres.

Willow Creek Reservoir is the largest of the Northeast District flood control reservoirs, measuring 700 acres. The reservoir is in the Willow Creek State Recreation Area near Pierce. Management of Willow Creek is geared toward a large reservoir fishery that includes walleye, wipers, channel catfish and provides some good opportunities for crappie anglers. The reservoir does experience substantial algal blooms, which may be negatively impacting recruitment of some species.



### Sampling Efforts

The standard gear used to survey panfish is frame nets with 5/8" mesh. The size of the lake determines how many nets to set. Nets are set at various locations around the lake for one night.

Night electrofishing is used to survey bass and the number of stations depends on the size of the lake. Stations are typically 15 minutes of shoreline electrofishing, but times may be reduced if there is a high number of fish caught so the tanks do not get overcrowded.

Willow Creek is typically sampled in late September with frame nets and experimental mesh gill nets, each set at different locations around the lake for one night. However, 2022 sampling effort was limited

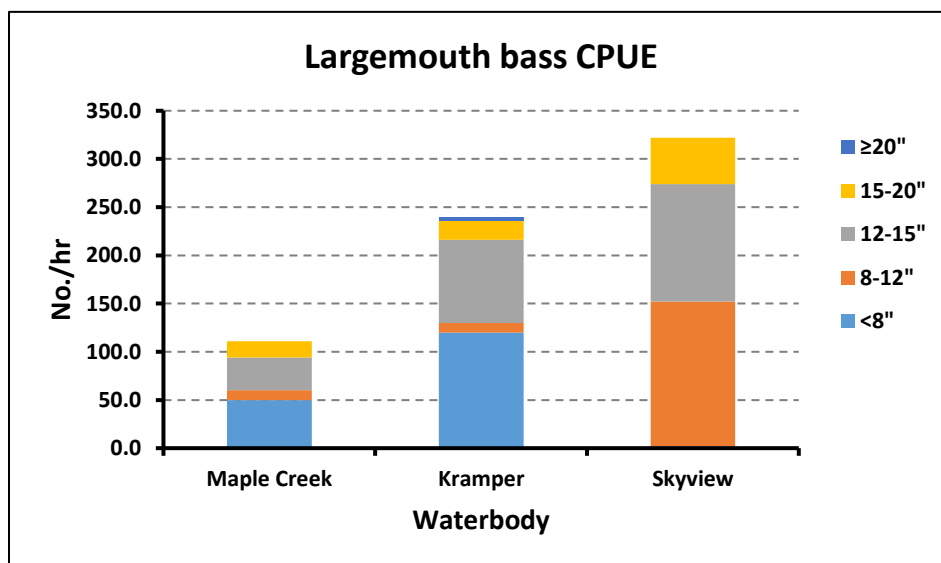
to two gill nets due to low water levels. Water levels during the Fall sampling season were low due to the drought, therefore the typical standardized sampling methods used on flood control reservoirs were not used because of the lack of locations available to set nets.

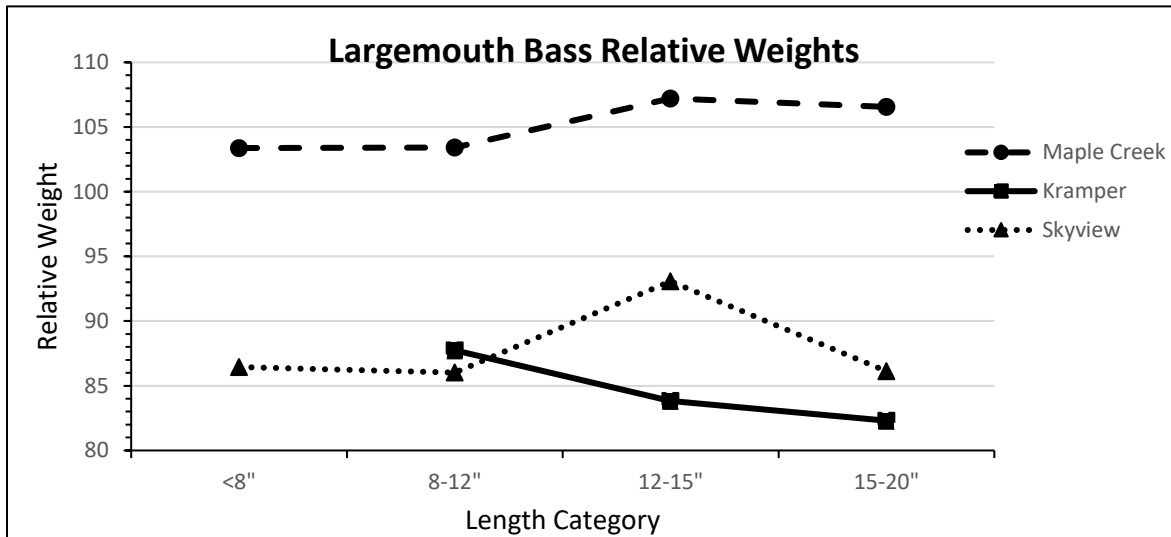
Lake	Time	Gear	Effort
Maple Creek	Spring	Frame Nets	5 nets
	Spring	Night Electrofishing	15 min x 4 stations
Kramper	Spring	Frame Nets	5 nets
	Spring	Night Electrofishing	10 min x 3 stations
Skyview	Spring	Frame Nets	5 nets
	Spring	Night Electrofishing	15 min x 2 stations
Willow Creek	Fall	Gill Nets	2 nets

### Sampling Results by Species

#### *Largemouth Bass*

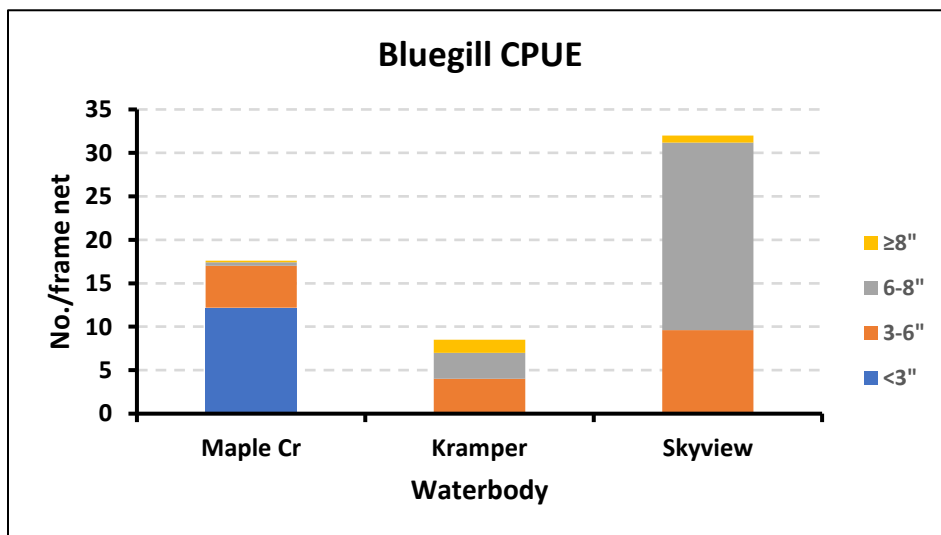
Bass are collected by nighttime-electrofishing efforts conducted in the spring of the year. A catch rate of at least 150 bass per hour of electrofishing is desirable. A minimum catch rate of 150 bass per hour not only equates to good catch rates for anglers seeking bass but can also limit panfish recruitment through predation to achieve desirable growth rates and size structure on those panfish. Maple Creek did not meet the desired 150 bass per hour, but there is potential with a good size range that will only improve in the coming years as fish continue to grow. Bass at Maple Creek were healthy and in good body condition. In previous years at Kramper, the size structure of bass was skewed toward smaller, younger fish, with a high abundance of fish 12 inches or less, but the 2022 survey found that size structure has improved. More bass moved into the 12-15-inch range and there are some opportunities to catch a few that are 15 inches and larger at Kramper. Sub-standard body condition was observed on some bass size groups at Kramper this year, warranting additional monitoring in 2023. Skyview lake had a higher abundance of largemouth bass than previous years but only three bass less than 8 inches were caught in the survey. In addition, bass in Skyview are beginning to exhibit reduced body condition, which may be density driven. Keep in mind that the 2022 bass sampling was conducted later in the Spring than was desirable and that dense stands of aquatic vegetation hampered electrofishing efforts.

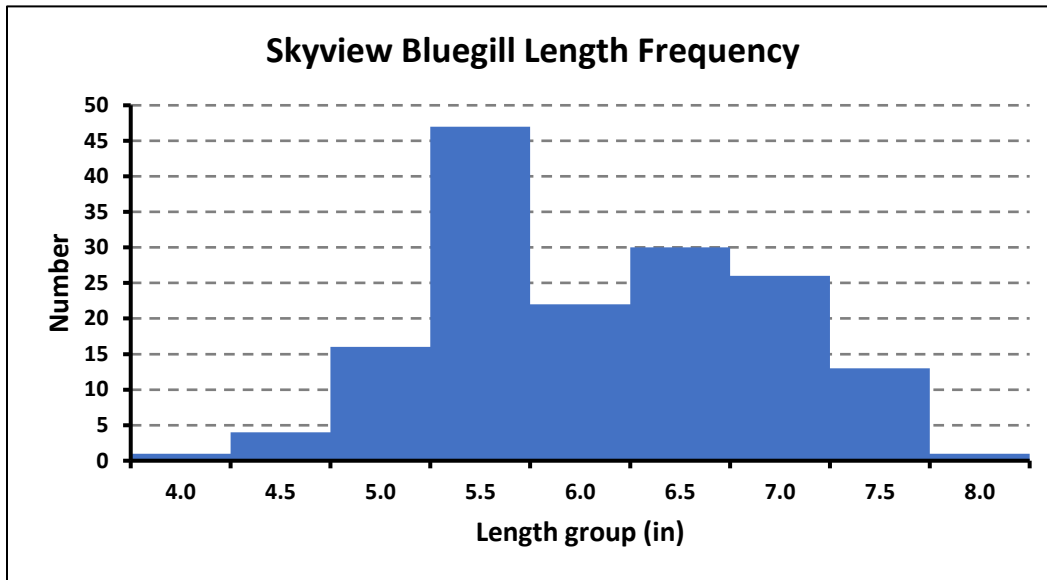




### Bluegill

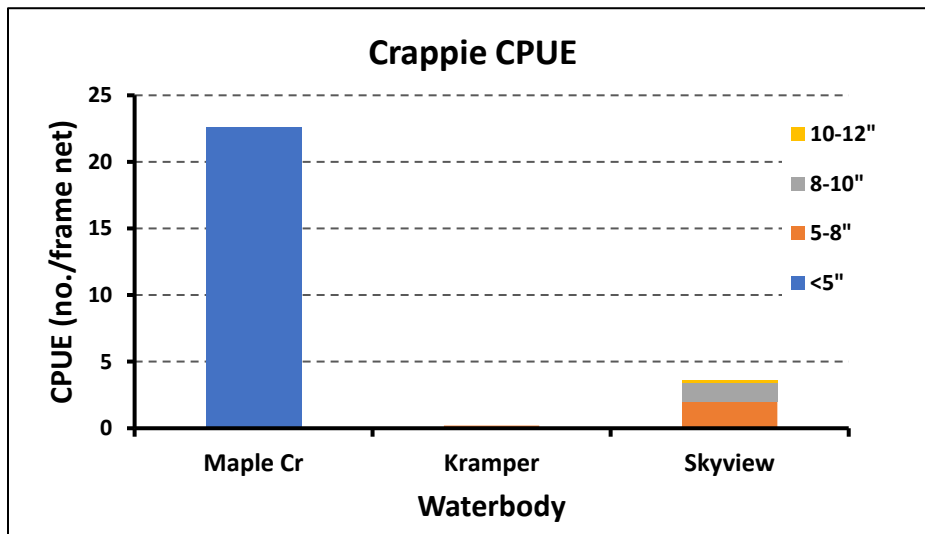
Bluegill are sampled with frame nets in the spring of the year, typically late-April thru mid-June. Three flood control reservoirs were sampled with frame nets in the spring of 2022. Maple Creek sampling occurred when the aquatic vegetation was thick and catch rates of bluegill in frame nets suffered as a result. Subsequent sampling by other methods, however, indicated good numbers of six inch and larger bluegill in Maple Creek, so don't let the results of our survey deter you from going out to find decent bluegill here. Kramper sampling occurred during the middle of the bluegill spawn when fish are not moving much and are locked into spawning beds. Some nets were set right over the top of the bluegill beds and few fish were caught. Also, similar to Maple Creek, dense vegetation likely influenced poor bluegill catch rates on Kramper. As with Maple Creek, alternate sampling methods indicated good numbers of larger bluegill and our net data shouldn't deter you from going out to find decent bluegill. Skyview lake had decent catch rates of six to eight-inch bluegill, with over 55 percent of the sample comprised of fish six inches or larger. Bluegill in Skyview seem to have positively responded to the bass regulation change, which was intended to decrease the number of bluegill, but improve their overall size structure. Frame nets were not set at Willow Creek this year.





### Crappie

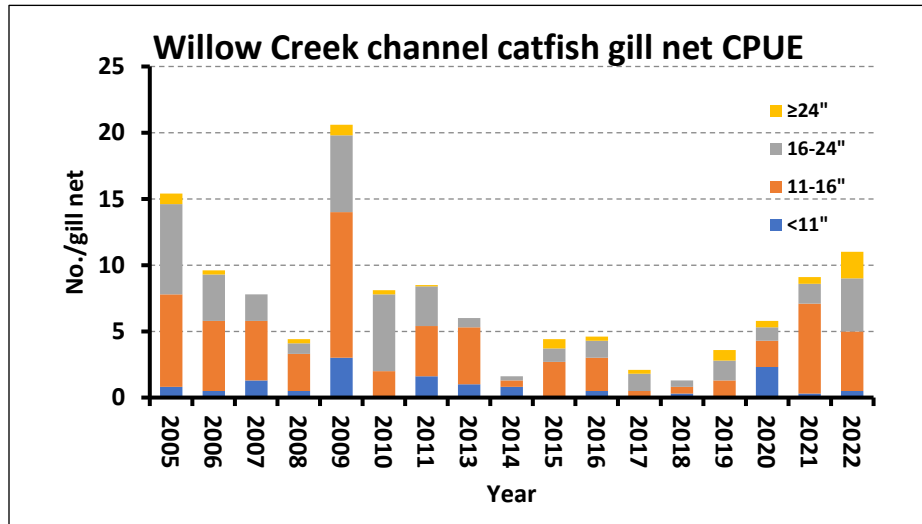
Timing is critical for collecting crappie via frame nets in the spring. Net sets are usually considered to be timed well when the crappie are in the shallows spawning. Crappie observations are recorded during the spring frame netting efforts, but often are not reliable estimates of a lake's population. Case in point, sampling Maple Creek indicated a population comprised entirely of three to four-inch fish. Anglers, however, reported very good crappie fishing north of the highway during the summer of 2022 in Maple Creek. Only one six-and-a-half-inch crappie was sampled at Kramper in the frame nets. Alternate methods of sampling at Kramper showed larger crappie are present, smaller crappie are abundant in the six to nine inch range. Thick aquatic vegetation really limited catch of both crappie and bluegill in the 2022 Spring sampling effort at all three of the flood control reservoirs. Skyview catch was not unusual for what we usually see for bass and bluegill. A total of 18 crappie, ranging from seven to ten inches were caught at Skyview. Willow Creek was not sampled for crappie in 2022 because low water levels prevented setting frame nets.



### Channel Catfish

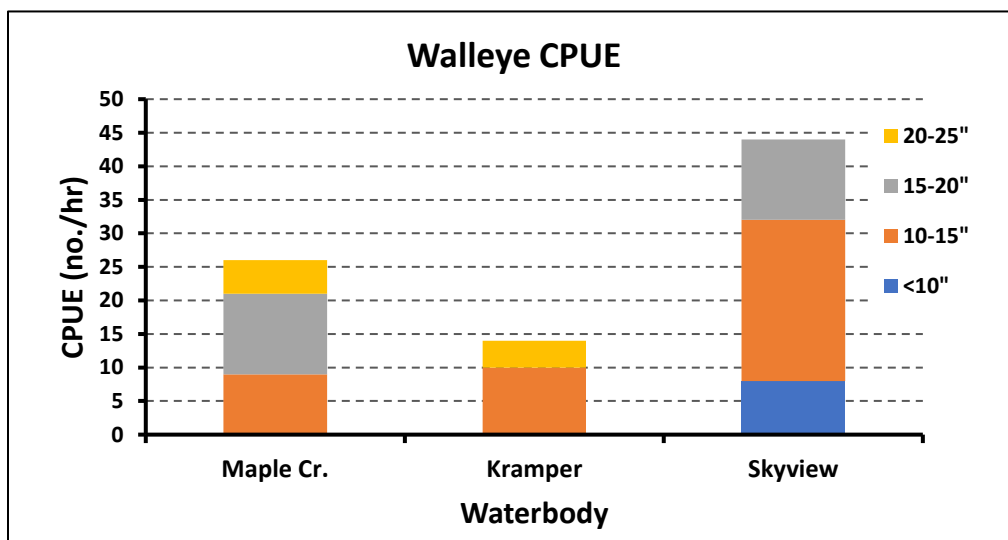
Open water, offshore species like walleye, catfish, white bass and wipers are sampled with gill nets set in the fall of the year. No fall sampling was conducted in Maple Creek, Kramper or Skyview for 2022. In

previous years, sampling revealed very enticing populations of channel catfish in Maple Creek and Kramper. During 2022, the trend of increasing numbers of channel catfish in Willow Creek Reservoir continued. More channel catfish moved into the 16 to 24-inch range as well as the 24 inch and larger category. This shift toward larger fish shows promise that catfish angling at Willow Creek has and will continue to improve over the next several years. Most of the flood control reservoirs in the Northeast district have good channel catfish populations, exhibiting moderate to high numbers and good size structure, and none of them should be overlooked by anglers seeking catfish.



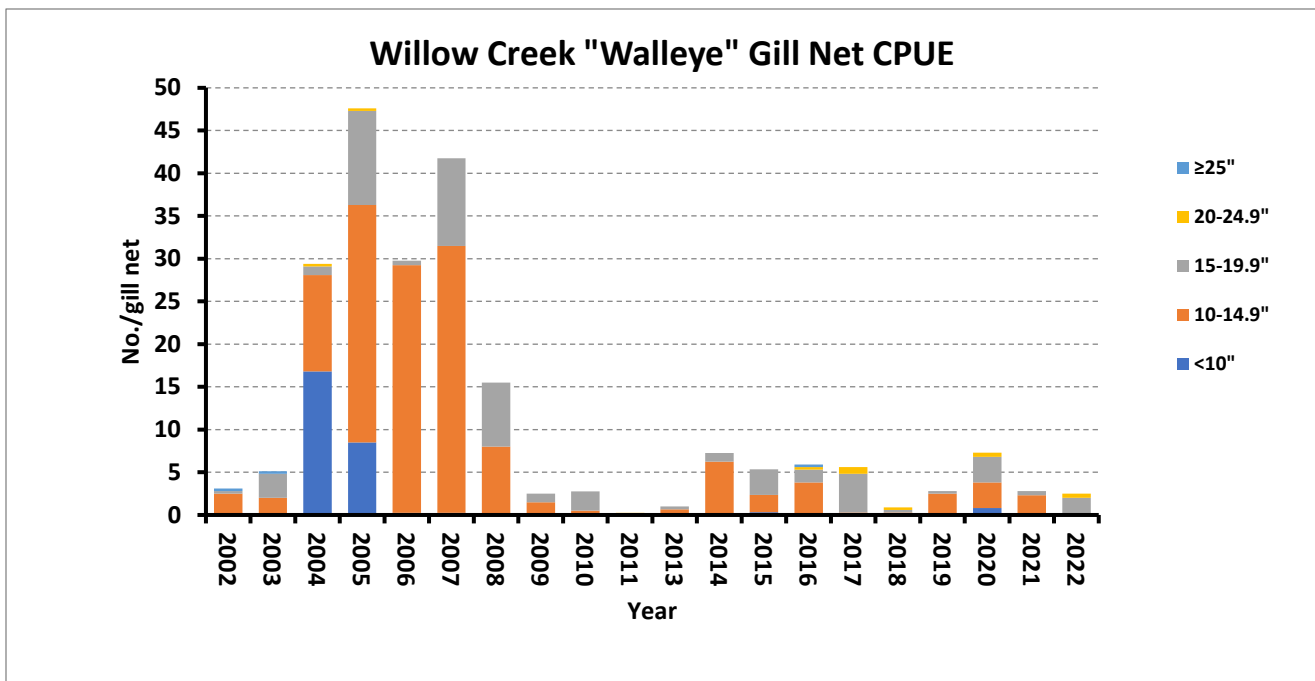
*Walleye/Saugeye*

Many of the smaller flood control reservoirs in the district receive annual walleye stockings. Maple Creek, Kramper and Skyview were not sampled in 2022 for walleye with the standard gear type, but the night electrofishing surveys provide some evidence that the quality of these fisheries is there. Maple Creek and Kramper had a nice broad size range of walleye, with some opportunities to catch 20-25-inch fish. Skyview did not have as many larger walleye in the sample but had more small fish, which shows promise for the future.



Willow Creek was the only flood control reservoir in the Northeast District that was sampled with gill nets, the standard gear type to target walleye and saugeye. Walleye fry stocking in Willow Creek was initiated in 2004 and was very successful up until 2008. Fry stocking rates have remained the same or higher ever since that time, but they have failed to create a good year class since 2008. Considering the poor walleye recruitment and seeing success in other areas of the state with saugeye (a cross between

walleye and sauger), it was decided to try them in Willow Creek. Saugeye tend to be a bit hardier and may handle the declining water quality better than the walleye have been. The saugeye seem to be doing better than walleye, but the water quality degradation and sedimentation issues are still having an impact on recruitment to the fishery. The 2022 survey only caught two 16-inch walleye and five saugeye ranging from 13 to 18.5 inches.



### Fish Stocking

Flood control lakes in the northeast district typically have largemouth bass, bluegill, crappie and yellow perch populations that can maintain their abundance without stocking. Natural recruitment for sport fish species such as channel catfish, walleye, and saugeye is typically very low or non-existent in our flood control reservoirs and require supplemental stocking to maintain their numbers. Channel catfish are stocked in most flood control reservoirs as 10-inch fish, either annually or semi-annually at rates of 10-25 per surface acre. Stocking density is determined by lake size, relative population levels, and observed angler usage and harvest. Walleye and saugeye are stocked in select lakes annually with fish size and stocking rates determined by research and individual lake sampling. Stocked two-inch fingerling walleye do well in lakes such as Maskenthine and Buckskin Hills at a rate of 50 per surface acre. Larger "advanced" size walleye, typically 8-9 inches, are currently stocked annually in September at 5-10 per acre at Skyview, Maple Creek, Summit, and Kramper. These fish appear to be surviving much better than the two-inch fingerlings and show greater potential to maintain moderate to high numbers of walleye for the angler in these lakes. Willow Creek is stocked annually with 1 million walleye fry and 35,000 fingerling saugeye.

Stocking records for all lakes in Nebraska can be found on the Game and Parks website at [outdoornebraska.org](http://outdoornebraska.org).

### Invasive Species

Fish species that were not stocked by NGPC have been observed in Maple Creek and Skyview among others. As a reminder, **It is unlawful to release into public waters of the state any fish that did not originate from that body of water, including the dumping of bait buckets.** Additionally, sport fish regulations state **It shall be unlawful to transport or possess live white perch, black carp, silver carp, bighead carp, grass carp and yellow bass away from the water body from which they were captured.** Please call your local conservation officer (phone numbers are listed in the regulation

guides) or the Wildlife Crimestoppers Hotline (1-800-742-7627) if you observe this or any kind of game violation.

Many of the Northeast District Lakes contain dense beds of aquatic vegetation on a seasonal basis. Curly-leaf pondweed is found in this area and is classified as an Aquatic Invasive Species. Those lakes that develop especially dense stands of curly-leaf include Pibel, Grove, Summit, Buckskin, Skyview and Maskenthine. **Anglers are reminded of the Clean, Drain, Dry regulations that require any boat that has been on a waterbody to drain all water from all compartments, equipment or containers before leaving the launch area and to remove all aquatic vegetation from the boat and trailer before leaving the launch area.** These regulations are meant to control and/or limit the spread of aquatic invasive species, such as zebra mussels, Eurasian watermilfoil, curly-leaf pondweed, to name a few. Nonresident boaters are also reminded of the Invasive Species sticker requirement. The sticker provides funding for dealing with invasive species that are already present in addition to education and prevention activities that are meant to limit their spread. Nonresident boaters must have one of these stickers affixed to their watercraft before launching in any Nebraska water. Resident boaters automatically contribute to this fund through a surcharge on their boat registration, thus as long as their registration is up-to-date, residents are in compliance and won't have a physical sticker attached to their watercraft. Additional information about aquatic invasive species and preventing their distribution can be found in the 2023 Nebraska Fishing Guide and at the University of Nebraska Invasive Species website: <http://www.neinvasives.com>. More information for Northeast District lakes such as location, boat ramps, species present, special regulations, etc. can also be found in the Nebraska Fishing Guide.

### **More Information**

*Fishing rules and regulations*

Visit the Nebraska Game and Parks website at:

[www.OutdoorNebraska.org](http://www.OutdoorNebraska.org)

*Fisheries and/or fishing opportunities in the Northeast District*

Contact us:

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