

## FISHERIES MANAGEMENT

A 2018 fish survey showed high numbers of carp in Normandale Lake. Radio-tags were installed on carp in 2019 to focus on the best approach for managing the carp. A follow-up fish survey in the summer of 2019 will assess the effect of the drawdown on the overall fish population.

## FISH STOCKING

The Department of Natural Resources will stock Normandale Lake with adult largemouth bass and bluegill in 2019.



Fish Survey on Normandale Lake

## PROJECT OVERVIEW

The Nine Mile Creek Watershed District and City of Bloomington are partnering to complete projects to improve the health of Normandale Lake. The projects target curly-leaf pondweed, an invasive aquatic plant, and phosphorus, a nutrient that causes algae blooms and excessive plant growth.

## MONITORING FOR SUCCESS

The District will conduct lake monitoring to understand the success of the projects. This will include water quality sampling, plant surveys, fish surveys, and sampling the lake bottom for "seeds" from curly-leaf pondweed.

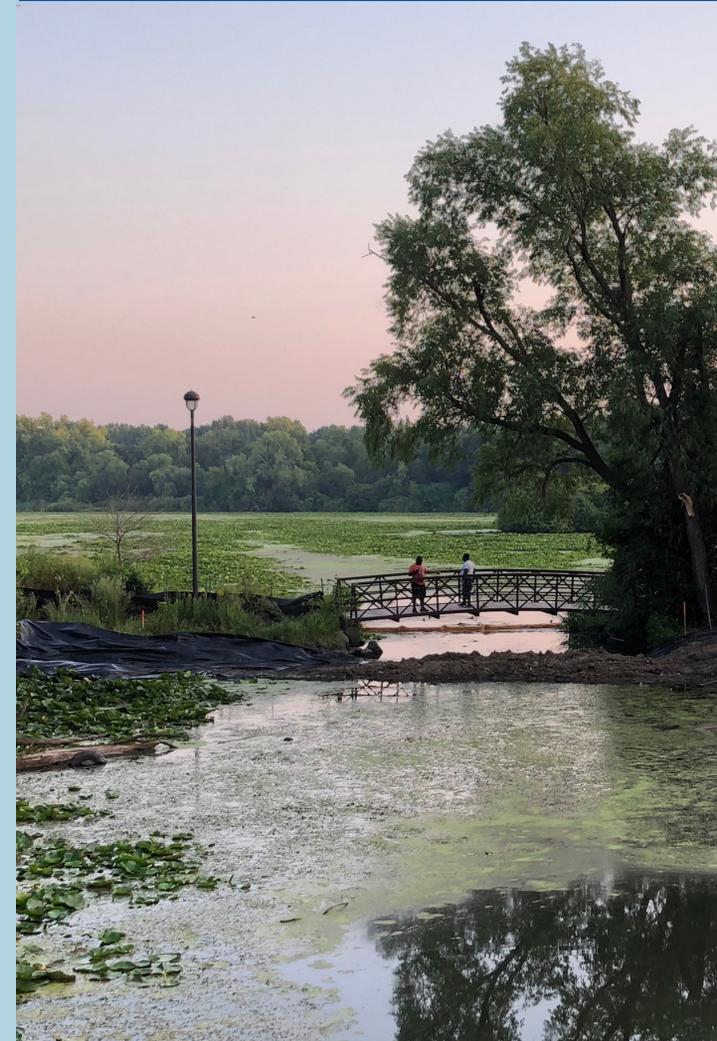
## TALK TO US!

Nine Mile Creek Watershed District  
952-358-2276  
[ninemilecreek.org/normandale](http://ninemilecreek.org/normandale)  
[blm.mn/nlwq](http://blm.mn/nlwq)



## NORMANDALE LAKE

# Water Quality Improvement Project



## LAKE DRAWDOWN

**August 2018-March 2019**

During the drawdown at Normandale Lake, water was emptied from the lake to expose the sediment to freezing temperatures. This was done to control curly-leaf pondweed, an invasive aquatic plant. It is the only way to kill the plants' turions (seed-like structures), which stops the plant from growing. The winter conditions were favorable for freezing the sediment and killing the curly-leaf pondweed.



Normandale Lake Drawdown

## ALUM TREATMENT

**May 2019**

On contact with water, alum forms a fluffy precipitate called floc. This binds with phosphorus, which keeps it from fueling algae growth. The floc settles to the bottom of the lake and then forms a thin layer on the sediment. This keeps phosphorus from entering the overlying water and makes it unavailable to algae. The result is a reduction in the frequency and intensity of nuisance algal blooms. Alum is a safe and effective way to control phosphorus in a lake.



Lake Alum Treatment

## HERBICIDE TREATMENT

**Spring 2020**

An herbicide treatment using Endothall will target any curly-leaf pondweed that remains after the drawdown. Endothall, a selective herbicide, is most effective when applied in late April or early May. This timing also minimizes harm to native plants, which begin growing later in the season. Treatment may be repeated yearly for up to five years, depending on curly-leaf pondweed regrowth.



Curly-leaf Pondweed