

#### **North Lake Lida Water Quality Summary**

**Total Phosphorus** 

#### 18 ppb

The average phosphorus concentration is well below the state standard (40 ppb), so North Lida is not impaired.

Chlorophyll-a (algae)

### 5 ppb

The average chlorophyll-a concentration is considerably lower than the state standard (14 ppb). Algae overabundance is typically not an issue.

Clarity (Secchi Depth)

16 feet

The average water clarity is better than the state standard (4.5 feet). North Lida has very clear water

**Trends** 

### **Improving**

From 1998 to 2024 water clarity increased while phosphorus and chlorophyll-a concentrations decreased. Therefore, the water quality of North Lida is improving.

North Lake Lida is a stable lake, with water quality conditions that do not fluctuate wildly throughout the summer months. There is data from one water quality monitoring location on North Lake Lida. Water samples have been collected from that site since 1998. Average water quality results from 1998-2024 are shown to the left.

Overall phosphorus concentration is well below the state standard for the region, meaning North Lake Lida is not considered to be impaired by phosphorus.

Chlorophyll-a concentration, which is a way to measure algae abundance (how green the water is), show that algae population are in-check and do not change significantly throughout the majority of the summer months.

In general, the water within Lake Lida is very clear with measured water clarity that is significantly better than the state standard.

Over the entire course of sampling (1998-2024), the collected data show decreasing trends in total phosphorus and chlorophyll-a alongside increasing water clarity over the last 26 years. All trends suggest water quality that is improving in the long-term. In the past decade there has been little significant change and water quality trends are stable.

The unintentional introduction of Zebra Mussels to Lake Lida in the past likely led to increased water clarity and decreased chlorophyll-a concentrations because Zebra Mussels filter algae out of the water as their food. However, the nutrients (phosphorus) that promote algae growth are still present in the lake. Luckily, phosphorus in North Lida, the main driver of algae growth, is well below the state water quality standard and has been decreasing in the long run. This indicates that water quality is improving not just because of the zebra mussels.



#### **South Lake Lida Water Quality Summary**

**Total Phosphorus** 

#### 31 ppb

The average phosphorus concentration is below the state standard (40 ppb), so South Lida is not impaired.

Chlorophyll-a (algae)

# 13 ppb

The average chlorophyll-a concentration is lower than the state standard (14 ppb). South Lida does experience algae blooms in late summer.

Clarity (Secchi Depth)

#### 11 feet

The average water clarity is better than the state standard (4.5 feet). South Lida has moderately clear water

**Trends** 

## **Improving**

From 1998 to 2024 water clarity increased while phosphorus and chlorophyll-a concentrations decreased. Therefore, the water quality of South Lida is improving.

There is data from one water quality monitoring location on South Lake Lida. Water samples have been collected from that site since 1998. Average water quality results from 1998-2024 are shown to the left. South Lida has more nutrients and algae than North Lida.

Overall phosphorus concentration is below the state standard for the region, meaning South Lake Lida is not considered to be impaired by phosphorus.

Chlorophyll-a concentration, which is a way to measure algae abundance (how green the water is), show that algae population are just below the state standard. South Lida does experience algae blooms in late summer.

Over the entire course of sampling (1998-2024), the collected data show decreasing trends in total phosphorus and chlorophyll-*a* alongside increasing water clarity over the last 26 years. All trends suggest water quality that is improving in the long-term. In the past decade there has been little significant change and water quality trends are stable.

The unintentional introduction of Zebra Mussels to Lake Lida in the past likely led to increased water clarity and decreased chlorophyll-a concentrations because Zebra Mussels filter algae out of the water as their food. However, the nutrients (phosphorus) that promote algae growth are still present in the lake. Luckily, phosphorus in South Lida, the main driver of algae growth, is below the state water quality standard and has been decreasing in the long run. This indicates that water quality is improving not just because of the zebra mussels.