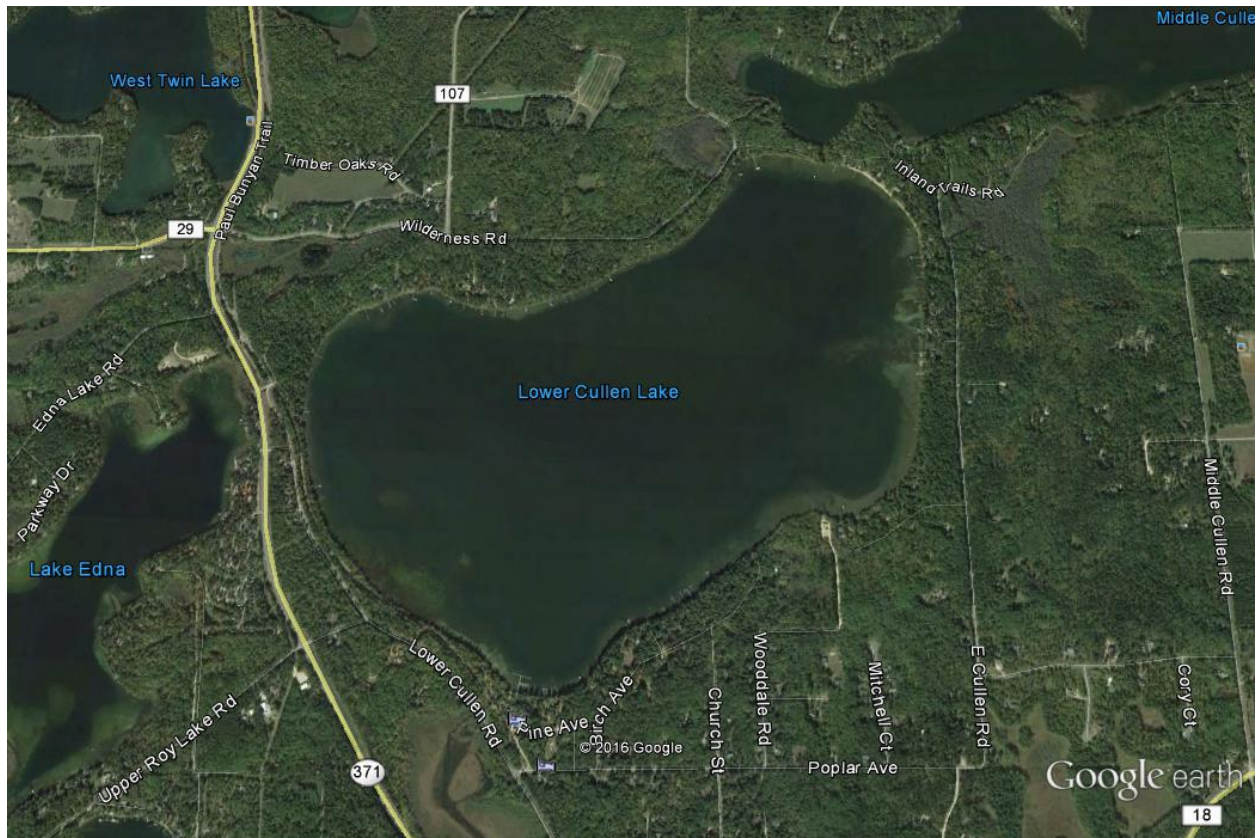


# 2021 CURLY LEAF PONDWEED ASSESSMENT Lower Cullen Lake, Crow Wing County, Minnesota

## Mid-Season Assessment



Submitted by:



Submitted to:  
Cullen Lakes Association

July 13, 2021

**Survey Information:**

Clarke performed a Curly Leaf Pondweed Survey on Lower Cullen Lake on 6/18/2021. The purpose of this survey was to assess the potential treatment areas and the rest of the lake to see densities of Curly Leaf Pondweed when it was at the peak of its life cycle. This also will show areas to focus our surveying on for 2022 and use as potential treatment areas for 2022.

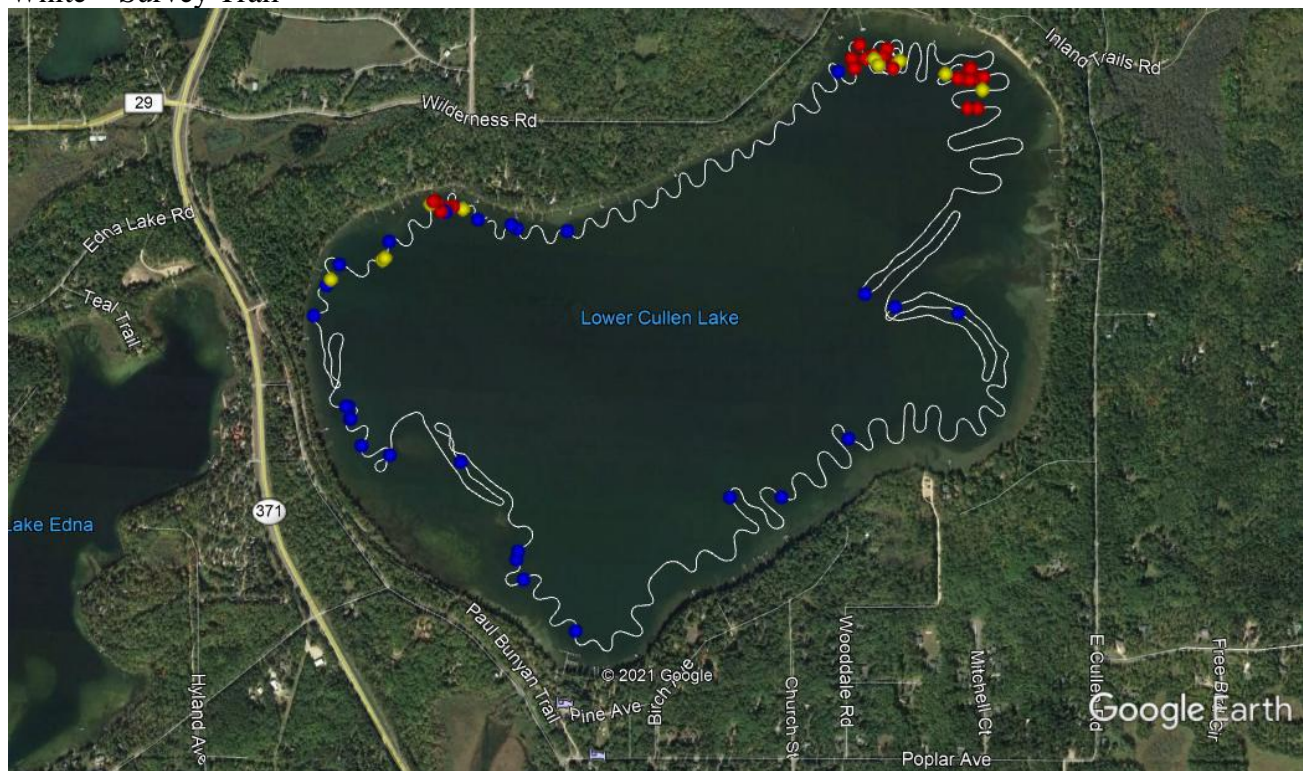
During the survey Clarke found 64 points with Curly Leaf Pondweed. At these points the CLP growth varied from low to high densities. Some of the areas are at levels that should be considered for treatment in 2022. The treatment areas from 2021 should also be checked in spring survey to determine if those areas need treatment again in 2022.

The lake as a whole looked very healthy as far as native vegetation. A wide variety of natives especially Large Leaf Pondweed, Clasp Leaf Pondweed, Chara, and Coontail were found throughout the lake. It was noted that compared to other years the Large Leaf Pondweed and Clasp Leaf Pondweed were at lower densities. A large amount of Chara was observed lake wide. Also water clarity was very good, most likely due to Zebra Mussels which were found at a higher amount attached to vegetation.

**6/17/2021 Survey**

**Table**

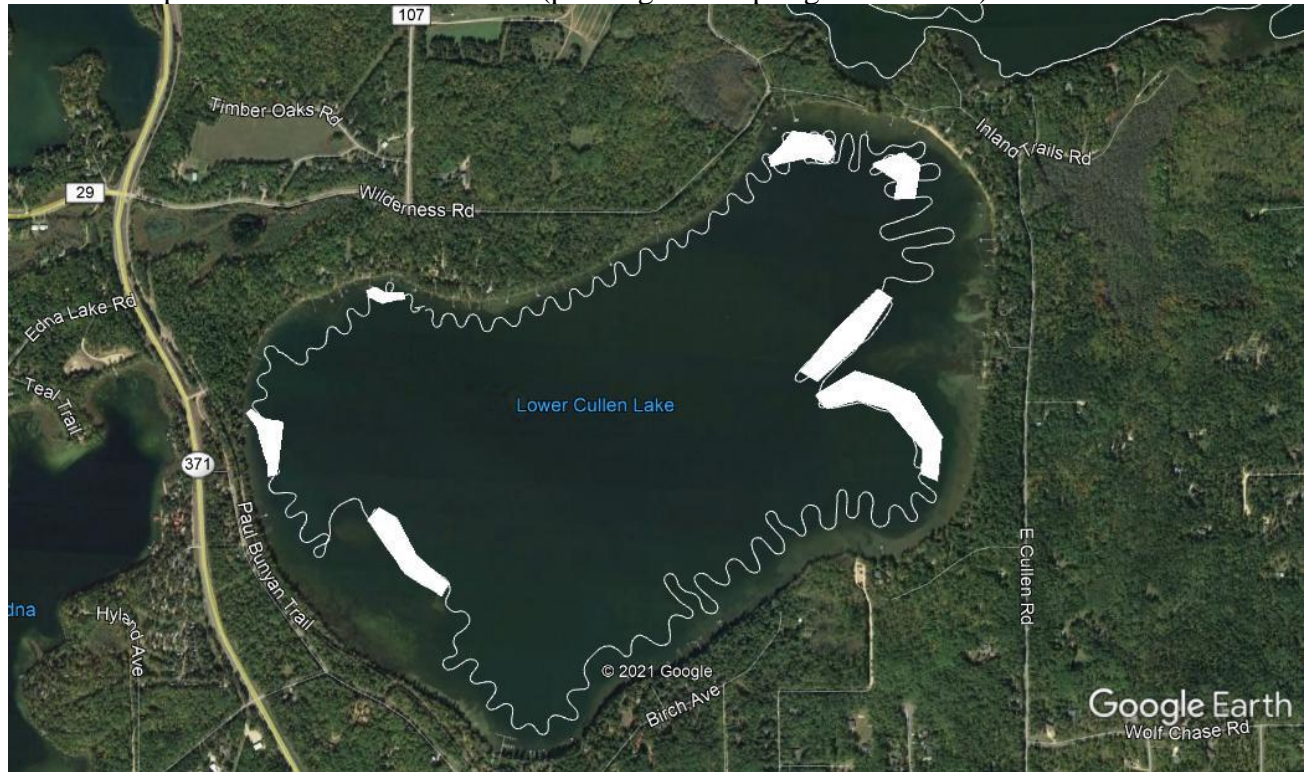
- Red – High Density
- Yellow Mid Density
- Blue – Light Density
- White – Survey Trail



**2022 Potential Treatment Areas (pending 2022 Spring Assessment)**

**Table**

White – Proposed 2022 Treatment Areas (pending 2022 Spring Assessment)



**Total Potential Treatment acreage = 24.7 acres**

**Photo from Survey**

