

WILDLIFE PROTECTION

During the lake drawdown, water levels dropping in Normandale Lake will cue turtles to find new overwintering habitat before they need to hibernate. Turtle protection fencing will surround the lake and direct turtles safely upstream or downstream for the winter and keep them off roads.



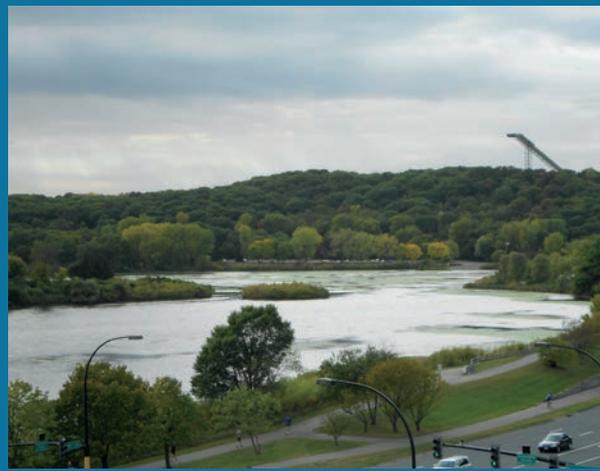
The District and City have worked closely with the Minnesota Department of Natural Resources on this project to protect turtles and other wildlife.

To read the project's Environmental Assessment Worksheet visit: ninemilecreek.org/current-projects/normandale.

If you see wildlife in danger, contact: Bloomington Animal Control at 952-563-4942

PROJECT OVERVIEW

Bloomington and the 9 Mile Creek Watershed District are partnering on a lake drawdown, herbicide treatment, and alum treatment to improve the health of Normandale Lake. The treatments will target curly-leaf pondweed, phosphorous that causes algae blooms, and bad odors. Less algae and a healthier plant population will grow in the lake after the project.



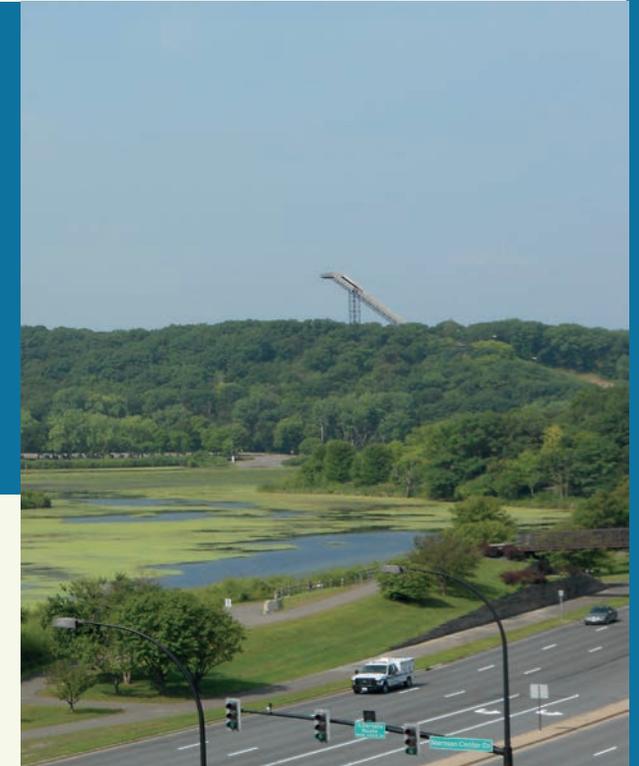
DID YOU KNOW?

Normandale is a shallow, man-made lake. It was created in the mid-1970s to control flooding. You can help keep Normandale Lake healthy by cleaning leaves and trash from the surface of stormdrains by your house. Sign up at: adopt-a-drain.org.

ADDITIONAL INFORMATION

Find up to date project information at: blm.mn/nlwq
ninemilecreek.org/current-projects/normandale

NORMANDALE LAKE WATER QUALITY IMPROVEMENT PROJECT



NORMANDALE LAKE PROJECT STEPS

1. LAKE DRAWDOWN

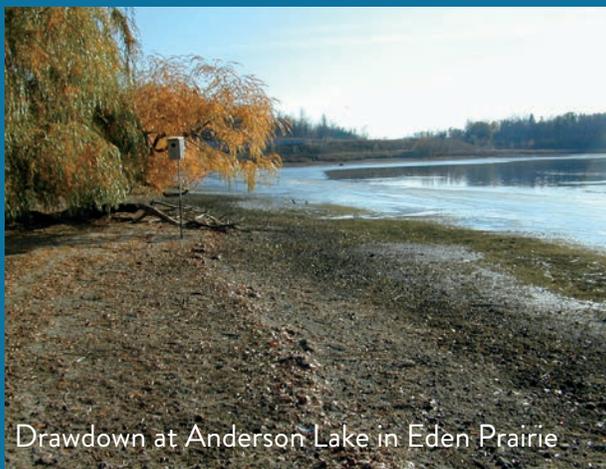
QUICK INFO

What: Drawdown to kill curly-leaf pondweed and reduce phosphorus

Timeline: Late August 2018-April 2019

Cost: \$310,000-\$420,000

User Impacts: Users will notice low water levels in Normandale from late summer to early April 2019.



Drawdown at Anderson Lake in Eden Prairie

2. HERBICIDE TREATMENT

QUICK INFO

What: Herbicide application to treat remaining curly-leaf pondweed after drawdown

Timeline: Spring 2019

Cost: \$100,000

User Impacts: Users will see a treatment boat applying herbicide on the lake, up to a few days.



Curly-leaf Pondweed

Photo: Eyeweel, flickr.com/photos/eyeweel/4458998159 /CC BY-NC-ND 2.0

3. ALUM TREATMENT

QUICK INFO

What: Alum treatment to reduce internal phosphorus loading

Timeline: Spring 2019

Cost: \$140,000

User Impacts: Users will see a treatment boat applying alum on the lake, up to a few days.



Alum Treatment Boat

Photo: Riley Purgatory Bluff Creek Watershed District

WHAT IS A DRAWDOWN?

A drawdown is when water is emptied from a lake. It is used to control curly-leaf pondweed, an invasive plant, in shallow lakes. By exposing the lake bottom to freezing temperatures, curly-leaf pondweed turions (reproductive structure) are killed, stopping the plant from growing. A lake drawdown can also reduce the release of phosphorus from the lake bottom. Too much phosphorus in a lake is undesirable because it causes algae blooms, one of the green, gunky materials that grows on the surface of the lake.

WHAT IS AN HERBICIDE TREATMENT?

An herbicide treatment is used to kill undesirable plants. Endothall, an herbicide that targets curly-leaf pondweed, will be applied in the spring from a boat. It will target any of the invasive plants that remain after the drawdown. Endothall is most effective when applied in late April or early May. This timing also minimizes impacts to native plants, which begin growing later in the season. Treatment may be repeated yearly for up to five years, depending on invasive plant regrowth.

WHAT IS AN ALUM TREATMENT?

Aluminum is applied to the lake from a boat as a solution of alum (aluminum sulfate). It forms floc, a fluffy substance, that settles to the lake bottom. The aluminum binds with phosphorus in the sediment to prevent it from going back into the water. Too much phosphorus in a lake is undesirable because it causes algae blooms. Alum application will occur in the spring, before significant aquatic plant growth, allowing a more effective treatment. Treatment may be repeated in 5-10 years.