

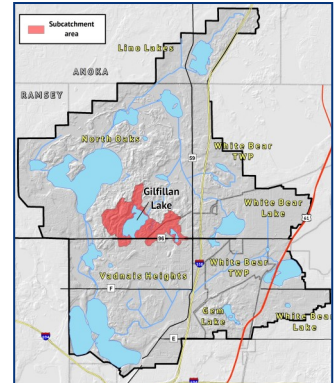
# GILFILLAN LAKE



## QUICK FACTS

Lake Catchment Area	645 acres
Surface Area	102 acres
Maximum Depth	7 ft
Average Depth	4 ft

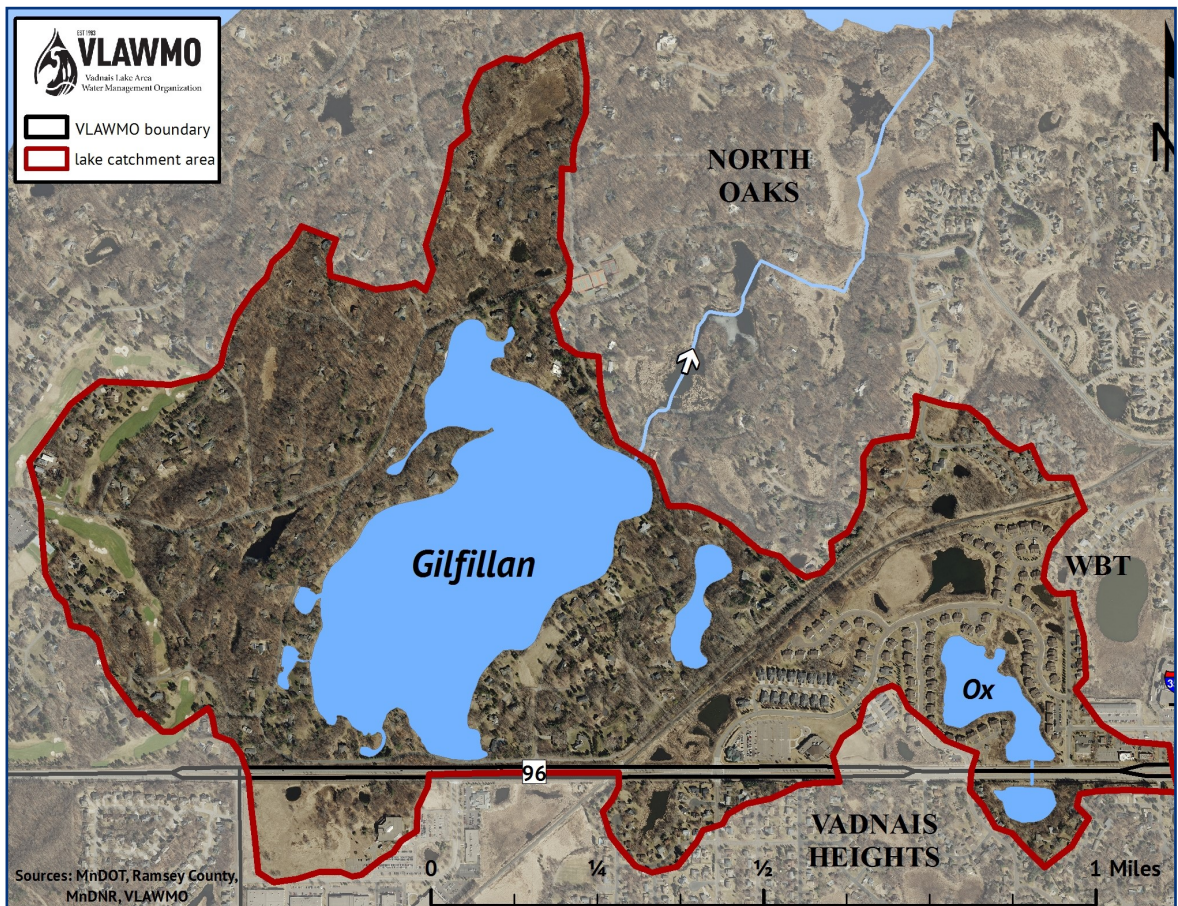
**LOCATION:** Gilfillan Lake is located in the City of North Oaks near the center of the VLAWMO watershed. Gilfillan Lake is surrounded by private homes with one large open lot belonging to the North Oaks Homeowners' Association. The lake outlets to the north into Teal Pond and then into Black Lake.



**Common Fish**  
Walleye, Sunfish

**Predominant Vegetation**  
Najas, Canada waterweed, White water lily

**Invasive Species**  
None indicated



**LAKE SUMMARY:** The Minnesota Department of Natural Resources used Gilfillan for a walleye nursery in the past. That is not continuing currently. Gilfillan is impaired for high nutrients. The City of North Oaks and the SPRWS pumped water from Pleasant Lake to Gilfillan Lake to increase water levels. The pump, filter and piping were installed fall of 2011. Pumping began during spring of 2012. The increased water level (about 4.5ft) reduced nutrient levels for a while. Nutrients fairly rapidly returned to State standard levels, and continued climbing again after pumping halted. The pumps are routinely turned on for inspection but, at present, remain off due to high water.

## NUTRIENT SUMMARY:

Gilfillan nutrient levels fell significantly in 2012 due to augmentation from Pleasant Lake, but show a slight rise in recent years.

## GILFILLAN GOALS:

Gilfillan requires a 62% Total Phosphorus (TP) reduction (264 lbs/year) to meet the goals outlined in the Total Maximum Daily Load (TMDL) study. Internal loading is the largest contributor of TP in Gilfillan, which means phosphorus is circulating into the water column from the lake bottom sediment. Wind action and rough fish (bullhead, released goldfish) stir up sediment and promote algae blooms. These interactions keep the lake in a murky water state and diminish aquatic plants by limiting the amount of sunlight that can

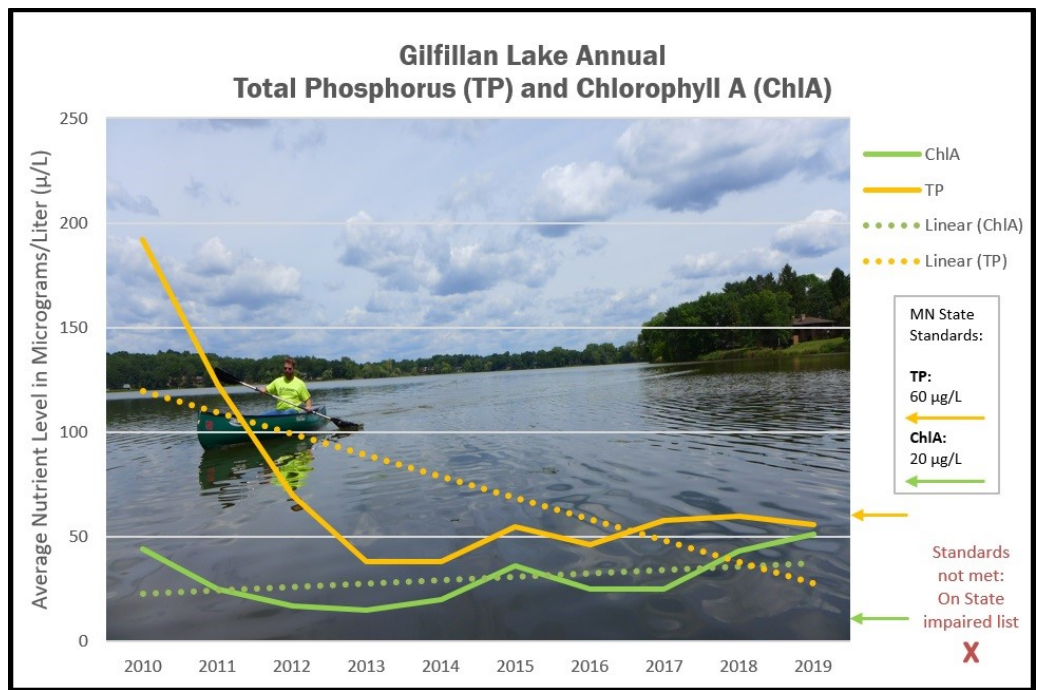
reach them. For a shallow lake to have clean water, nutrients should be taken up by aquatic plants instead of algae. With a shared goal and community consensus, Gilfillan holds potential to flip into a clean water state using alum or similar in-lake treatments. Improvements to Gilfillan will help protect Black Lake to the north, which Gilfillan flows into.

## PROJECT HIGHLIGHT:

Gilfillan has maintained an active group of shoreline property owners and community partners. One such project was a shoreline restoration in 2015, planted by volunteers from the North Oaks Natural Resources Commission.



Visit [VLAWMO.org/waterbodies](http://VLAWMO.org/waterbodies) for studies and reports on Lake Gilfillan.  
Updated 2/25/20—NV



Gilfillan 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]						▲	
TSI Transparency: Secchi Disk		[Progress bar from 20 to 60]						▲	
TSI Chlorophyll A: ChIA		[Progress bar from 20 to 60]						▲	
TSI Total Phosphorus: TP		[Progress bar from 20 to 60]						▲	

## GILFILLAN SOURCES OF PHOSPHORUS

