



# On-Site Lake Evaluation Record

Lake Name: White Birch Lakes

County: Clare

Evaluated by: Adam Kehr

Reviewed by: Bre Grabill

Date: 23 August 2018

Purpose of evaluation: End of season survey

## Evaluations Performed

### Aquatic Vegetation Evaluation

- Aquatic vegetation survey
- Aquatic vegetation brief check

- Water quality sampling
  - \_\_\_ On-site (Temperature, DO, Secchi disk)
  - \_\_\_ Water samples collected for
    - \_\_\_TP, TN, ALK\_\_\_\_\_ analysis

### Vegetation evaluation methods

- Visual evaluation
- Sample collection with rake
- Sonar profiling
- GPS-mapped sample locations

- GPS data collection
- Depth survey
- Shoreline mapping
- Reference point location
- Other \_\_\_\_\_

## Overall Condition of Lake

- excellent (no problems or developing problems noted)
- very good (no immediate action required)
- fair (continue next season)
- poor (management needed as soon as possible)
- very poor (management action past due—IMMEDIATE response required)

## Problems Noted

- Growth of exotic plants
  - Eurasian watermilfoil
  - curlyleaf pondweed
  - other \_\_\_\_\_
- Excessive growth of native plants - continue program next season
- Excessive filamentous algae growth
- Poor water clarity
- Blue-green algal blooms



## **RECOMMENDATIONS**

- X Monitoring Program:  
Continue monitoring program next season: x Yes,  No
- X Herbicide application: Continue Program Next Season  
Need for herbicide treatments next season:  urgent, x serious,  moderate,  slight
- X Algaecide application: Continue Program Next Season  
Need for algae treatments next season:  urgent,  serious, x moderate,  slight
- Harvesting Program:  
Need for harvesting next season:  Yes,  No

## **NOTES**

White Birch Lakes and Teal Pond were surveyed on 23 August 2018 after being surveyed and treated for weeds and algae throughout the 2018 season.

White Birch Lakes have a minimal infestation of exotic plants. The exotic infestation has been kept minimal with routine surveys and quick treatment responses to the exotic plants. It is important to continue to survey and spot treat as needed. Depending on the plant bed diversity and location, a combination of systemic and contact herbicides will be recommended for use in the future.

Native plants are present in all waterbodies. Native plants are very important to the overall health of the ecosystem providing sediment stabilization, dissolved oxygen and habitat for a healthy fishery. If and when native plants become a concern, spot treatment techniques can reduce the growth while still maintaining a healthy and thriving lake ecosystem. Recommendations for 2018 include continuing to spot treat the lakes only as required.

Algae is weather and nutrient dependent. In addition to practicing healthy lakefront living techniques (Phosphorus free fertilizers) and reducing nutrient loading, algae treatments can be included in the management program as required. Chara as was treated in 2018 and it is recommended to only spot treat Chara as needed in the future. Chara plays an important role in the lake, filtering the lake for improved clarity as well as providing food and forage for fish. Chara can grow dense and can be spot treated as needed.

Monitoring White Birch Lakes and Teal pond will allow for early detection and rapid response to any new threatening exotic species as well as staying on top of the current plants in the lakes.

There was no Phragmites found on Teal pond this season, therefore no treatments took place for that. Hand treatment was done this year to treat algae. We would recommend using the boat in the future, it is very helpful. We also recommend keeping up with aggressive algae treatments so it does not become a problem.

Please contact me with questions or concerns.

A handwritten signature in cursive script that reads "BreAnne Grabill".

BreAnne Grabill, Environmental Scientist  
Northern Lakes Manager  
PLM Lake & Land Management Corp. North  
breg@plmcorp.net