

Ida Lake

(Douglas County)

Curlyleaf Pondweed Delineation



Survey Date: May 26, 2019



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Report Date: May 27, 2019

Introduction

AIS Consulting Services completed a Curlyleaf Pondweed (CLP) delineation on Ida Lake (Douglas County) on May 28, 2019. The purpose of the survey was to assess Curlyleaf Pondweed abundance and density within historical CLP areas, including areas treated in 2018. This report summarizes the results of the survey.

Methods

We maneuvered our boat in a meandering pattern within historical CLP areas (*figure 1*). Within each area, we used a combination of visual assessment, sonar unit and rake tosses to locate CLP. When CLP was found, we recorded the depth and estimated density of CLP at this point. Then additional areas were searched adjacent to that point to delineate the boundaries of the CLP bed. All waypoints were uploaded to GIS software, and maps were created for the CLP beds and an average depth was determined for each CLP bed.

Estimated Density Ratings for Individual Points -

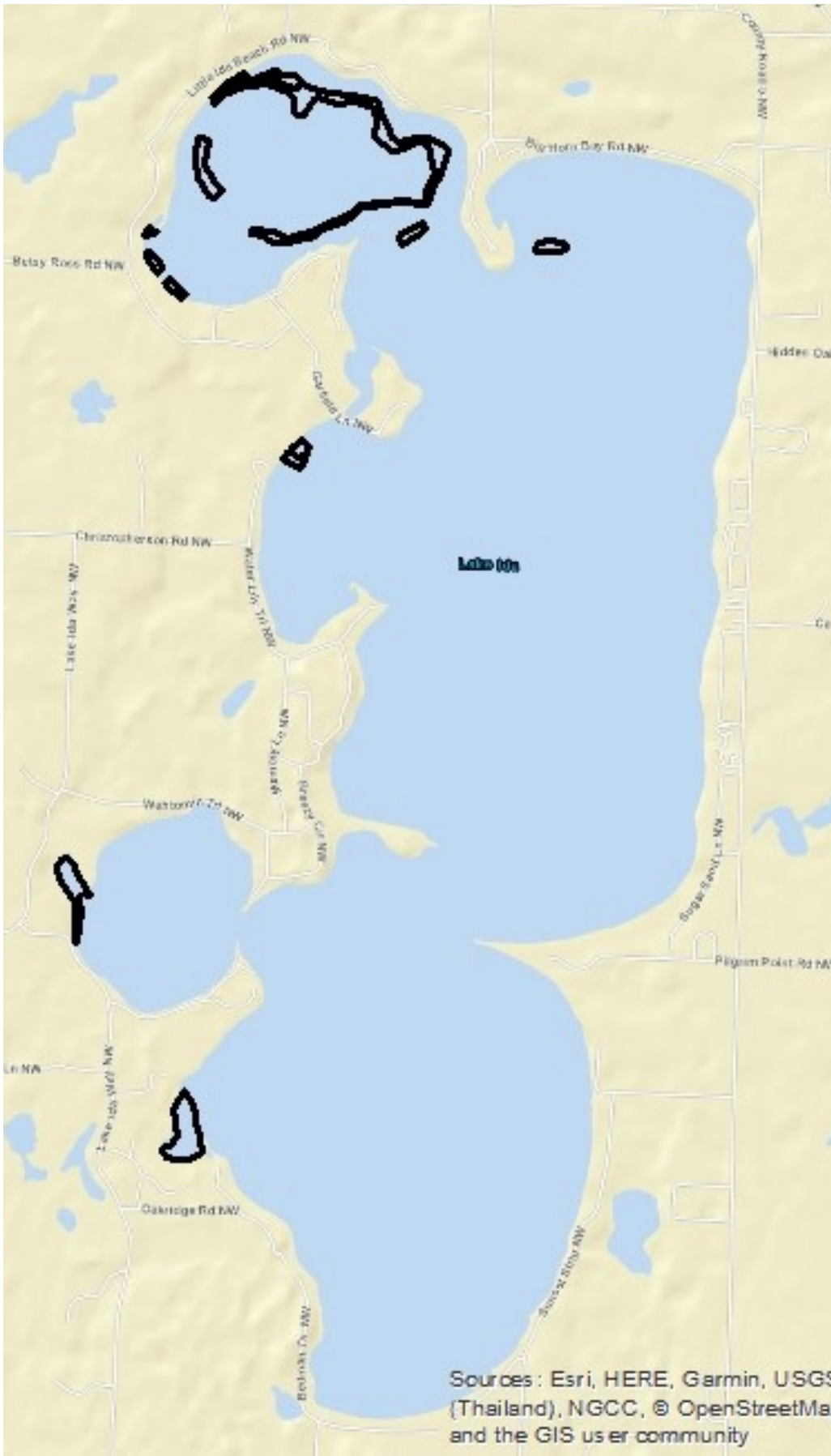
1 = Light density, plants typically sparse

2 = Scattered CLP, plants below the surface

3 = Moderate density, plants near the surface

4 = High density, plants at the surface

Figure 1. CLP Survey Search Areas



Results

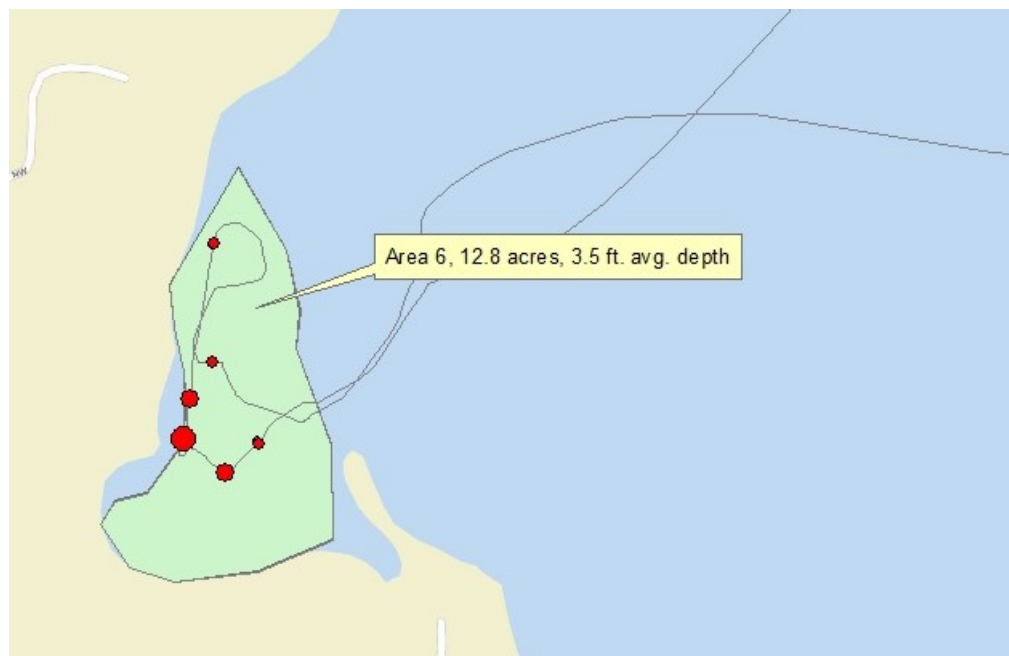
Figure 2. Tracks from May 26, 2019 Survey



Sources : Esri, HERE, Garmin, US (Thailand), NGCC, © OpenStreet and the GIS user community

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CLP Distribution and Abundance



Area 6 - Recommend Treatment

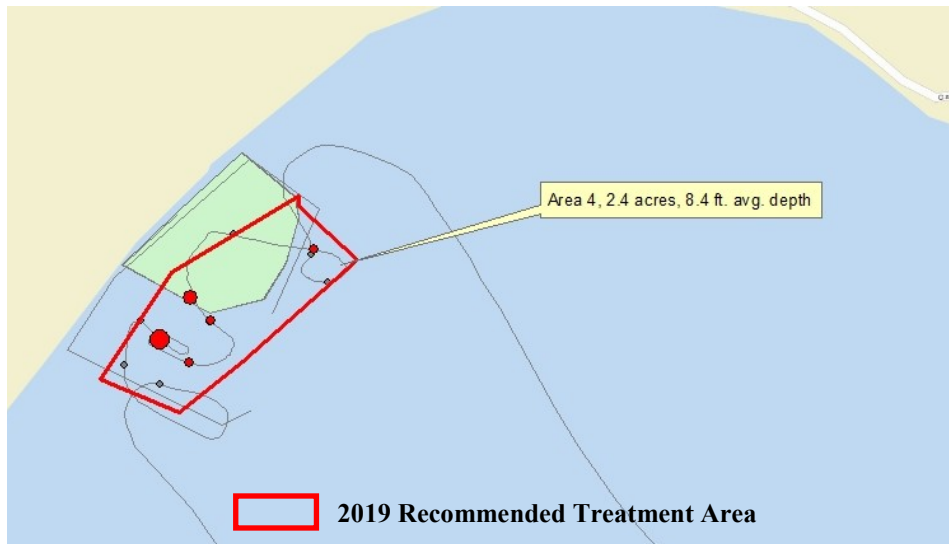
CLP was abundant within treatment area 6 and is recommended for treatment in 2019.

- No CLP Observed
- 1 = Light density, plants typically sparse
- 2 = Scattered CLP, plants below the surface
- 3 = Moderate density, plants near the surface
- 4 = High density, plants at the surface
- 2018 CLP Treatment Area
- Survey Tracks



Area 5 - Recommend Treatment

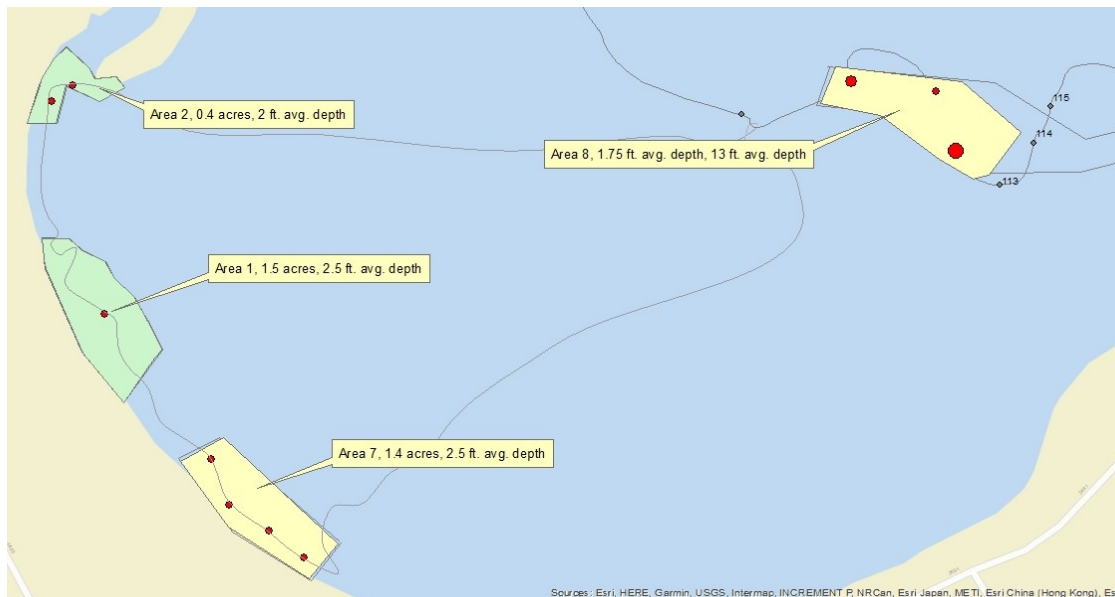
CLP was found throughout treatment area 5 and is recommended for treatment in 2019.



Area 4 - Recommend Treatment

CLP was found near treatment area 4 from 2018, however, we adjusted the site to better fit the distribution of CLP at this location. This site is recommended for treatment in 2019.

- No CLP Observed
- 1 = Light density, plants typically sparse
- 2 = Scattered CLP, plants below the surface
- 3 = Moderate density, plants near the surface
- 4 = High density, plants at the surface
- 2018 CLP Treatment Area
- Survey Tracks



Areas 1 & 2—Recommend Treatment

CLP was observed in Areas 1 and 2, and are both recommended for treatment in 2019.

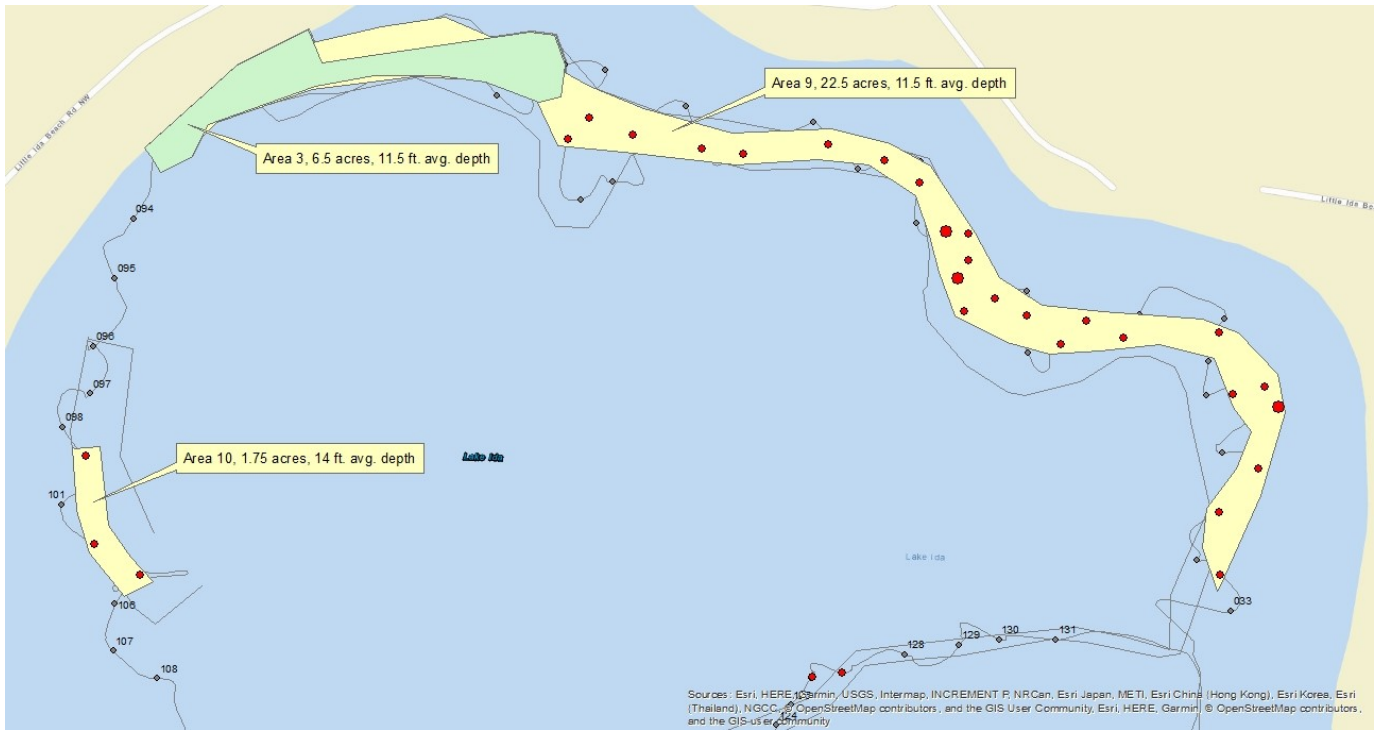
Area 7—Recommend Treatment

Area 7 was not treated in 2018, but CLP was observed here during the 2018 CLP survey and was again observed during the 2019 CLP survey. Area 7 is recommended for treatment in 2019.

Area 8 - Not Recommended for Treatment

Area 8 was not treated in 2018, but CLP was observed here during the 2018 CLP survey and was again observed during the 2019 CLP survey. CLP in area 8 is in depths between 12 and 16 ft. of water. CLP is not expected to reach the surface here and should not become a navigational issue. Treatment of a site this small and in deep water is not likely to be successful and is not recommended for treatment in 2019.

CLP Distribution and Abundance



- No CLP Observed
- 1 = Light density, plants typically sparse
- 2 = Scattered CLP, plants below the surface
- 3 = Moderate density, plants near the surface
- 4 = High density, plants at the surface
- 2018 CLP Treatment Area
- Survey Tracks

Area 3 - Incorporated into Treatment Area 9.

Area 3 was treated in 2018. CLP was observed here during the 2019 survey, and extended eastward into Area 9. CLP density within this area was generally light, and was found in deeper depths between 10 and 14 feet of water. Treatments in long, narrow sites in deeper water can be challenging to get good control.

Area 9 - Recommended for Treatment

Light growth of CLP was found throughout area 9 in depths between 10 and 14 feet of water. Treatments in long, narrow sites in deeper water can be challenging to get good control, however, treatment may be warranted due to the long length of the site. We recommend the lake association discuss their goals for treatment in this area, and if you want to treat the whole site, part of the site or just not treat this area.

Area 10 - Not Recommended for Treatment

Area 10 is a small area, with light growth of CLP in deeper water. Treatment is unlikely to be successful, and is not recommended.

Figure 4. 2019 Potential CLP Treatment Areas

