

LAKE WAPOGASSET AND BEAR TRAP LAKE FACT SHEET SERIES

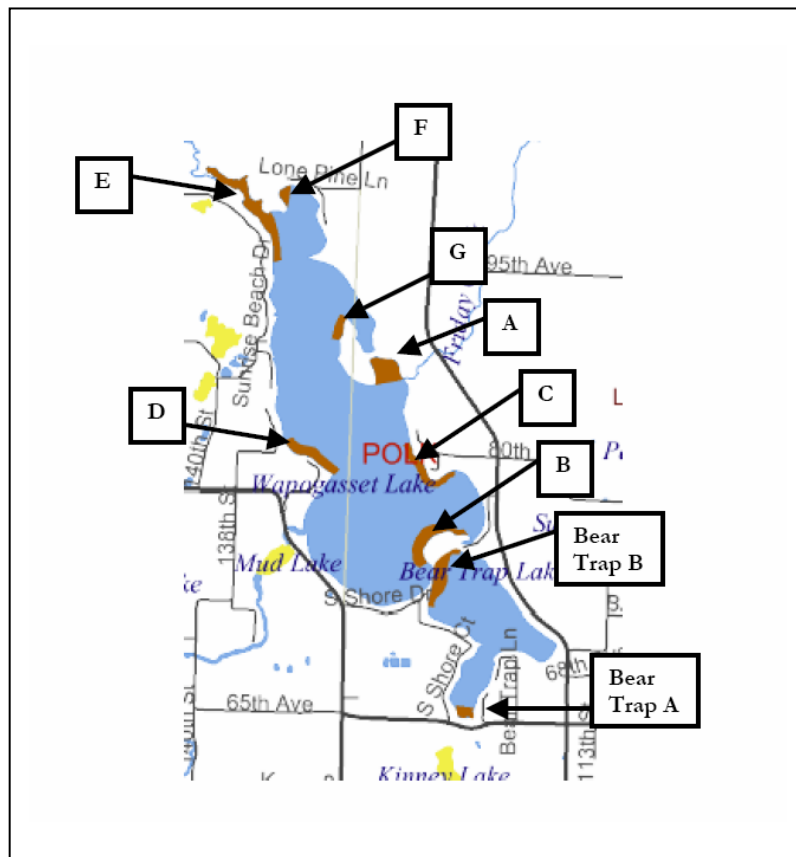
2026 COMPREHENSIVE LAKE MANAGEMENT PLAN

FISH AND WILDLIFE HABITAT

Viewing wildlife and fishing are important to property owners on Lake Wapogasset and Bear Trap Lake. According to the 2026 Sanitary District property owner survey, observing wildlife is very or extremely important to 70% of respondents, and fishing is very or extremely important to 51%. Diverse, native aquatic and shoreline vegetation provide the basic habitat elements needed to support fish and wildlife and these activities. Recommendations from various sources support their importance.

SENSITIVE HABITAT AREAS

A sensitive area survey was conducted on Lake Wapogasset in 1989. There were seven locations around Lake Wapogasset and two locations on Bear Trap Lake that were recorded as “sensitive areas” based upon their importance as habitat in the lake ecosystem. Most sensitive areas consist of diverse aquatic vegetation. These areas of aquatic vegetation offer critical or unique fish and wildlife habitat. This habitat provides the necessary seasonal or life stage requirements of the associated fisheries while offering water quality or erosion control benefits to the body of water. Lake Wapogasset Sensitive Areas B, C, D, and G were included as walleye spawning beds.



SENSITIVE AREA DESCRIPTIONS

Sensitive Area	Location/description	Importance	Protection
LAKE WAPOGASSET			
A	3000 feet of shoreline extending from Friday Creek to YMCA Camp	Habitat for centrachid and esocid species of fish; important wildlife habitat	Chemical and mechanical treatments should not be allowed.
B	2000 feet of shoreline out 200 feet on East shore of Wapogasset	Rock and gravel bottom with no silt that provides walleye spawning.	No dredging, structures or deposits should occur.
C	1500 feet of shoreline out 200 feet near bible camp.	Rock and gravel bottom with no silt that provides walleye spawning.	No dredging, structures or deposits should occur.
D	2000 feet of shoreline out 200 feet on western shore of Wapogasset	Rock and gravel bottom with no silt that provides walleye spawning.	No dredging, structures or deposits should occur.
E	Entrance of Balsam Branch into Wapogasset and surrounding wetlands/approx. 3500 feet of shoreline.	Habitat for centrachid and esocid species of fish for spawning and nursing; important wildlife habitat; wild rice in the area	Chemical and mechanical treatments should not be allowed.
F	A small bay on north end of Wapogasset/approx. 800 feet of shoreline	Habitat for centrachid and esocid species of fish for spawning and nursing; important wildlife habitat	Chemical and mechanical treatments should not be allowed.
G	Located along YMCA camp out 200 feet covering approx. 900 feet of shoreline.	Rock and gravel bottom with no silt that provides walleye spawning	No dredging, structures or deposits should occur.
BEAR TRAP LAKE			
A	Southern Bay near HWY F. Includes approximately 550 feet of shoreline and extends up to 100 feet up the shore.	Habitat for centrachid and esocid species of fish for spawning and nursing; important wildlife habitat	Chemical treatments and mechanical harvesting should be limited to navigation channels.
B	NW shoreline including the narrows from the public boat launch to the Bible Camp.	Habitat for centrachid and esocid species of fish for spawning and nursing; important wildlife habitat	Chemical treatments and mechanical harvesting should be limited to 80 feet from shore.

SENSITIVE REPORT RECOMMENDATIONS

The Sensitive Area reports emphasize the importance of the restoring and maintaining a minimum 35 foot deep zone of natural vegetation along the water's edge to reduce runoff of sediment and nutrients to the lakes. They also encourage other methods such as berms and infiltration areas to reduce runoff of nutrients and sediment. Recommendations to protect sensitive area habitat from this 1989 report remain valid today.

1. Limit aquatic vegetation removal to navigational channels no greater than 25 feet wide where necessary, the narrower the better. These channels should be kept as short in length as possible and it is recommended that people do not completely eliminate aquatic vegetation within the navigation channel. Chemical treatments should be discouraged and if a navigational channel must be cleared, pulling by hand is preferable over mechanical harvesters where practical.
2. Prohibit littoral zone alterations covered by Wisconsin Statutes Chapter 30, unless there is clear evidence that such alterations would benefit the lake's ecosystem. Rock riprap permits should not be approved for areas that already have a healthy native plant community stabilizing the shoreline and property owners should not view riprap as an acceptable alternative in these situations.
3. Leave large woody debris, logs, trees, and stumps, in the littoral zone to provide habitat for fish, wildlife, and other aquatic organisms.
4. Leave an adequate shoreline buffer of un-mowed natural vegetative cover and keep access corridors as narrow as possible (preferable less than 30 feet or 30% of any developed lot whichever is less).
5. Prevent erosion, especially at construction sites. Support the development of effective county erosion control ordinances. The proper use of Best Management Practices (BMP's) will greatly reduce the potential of foreign materials entering the waterway (i.e. silt, nutrients).
6. Strictly enforce zoning ordinances and support development of new zoning regulations where needed.
7. Eliminate nutrient inputs to the lake caused by lawn fertilizers, failing septic systems, and other sources.
8. Control exotic species such as purple loosestrife.

A reassessment of sensitive areas on Bone Lake reinforced these suggestions with the following recommendations in 2025.

RECOMMENDATIONS FOR LAKE USERS/RIPARIAN OWNERS

- Refrain from removing or reducing aquatic vegetation, especially floating and emergent species.
- Leave coarse woody habitat that falls into the water.
- Leave snag or cavity trees standing (if they do not pose a threat to property).
- Restore manicured lawn/developed shoreline to native vegetation.
- Familiarize yourself with the sensitive areas (critical habitat) and their importance.
- Do not disturb herptiles, birds, or mammals utilizing various habitats around the lakes.

WILDLIFE HABITAT

One reason for the wildlife diversity around the lakes and its watersheds is the habitat diversity. This geographic area contains various types of wetlands, open grasslands, upland and lowland woodlands, and agricultural areas - key habitats to the wildlife in the area.

Birds are among the wildlife people like to observe. The Bone Lake Management District completed a bird survey in 2011 and 2022. Recommendations from that report provide suggestions to encourage birds on Lake Wapogasset and Bear Trap Lakes as well.

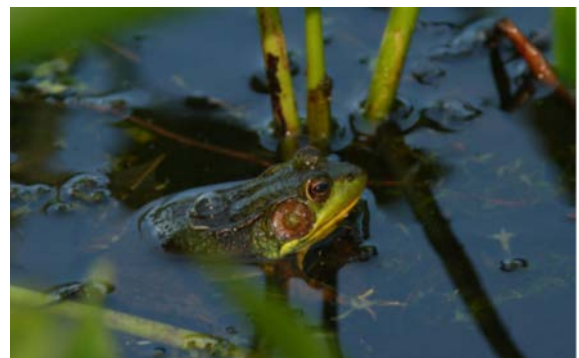
RECOMMENDATIONS TO ENCOURAGE BIRDS

- Allow standing dead wood and large, old trees to remain for habitat for red-headed woodpeckers and other cavity nesting birds.
- Maintain (and potentially expand) large parcels of second growth forest to support red-shouldered hawk, least flycatcher, ovenbird, rose-breasted grosbeak, scarlet tanager, and veery.
- Decrease use of lead sinkers to protect bald eagle, trumpeter swan, and common loon.
- Install nest boxes for a variety of species including blue bird, purple martin, and chimney swift.
- Pursue opportunities for citizen-based monitoring such as eBird (<http://www.ebird.org/>).
- Maintain and expand natural shoreline vegetation next to the lake.

The Bone Lake Management District also conducted a study of frogs and toads around Bone Lake. Recommendations to protect frogs and toads on Bone Lake apply to project lakes as well.

RECOMMENDATIONS

- Maintain a wide buffer of natural shoreline vegetation for green frogs.
- Protect forested wetlands and small, temporary pools for tree frogs and toads.
- Protect identified sensitive areas especially beds of hardstem bulrush for green frogs and leopard frogs.
- Maintain quality of oxygen-rich feeder streams for green frogs and leopard frogs.



Green Frog (Rana clamitans)

Photo by Brian M. Collins

LAKES WAPOGASSET AND BEAR TRAP LAKE FISHERY

Wapogasset and Bear Trap lakes are highly productive lakes that receive extensive recreational boating use, high angling pressure and have quality, diverse fisheries. The Wisconsin Department of Natural Resources (DNR) surveyed Wapogasset and Bear Trap lakes to assess the status of their fisheries in 2019 and 2021. Fishery information and recommendations are taken directly from the 2021 report. DNR fishery surveys are being updated in 2026 with walleye and musky surveys completed in April. Spring electrofishing surveys targeting bass and panfish will occur in May or early June.

STOCKING HISTORY

Walleye fry and small fingerlings have been regularly stocked at variable rates into Wapogasset Lake since 1973. Beginning in 2013, as part of the Wisconsin Walleye Initiative, large fingerling walleye have been stocked biennially into Wapogasset Lake and Bear Trap Lake at a rate of 15 fish/acre. Large fingerling muskellunge have been stocked biennially into Wapogasset Lake since 2005 and Bear Trap Lake since 2015 at a rate of approximately 0.5 fish/acre.

FISHING REGULATIONS

The only special fishing regulation in Wapogasset and Bear Trap lakes is a 14–18-inch protected slot limit for largemouth bass and smallmouth bass. This regulation has a five fish daily bag limit, but only one fish over 18 inches can be harvested. All other species follow statewide or Ceded Territory regulations.

WALLEYE

The adult walleye population density estimate in Wapogasset Lake during 2019 was 4.3 fish/acre. The adult walleye population estimate in Bear Trap Lake was 4.0 fish/acre. The density of adult walleye in Wapogasset and Bear Trap lakes were similar, and both increased and were the highest ever reported for both lakes. Walleye growth rates in Wapogasset and Bear Trap lakes were fast, consistently above the median for complex-warm-dark lakes, and the mean length at age for ages 1 to 10 averaged 2.0 inches greater than the lake class median. The survival to age-3 was 7.5%, and the cost per age-3 walleye was estimated at \$14.07. The survival to age-5 was 8.3%, and the cost per age-5 walleye was estimated at \$12.74. Both lakes are currently classified as combination lakes where natural recruitment occurs, but the walleye fishery is primarily driven by stocking. Large fingerling stockings began in 2014 and have had high survival and successfully created a high-quality walleye fishery with a high adult density and quality size structure. The walleye fishery should continue to improve in the coming years as age and size structure improves and additional stockings occur. A preliminary population estimate

from the 2026 Lake Wapogasset survey indicates the estimate is lower than 2019, but it is well above management objectives.¹

MUSKELLUNGE

The adult (≥ 30 inches) muskellunge population density estimate for both lakes combined was 0.24 fish/acre. The current muskellunge population density has remained similar to that observed during the 2013 fishery survey (0.20 adult fish/acre). The average length of muskellunge was 37.5 inches, and lengths ranged from 14.9 – 48.0 inches.

NORTHERN PIKE

A total of 65 northern pike were collected during the 2019 spring netting survey on Wapogasset and Bear Trap lakes, and lengths ranged from 10.7 – 36.2 inches. Wapogasset and Bear Trap lakes continue to have lower-density northern pike populations with desirable size structures.

LARGEMOUTH BASS

A total of 335 largemouth bass were collected from Wapogasset and Bear Trap lakes during the spring electrofishing survey. Size structure indices have increased since 2013 and now resemble historically high values observed in the early 1970s.

SMALLMOUTH BASS

Only seven smallmouth bass were collected from Wapogasset and Bear Trap lakes. Despite an increase in catch rate from 2013, the relative abundance of smallmouth bass remains low throughout the system but likely still contributes to the overall bass fishery.

BLUEGILL

A total of 118 bluegills were collected from Wapogasset and Bear Trap lakes, and lengths ranged from 3.1 to 9.3 inches with an average length of 5.9 inches. The bluegill population abundance has declined, but this corresponded with a notable improvement in population size structure.

BLACK CRAPPIE

Twenty-two black crappies were collected in Wapogasset and Bear Trap lakes during the SE2 survey with a combined electrofishing catch rate of 8.8 fish/mile. Black crappies have remained low in abundance with good size structure and similar to previous surveys.

¹ Email communication. Kyle Broadway, DNR Fisheries Biologist. May 6, 2026.
5/26/2026

YELLOW PERCH

Twenty-four yellow perch were collected in Wapogasset and Bear Trap lakes during the survey with a combined electrofishing catch rate of 9.6 fish/mile. Lengths ranged from 2.5 to 7.5 inches, with an average length of 2.9 inches. The low relative abundance and low size structure of the yellow perch population in Bear Trap and Wapogasset lakes may not have a significant contribution to the recreational panfish fishery but serve as an important forage source for predatory fishes.

FISHERY MANAGEMENT RECOMMENDATIONS

The fishery management recommendations below are taken directly from the DNR 2021 report. DNR conducts fishery surveys and establishes fishing regulations. The Lake Association and Sanitary District can have the most influence increasing habitat complexity and monitoring and preventing aquatic invasive species (recommendations 5 and 6).

- 1) Large fingerling walleye stockings have successfully established a quality fishery in Wapogasset and Bear Trap lakes. The walleye population should be maintained at a density of ≥ 3 fish/acre with the current stocking regime (15 fish/acre every other year).
- 2) Wapogasset and Bear Trap lakes support a high-quality muskellunge fishery. The muskellunge population should be maintained at an adult density of 0.2 – 0.3 fish/acre with the current stocking regime of 0.5 fish/acre every other year.
- 3) Wapogasset and Bear Trap lakes are well-rounded and popular panfish lakes. No management actions are necessary for these species.
- 4) Bass should continue to be managed with the 14-18-inch protected slot limit regulation.
- 5) **Efforts to increase habitat complexity in Wapogasset and Bear Trap lakes should also be encouraged where applicable.** Inputs of coarse woody structure/habitat, protection/promotion of aquatic vegetation and maintenance/restoration of vegetative buffers would be beneficial. Efforts to increase habitat complexity in Wapogasset and Bear Trap lakes should also be encouraged where applicable. Inputs of coarse woody debris, protection/promotion of aquatic vegetation and maintenance/restoration of vegetative buffers would be beneficial. This website healthylakeswi.com is a great resource to learn about this recommendation.
- 6) Invasive species monitoring and control programs should continue.

SOURCES

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Ecological Integrity Service. *Sensitive Area (Critical Habitat) Survey: Evaluation of macrophytes, zooplankton, macroinvertebrates, herptiles, and mammals. Bone Lake, Polk County Wisconsin 2021-22.*

Wisconsin Department of Natural Resources. *Fishery Survey Report for Wapogasset and Bear Trap Lakes, Polk County, Wisconsin 2019-2021. WATERBODY IDENTIFICATION CODES: 2618000 AND 2618100.*

Wisconsin Department of Natural Resources. *Bear Trap Lake Sensitive Area Survey Report and Management Guidelines.* 1989.

Wisconsin Department of Natural Resources. *Wapogasset Lake Sensitive Area Survey Report and Management Guidelines.* 1989.