

WILKINSON LAKE



QUICK FACTS

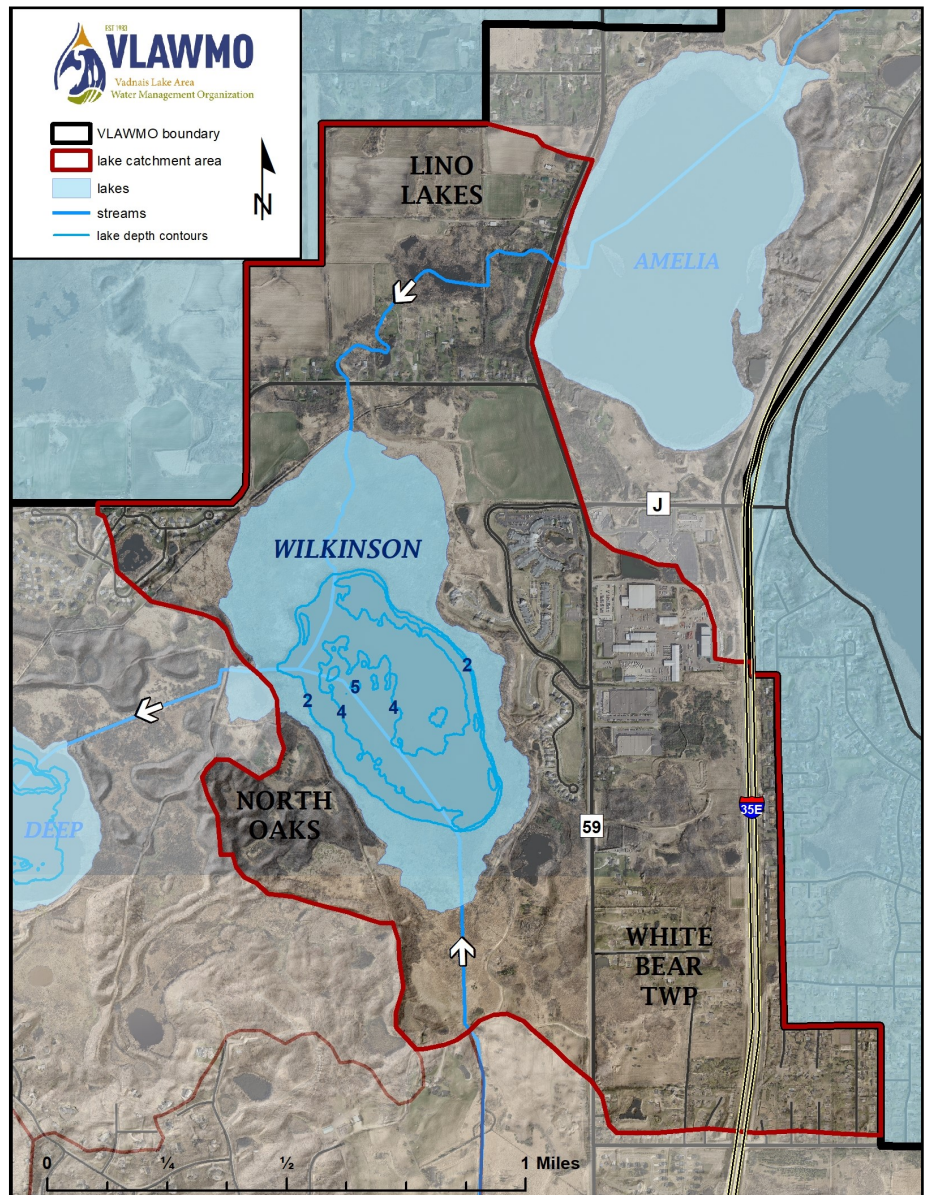
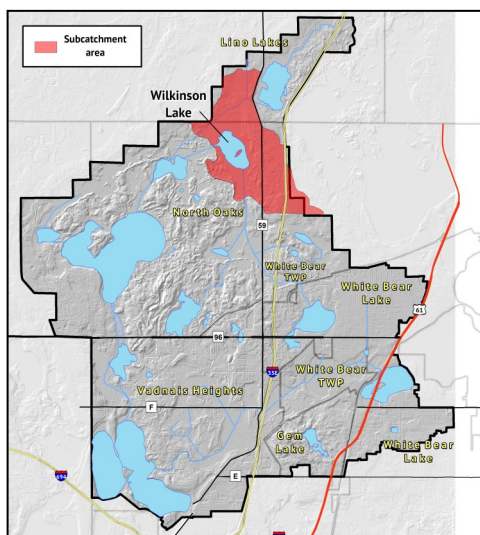
Lake Catchment Area	1,108 acres
Surface Area	105 acres
Maximum Depth	5 ft

Common Fish
Bullhead, Crappie, Bluegill, Bass, Pumpkinseed, Perch, Shiner

Predominant Vegetation
Canada waterweed, Flat-stem pondweed, White/Yellow water lily

Invasive Species
Curlyleaf pondweed, Eurasian Watermilfoil, Yellow iris

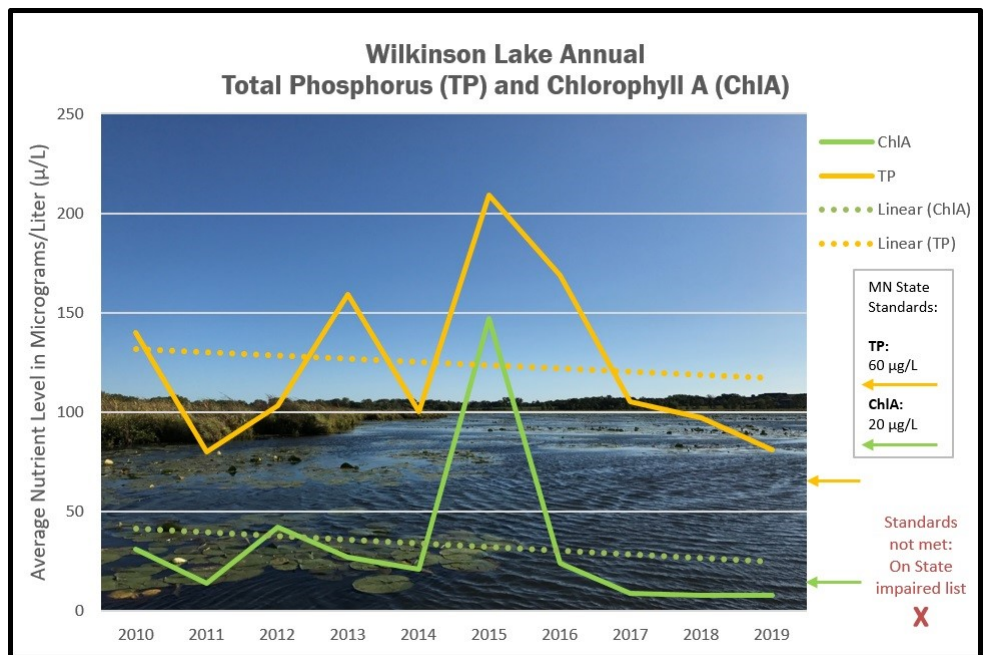
LOCATION: Wilkinson Lake is located in the City of North Oaks. A portion of Interstate 35E is within the subwatershed. Land use around the lake consists of multi-family residential, commercial, industrial, and protected open space. Multi-family senior housing and commercial use to the north are possible in the future.



LAKE SUMMARY: Wilkinson Lake is a shallow waterbody that is part of the Minnesota Land Trust, which provides protected open space surrounding the lake. This easement was established at the James J. Hill experimental farm. The City of North Oaks requires a 150-foot buffer between the lake and any structures. Due to high nutrient levels, however, Wilkinson Lake is listed on the State Impaired Waters List. A fish barrier was installed in 1994 at the western outlet of Wilkinson to prevent carp from entering from Deep Lake to the southwest.

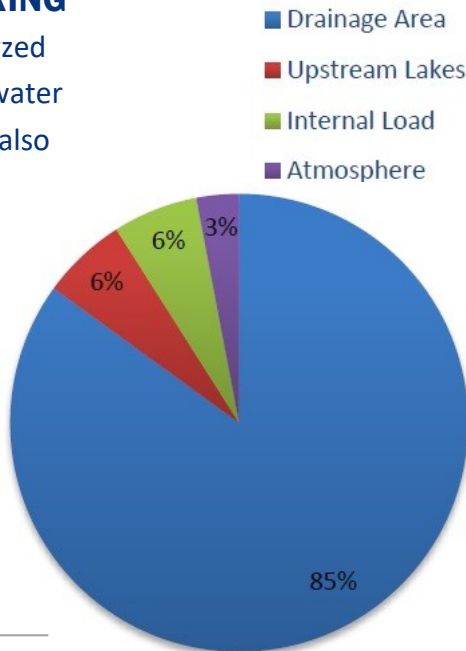
NUTRIENT SUMMARY:

Expanded monitoring to measure where nutrients are coming from began in 2016. These studies show that agricultural runoff and internal loading are factors in the lake's poor water quality. The State standard for Phosphorus is 60 µg/L, and the standard for Chlorophyll-A is 20 µg/L. A large spike can be seen on the graph in 2015—staff continue to monitor incoming data to determine if this is a trend or an outlier.

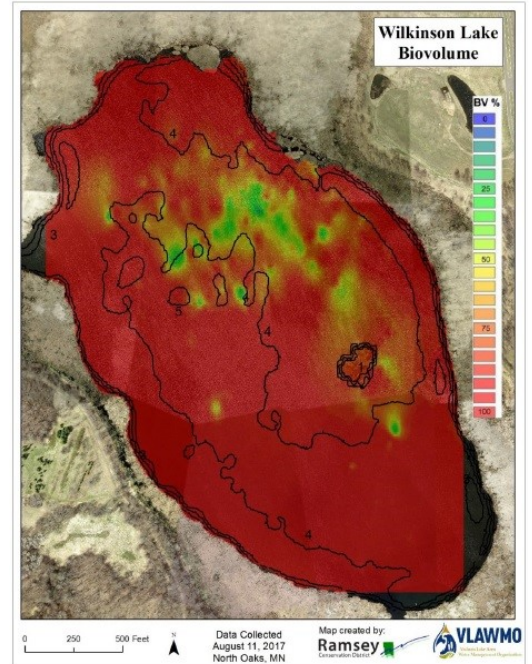


WET WEATHER MONITORING

Phosphorus sourcing was analyzed through early detection stormwater monitoring during rain events, also known as wet weather monitoring. The “first flush”, or the first 5 minutes of a rain event are most important because this is when runoff carries contaminants from the landscape. Results (right) show that the drainage area is the main source of contaminants.



Wilkinson Vegetation/Biovolume



WILDLIFE OBSERVATIONS:

Wilkinson is a hotspot for waterfowl and other wildlife. Each spring and fall a wide variety of waterfowl use the lake as a migration stopover. In 2019, remote-cameras near Wilkinson caught several species such as opossum and weasel (below).



Wilkinson Lake 2019	Clear Oligotrophic		Moderately Clear Mesotrophic		Green Eutrophic	Very Green Hypereutrophic	
	20	30	40	50	60	70 80	
Trophic State Index (TSI): Overall	[Progress bar from 20 to 60]					▲	[Progress bar from 60 to 80]
TSI Transparency: Secchi Disk	[Progress bar from 20 to 60]					▲	[Progress bar from 60 to 80]
TSI Chlorophyll A: ChIA	[Progress bar from 20 to 60]					▲	[Progress bar from 60 to 80]
TSI Total Phosphorus: TP	[Progress bar from 20 to 60]					▲	[Progress bar from 60 to 80]

Trophic State Index (TSI):

A TSI rating is a calculation based on the lake data averages. These values are used to compare lakes on a consistent scale.

Visit VLAWMO.org/waterbodies for more information on Wilkinson Lake.