

Elwood Reservoir

Fisheries Update - Spring 2025

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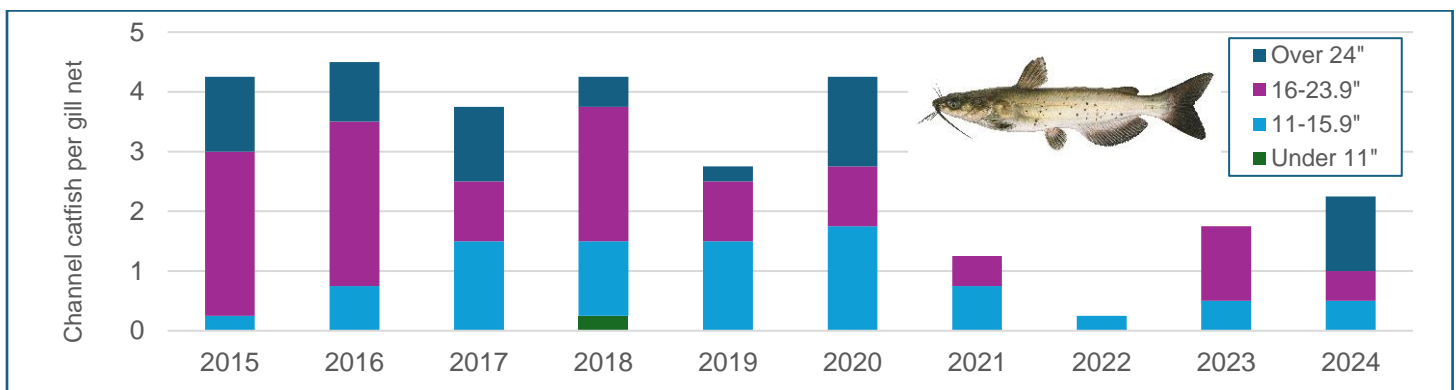


Elwood Reservoir is a 1,350-surface acre reservoir that is owned and operated by Central Nebraska Public Power & Irrigation District (CNPPID). Elwood was constructed in the 1970's to store additional irrigation water for the E65 canal. Created by damming a series of large canyons, the reservoir has numerous coves and bays and many miles of undeveloped shoreline. The reservoir is located off the main supply canal and water is delivered to the reservoir by the E65 canal via a pump system. When full, the reservoir contains nearly 40,000 acre-feet of water. Up to 24,000 acre-feet of water is released annually for irrigation which leads to severe drawdowns during the irrigation season. In normal years, it is refilled to near full capacity by late May or early June. The reservoir serves as an important recreational resource for anglers and hunters. Special regulations only allow powerboats to operate at no wake speeds so boating use is generally limited to fishing boats. The Nebraska Game and Parks Commission (NGPC) manages the fisheries resources and the land surrounding the reservoir is managed as a Wildlife Management Area (WMA) providing hunting opportunities for deer, turkey and waterfowl. Additional information regarding the operation of Elwood Reservoir can be on CNPPID's [website](#). Information regarding the WMA or fishing resources can be found on NGPC's [website](#).

Nebraska Game and Parks Commission uses standard sampling methods to monitor the status of fish populations in Nebraska waters. At Elwood Reservoir, gill nets are used during the fall to sample open-water fish species such as walleye and hybrid striped bass. Electroshocking is completed to evaluate black bass and young-of-the-year walleye populations. Trap nets are used for shoreline-oriented fish such as crappie as water levels allow. Annual netting surveys are completed at approximately the same dates and locations to reduce variability and allow for trend comparisons of species abundance and size distribution.

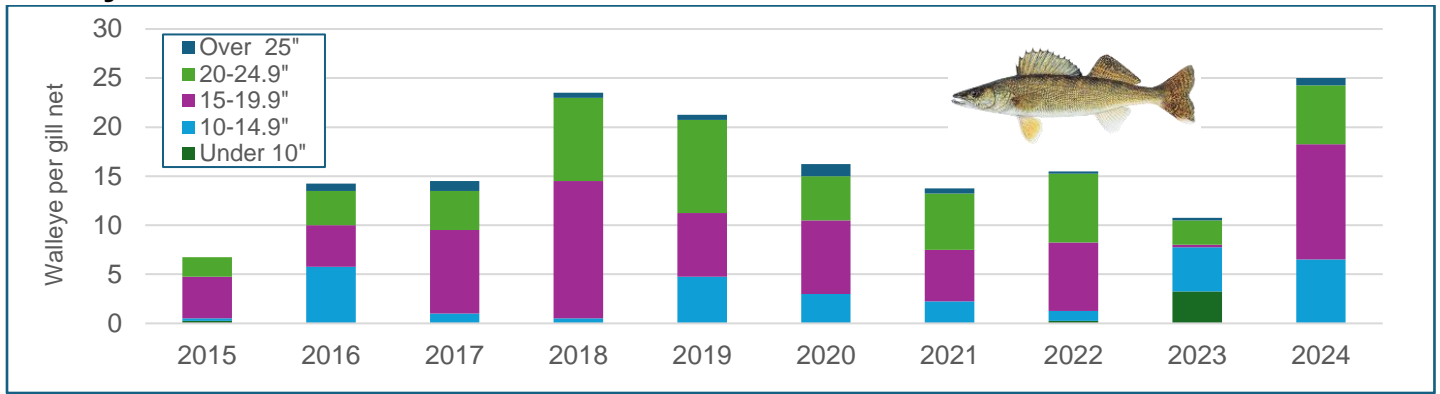
The following pages contain graphs and text that summarize fish surveys completed at Elwood Reservoir. Graphs show the total number of fish caught per net and the relative abundance of fish within several length categories. The text provides brief explanations of the information contained in the graphs. In most cases, results are included from the last 10 years.

Channel Catfish

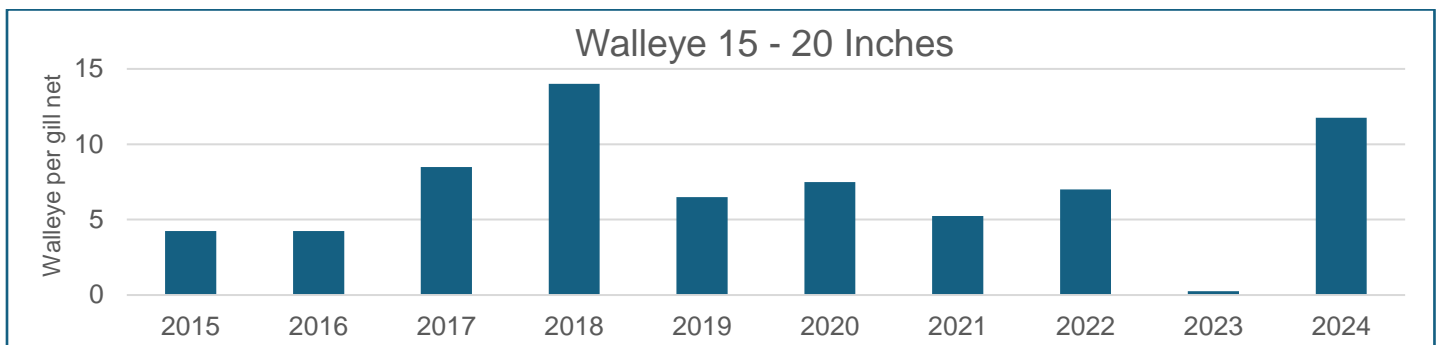


The channel catfish population at Elwood has historically been characterized as one of low density, but of high quality. In the past ten years, average catch has been 2.9 fish per net and fish larger than 24 inches have been sampled in most years. There was a slight decline in abundance and size during the 2021-2023 timeframe, but 2024 catch was slightly improved with a catch of 2.25 fish per net. Lengths of catfish sampled ranged 14.5 to 29 inches and the average length was 22 inches. Channel catfish regulations at Elwood allow the daily harvest of five fish with no more than one fish greater than 30 inches in the daily bag limit.

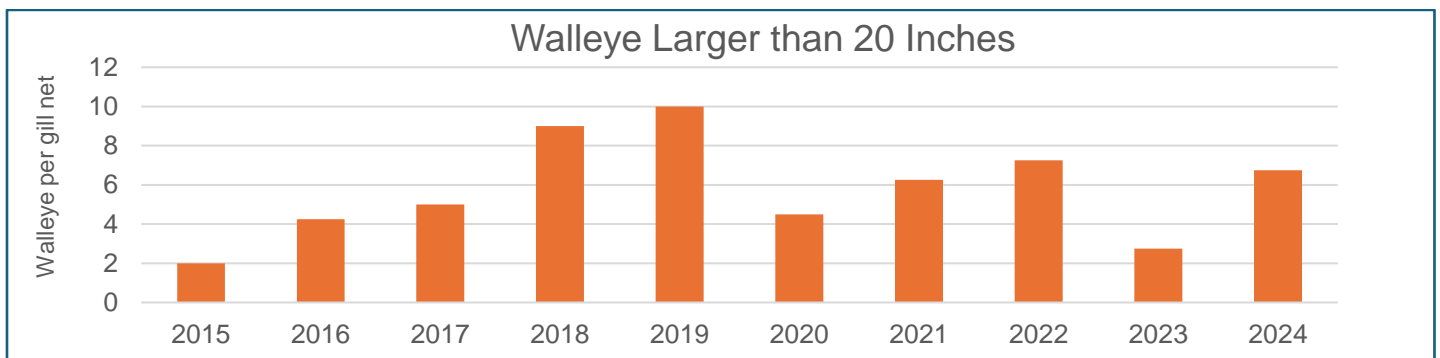
Walleye



The overall walleye catch was greatly improved from results seen during the past five years. The catch of 25 walleye per net was the highest observed in ten years of sampling and was significantly greater than the ten-year average of 16.2 walleye per net. Except for fish less than 10 inches, there was excellent representation of all the major size groups of walleye. Walleye lengths ranged from 13 to 27 inches and the average length was 17.4 inches. The large 2023 year-class appears to have successfully recruited, as age-1 walleye were the most abundant year-class collected making up 58% of the sample. There were a total of seven year-classes sampled, with fish up to eight years of age.



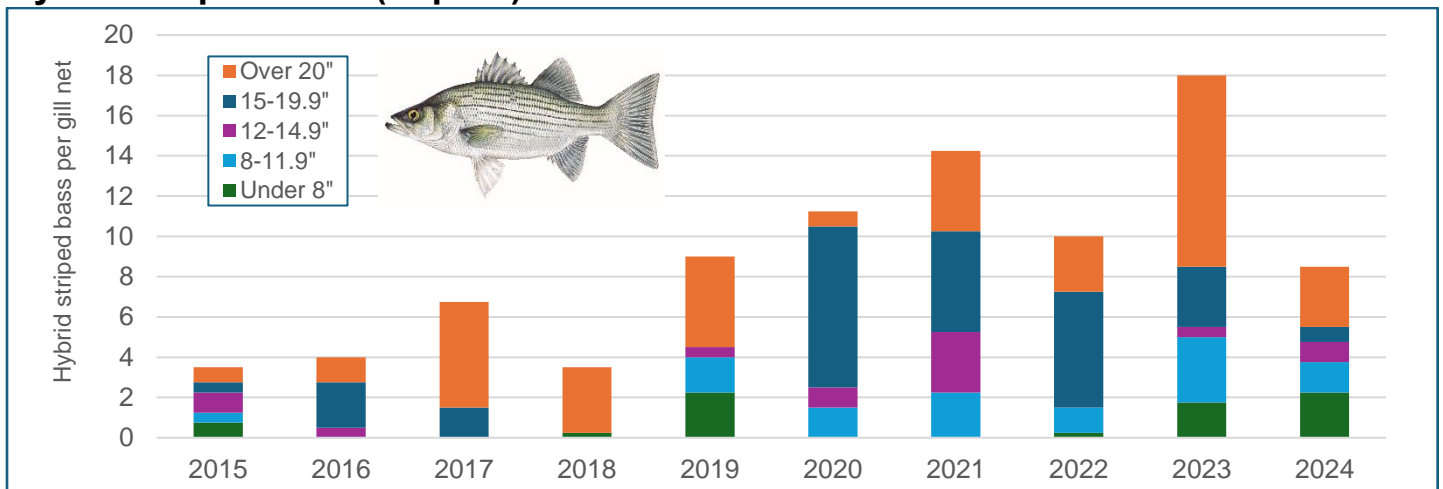
Catch of walleye from 15 to 20 inches was the best documented since 2018. The catch of nearly 12 per net was almost double the ten-year average catch of 7 per net. Most of fish in this size category were age-1 walleye and were 15 to 17 inches, although there were some fish in the 18-to-20-inch size class.



Catch of walleye greater than 20 inches was improved from results observed in 2023 and was slightly higher than the ten-year average of 5.8 walleye per net. Fish in this group were primarily in the 20-to-24-inch size class, but a few fish up to 27 inches were sampled.

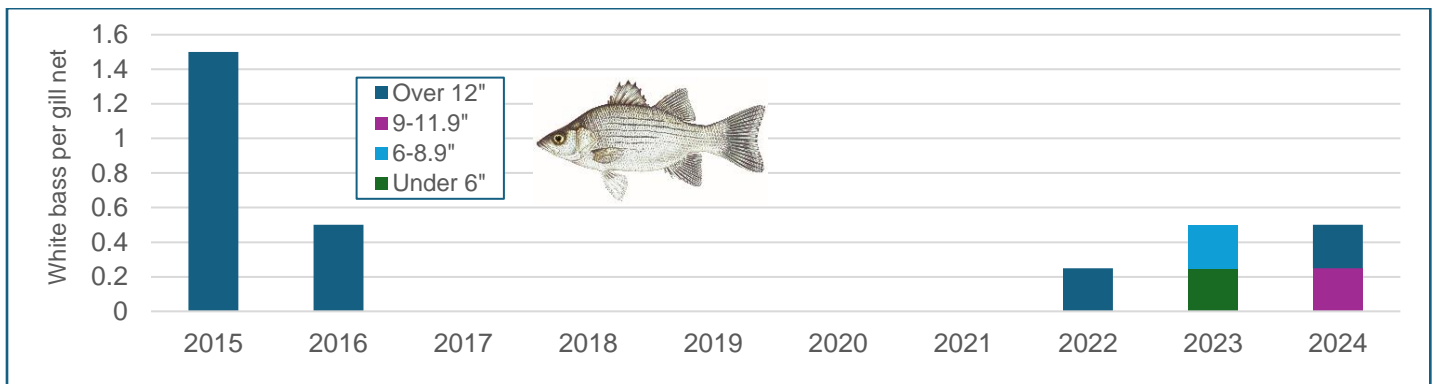
The walleye regulation for Elwood allows the daily harvest of one walleye from 15 to 18 inches and three longer than 18 inches or four larger than 18 inches; the daily bag limit can only contain one longer than 22 inches.

Hybrid Striped Bass (Wipers)



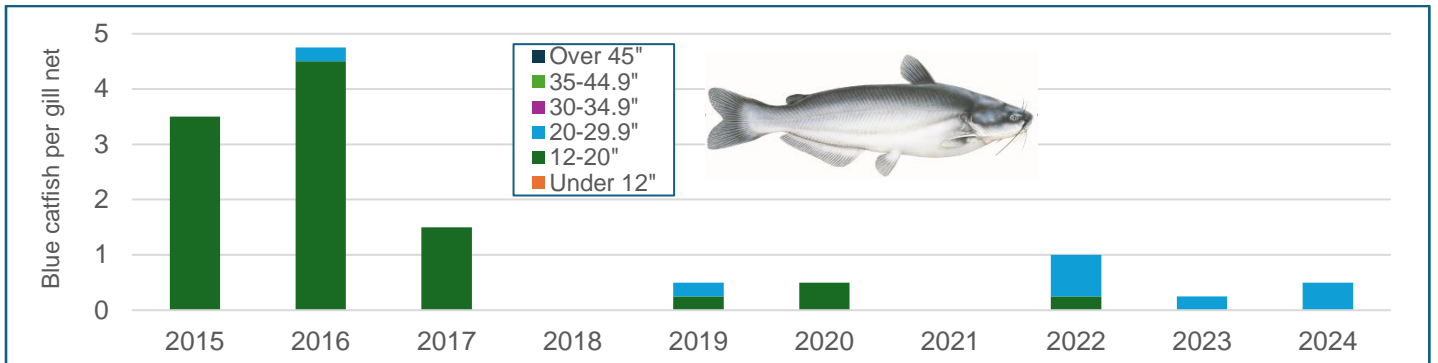
Elwood Reservoir has one of Nebraska's best hybrid striped bass fisheries, especially for large fish as hybrids up to 25 inches are common. Although the 2024 catch of 6.75 fish per net was slightly below the 10-year average catch of 9 fish per net, hybrids of all major size groups were sampled. Fish lengths ranged from 6 to 26 inches and the average length was 14.5 inches. Age-0 and age-1 hybrids were the most common year-classes sampled and in total there were seven year-classes documented. Hybrids less than 15 inches comprised 56% of the sample and should ensure good angling opportunities in the future. Fish larger than 20 inches made up about 35% of the sample and will provide anglers excellent opportunities for large fish during the next couple years. Hybrids are annually stocked in Elwood and 9,400 fingerlings are scheduled for stocking in June 2025. Current regulations at Elwood allow the harvest of three hybrids/white bass per day, but only one fish may be larger than 18 inches in the daily bag limit.

White Bass



White bass populations at Elwood have historically been very low, but the few fish that are present are typically quality-sized fish. Poor natural recruitment, likely due in part to the abundant alewife population in Elwood, is the primary reason behind low abundance of white bass. Occasionally, small year-classes are produced and juvenile white bass will also enter the reservoir from the canal system, allowing for a small population of white bass to exist. Regulations at Elwood allow the harvest of three white bass/hybrids, with no more than one larger than 18 inches in the daily bag limit.

Blue catfish



Blue catfish were first stocked into Elwood Reservoir in 2014 and stocking has occurred in four other years since, with the last stocking taking place in 2024. While catch was initially high after the first stocking, average gill net catch since has been less than one fish per net. Average size has improved as the fish have aged, as blue catfish sampled in the 2024 survey averaged 24 inches. Pending availability from the hatchery system, blue catfish fingerlings are scheduled for stocking in the fall of 2025. The statewide regulation for blue catfish is one fish per day.

Other Species

Muskellunge

Although muskellunge are not routinely sampled in standard sampling gear, Elwood has a fair population of muskellunge that provides anglers a chance of catching fish up to 45 inches. Muskellunge populations are maintained by stocking at Elwood and stocking has been somewhat sporadic over the past ten years due to availability of these fish. All muskies stocked in Nebraska are produced in-house by our hatchery system and occasionally environmental factors are not conducive to raising enough fingerlings for stocking. Advanced fingerling fish (10-12 inches) have been stocked most recently in 2022 and 2024. Prior to 2022, muskellunge were previously stocked on alternate years from 2011 to 2017. Current plans call for continuing to stock muskellunge on alternate years, with the next scheduled stocking in 2026. Muskellunge are regulated by a 40-inch minimum length limit and daily bag limit of one fish at Elwood Reservoir.

Black Bass

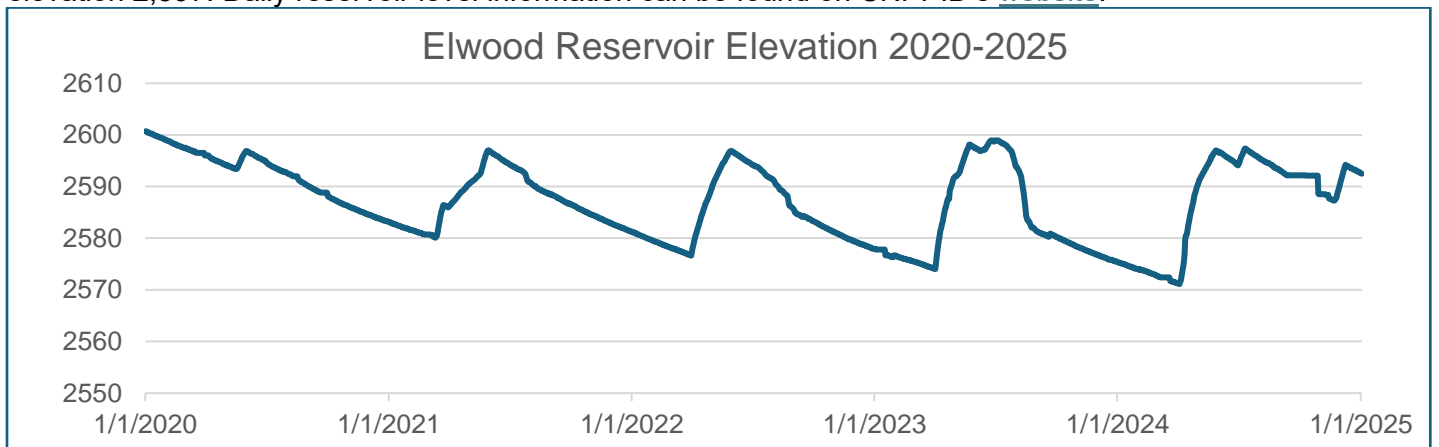
Elwood provides bass anglers a unique opportunity to catch all three major black bass species; largemouth, smallmouth, and spotted. Largemouth are most abundant, but smallmouth numbers have increased in abundance in recent years, and Elwood contains one of the few spotted bass fisheries in the State. The success of bass in Elwood is directly attributed to reservoir levels and suitable spawning and rearing habitat. When reservoir levels are high during the spring, the numerous coves provide good habitat for spawning sites and for young bass to develop. Periods of low water reduce available habitat and bass recruitment success generally declines. Currently, Elwood is supporting good populations of all three species and angler success has been good the past couple of years. Black bass are regulated by the Statewide 15-inch minimum length limit and daily bag limit of five fish, with only one fish larger than 21-inches.

Sauger

Although not stocked directly into Elwood, there is a small population of sauger present in the reservoir. Sauger are annually stocked into the Canal Lakes (Midway, Gallagher, Plum Creek) and due to the connectivity of the CNPPID canal system, some of these fish annually find their way into Elwood. Catch in 2024 was less than one sauger per gill net, but the size of the sauger was impressive as they ranged from 14 to 22 inches. Sauger fall under the same regulations as walleye at Elwood and are counted as part of the walleye daily limit.

Water Levels

Elwood Reservoir was constructed in the 1970's as a storage reservoir to provide additional water to the E65 irrigation canal during times of heavy irrigation demand. The reservoir is normally filled via the E65 canal during the non-irrigation season utilizing three large pumps and when full the reservoir contains approximately 40,000 acre-feet of water. Elwood normally experiences an annual drawdown of approximately 25' depending on irrigation demand. Seepage and evaporation will further reduce reservoir levels during the off season. The maximum elevation of Elwood reservoir is 2,607 and irrigation drawdowns normally cease at elevation 2,575. In recent years, the reservoir has only been filled to elevation 2,597 due to seepage issues along the dam and pump station. Repairs were made during 2023-24 allowing the reservoir to be filled to elevation 2,607 when needed in the future. According to CNPPID staff, tentative plans for 2025 are to fill the reservoir to elevation 2,597 during the spring and then utilize the reservoir for normal irrigation deliveries during the summer months. If Platte River flows exceed target flows, there is a possibility that the reservoir could be filled higher than elevation 2,597. Daily reservoir level information can be found on CNPPID's [website](#).



Fish Stocking

The table below shows the fish that have been stocked into Elwood during the past five years. Fish requested for 2025 includes 94,000 walleye fingerlings, 9,400 hybrid striped bass fingerlings, and 9,400 blue catfish fingerlings. Actual number and sizes for 2025 will be dependent on hatchery availability.

Year	Walleye	Hybrid Striped Bass	Yellow Perch	Muskellunge	Blue Catfish	Channel Catfish
2020	34,136 (2")	6,650 (1.25")	13,219 (3")			
2021	200,114 (1.5")	8,690 (1.25")	13,257 (1.5")			
2022	94,611 (1.25")	4,750 (1.5")		450 (11")	17,162 (4.5")	2,820 (10.5")
2023	52,641 (1.5") 23,124 (2.5")	10,038 (1.25")			9,400 (5.5")	
2024	92,565 (1.75)	9,400 (1.75")		420 (11.75")	8,000 (7")	
2025 (requested)	94,000 (2")	9,400 (2")			9,400 (8")	

Aquatic Invasive Species – Zebra Mussels

Anglers and recreational boaters should be aware of the threat of zebra and quagga mussels while using Nebraska waters. Boaters using Nebraska waters need to be aware of current regulations dealing with aquatic invasive species. The following regulations are in effect to help prevent the spread or introduction of unwanted species in Nebraska waters.

- 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.
- 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.

A good source of information about invasive species can be found on the Nebraska Game and Parks Commission website: [Aquatic Invasive Species Information](#)

Elwood Reservoir remains a priority location for AIS work and efforts will continue during 2025 to inspect boats, educate boaters, and to conduct sampling for veliger's, adult mussels, and other types of aquatic invasive species.



For additional information about fisheries management at Elwood Reservoir, please contact the Nebraska Game and Parks Commission office in Kearney at 308-865-5310, or by email at the addresses listed below.

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