

# BIRCH ISLAND LAKE FACT SHEET

#### Overall Health of Birch Island Lake

Water quality of Birch Island Lake is poor, with average nutrient levels higher than state standards for shallow lakes. Birch Island Lake does have a diverse range of aquatic plants present in the lake. There are a total of 12 different plant species. Typically the plant community in the western two thirds of the lake is primarily comprised of cattails and other wetland vegetation. However, heavy rainfall during June of 2014 raised the water level in the lake by 6 feet, causing cattails to die off. In 2015 the invasive species purple loosestrife was recorded in aquatic plant cataloging.

2014 Cattail die off from rapid rise in water levels

## Birch Island Lake Projects

In 2008, the District installed a pipe to direct water from the area north of 62 into the lake. To address declining water levels in Birch Island Lake, The District also cleaned out and improved two existing stormwater basins and constructed a new stormwater pond to treat stormwater runoff prior to reaching Birch Island Lake to improve water quality. This project was part of the larger Eden Prairie Lakes Water Quality Improvement Project.

The District is currently undertaking a water quality study at Birch Island Lake. Learn more at ninemilecreek.org/birch-island-lake-study

### Lake Characteristics

Surface Area	25 acres
Average Depth	3.5 feet
Max Depth	21 feet
Watershed Size	526 acres
Location	Eden Prairie
Invasive Species	Purple loosestrife
	• Goldfish

### Birch Island Lake Watershed



#### Chlorophyll-a 60 50 MPCA Standard ≤ 20 µg/L Chlorophyll-a (µg/L) 40 30 20 10 1997 2011 2012 2015 2020 2021 1989 2019 ■ Birch Island Lake - State Standard

**Phosphorus** 

MPCA Standard ≤ 60 μg/L

2012

Water Clarity (Secchi Depth)

2015

2018

State Standard

MPCA Standard ≥ 1 m

State Standard

2019

2011

# What is Chlorophyll-a? Chl-a is the chemical that

makes algae green. High levels of chl-a can mean that there is too much algae in the water. The higher levels of chl-a in Birch Island Lake indicate that water quality is poor.

### Recreation





Walking & Biking Nearby Birch Island Park has a hiking trail.



#### What is Phosphorus?

Phosphorus is a nutrient that algae need to grow. Too much phosphorus can "over-feed" algae in a lake, which can lead to algae blooms. Birch Island Lake's higher phosphorus levels indicate poorer water quality.

What is

Secchi Depth?

Secchi Depth is a

poor water clarity.





**Swimming** No public swimming



# beach.

measurement of water clarity. To take the measurements, a Secchi disk is lowered into the water until it is no longer visible. These low Secchi depth values indicate

2021

2020

**Boating** Birch Island Lake has canoe access.



## Learn more:

# ninemilecreek.org

## How Can You Help?

1997

2006

Birch Island Lake

2010

2011 2012

Year



100 90

80

70

60

50

40

30

20 10

0

0

0.5

2.5

Secchi Depth (m)

1989

1997

2006

■ Birch Island Lake

2010

Phosphorus (µg/L)



















Clean watercraft and water equipment of all aquatic plants and mussels before leaving a body of water.

#### Why?

It is important to clean water equipment to reduce the spread of invasive species.

Sweep up leaves, grass clippings, and excess fertilizer from driveways and streets.

#### Why?

Sweeping up yard waste will limit the amount of pollution that enters lakes through storm drains.

Dispose of trash and pet waste appropriately. Why?

Picking up your trash and pet waste will help keep pollutants out of our lakes and creeks.

Plant native plants in your garden, and water with care.

#### Why?

Native plants have long roots that are more efficient at soaking up water and prevent runoff.