# Curly-leaf Pondweed Management Lake Ida (Douglas County)

MAISRC Detector Connector Meeting December 3, 2021

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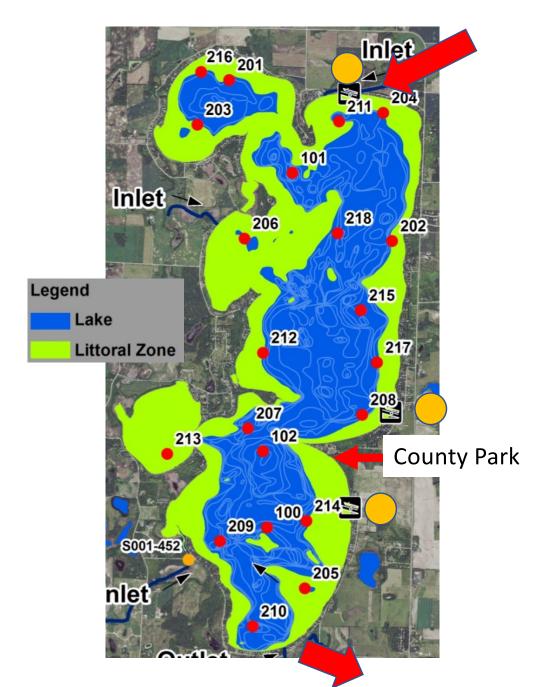
## Lake Ida overview







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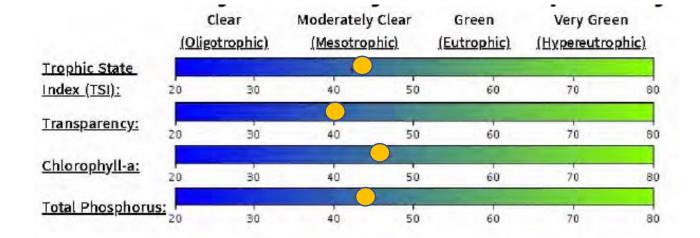




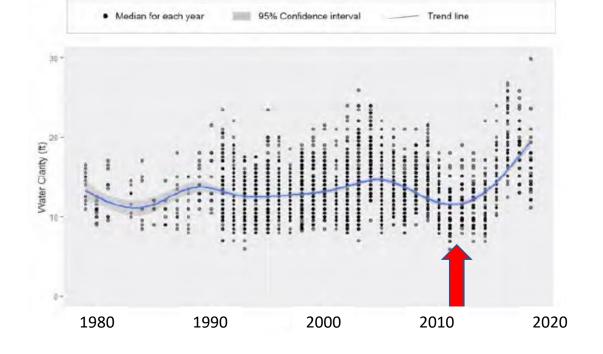


# Water quality metrics

Water quality metrics

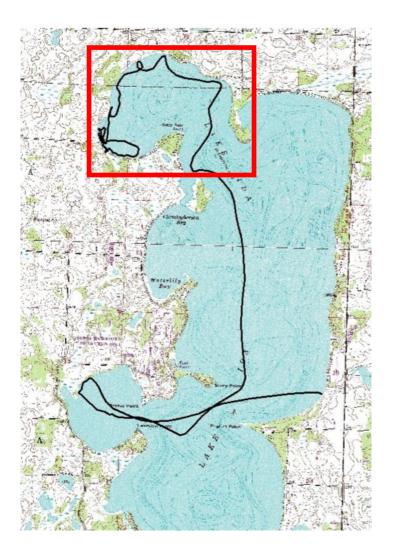


Secchi disk water clarity

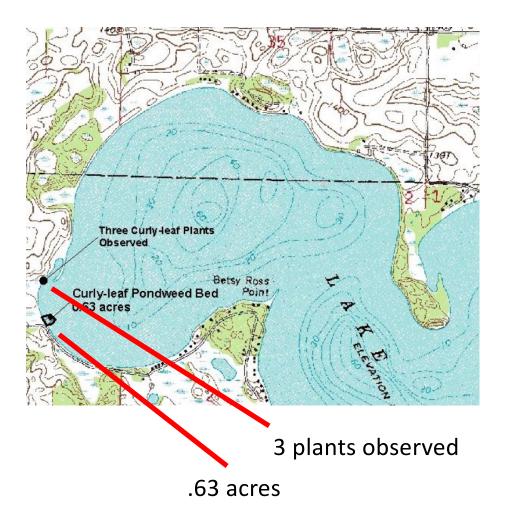


# DNR survey: 2009

#### Survey tracks

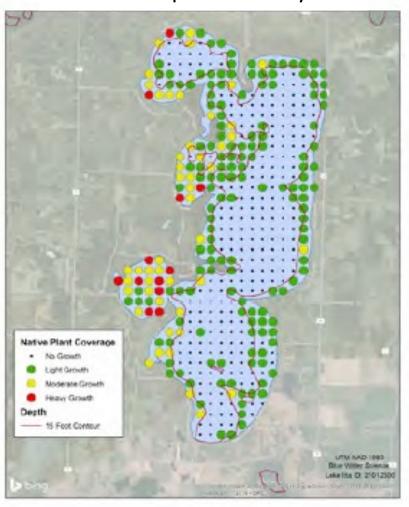


#### CLP beds

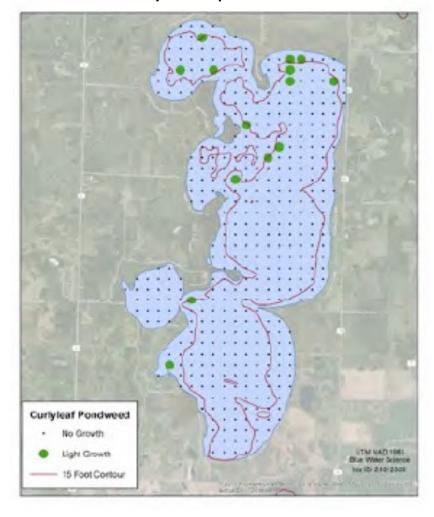


# Point-intercept survey: July 2019



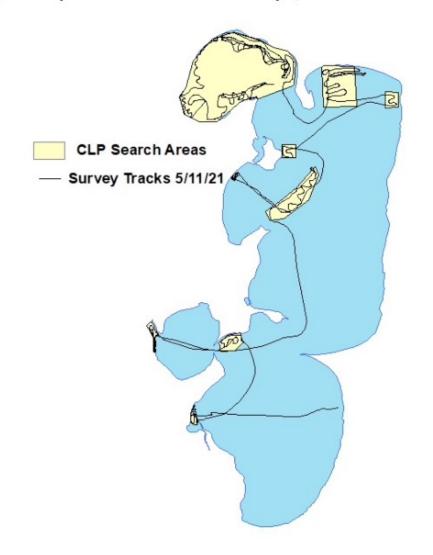


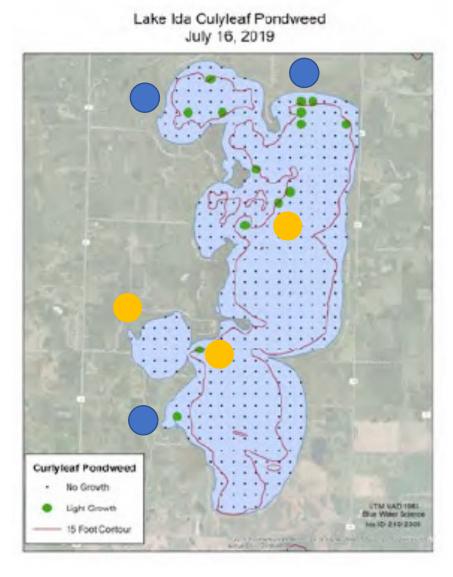
#### Curly-leaf pondweed



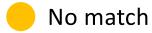
# Meander and Point-intercept surveys

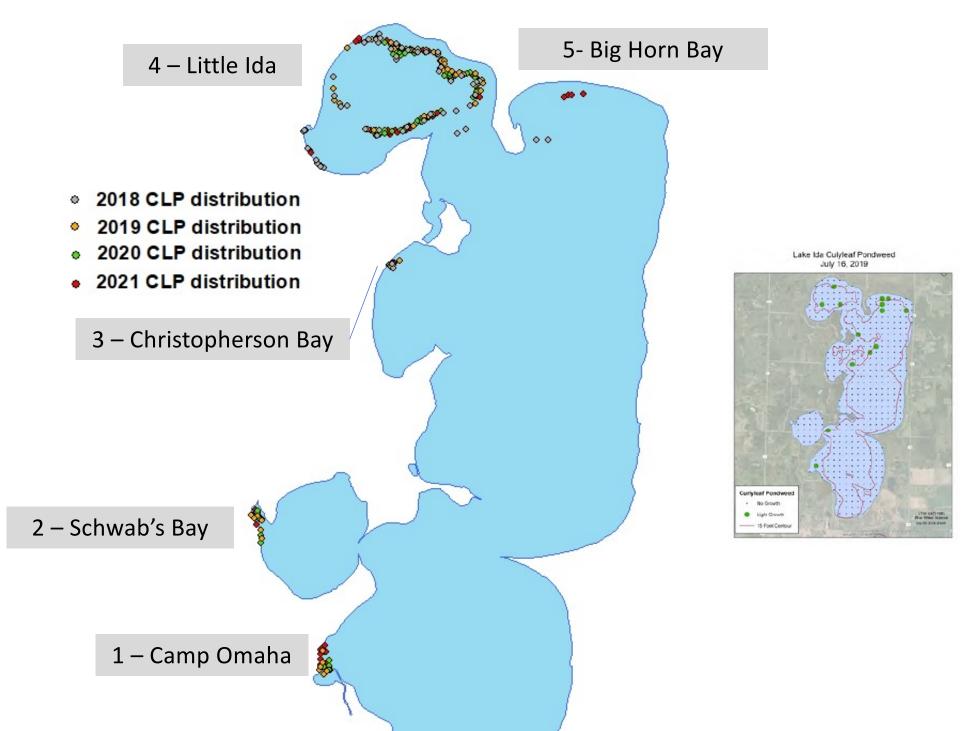
Figure 2. Survey tracks from Ida Lake CLP delineation on May 11, 2021







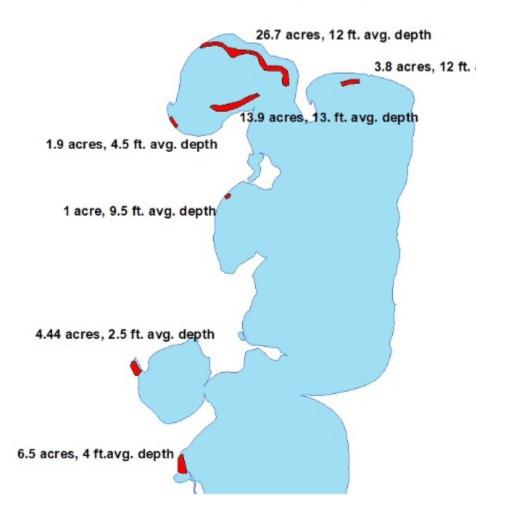




### Treatment recommendations: 2021

#### Recommended by survey

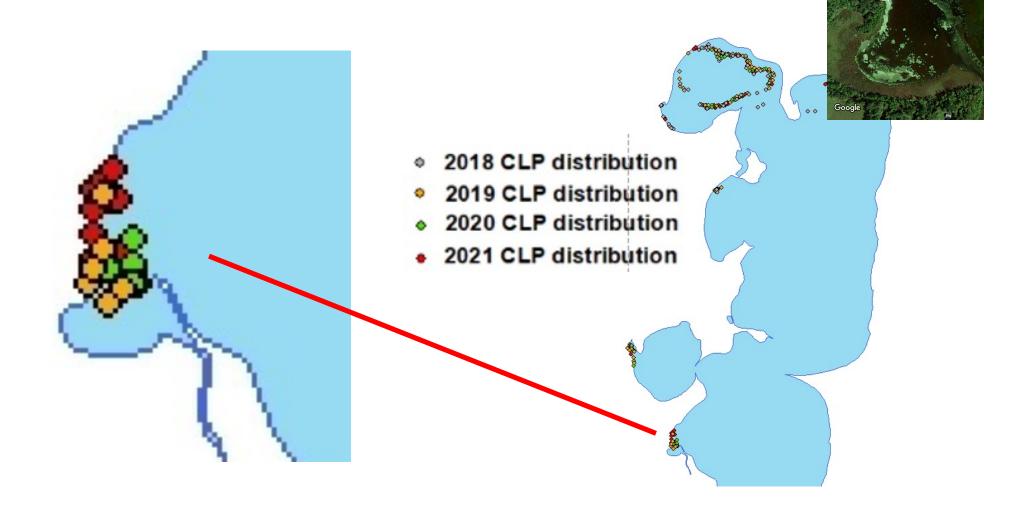
Figure 5. Ida Lake 2021 Potential CLP Treatment Areas (58.24 acres)



#### Recommended by treatment partner

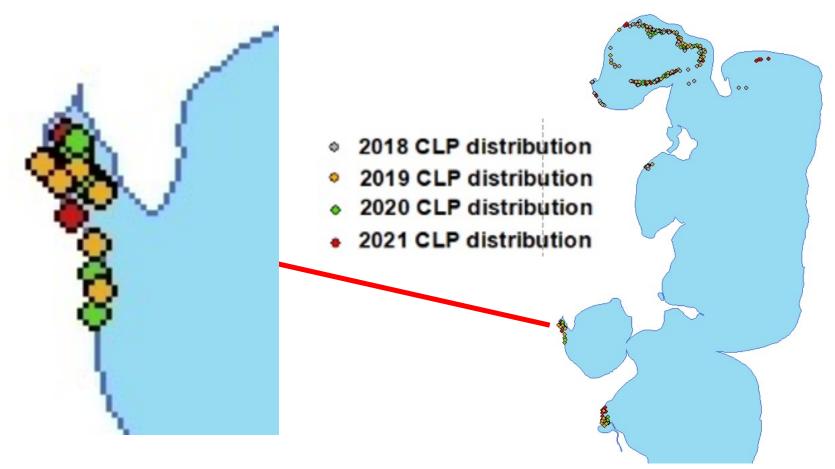


Zone 1: Camp Omaha

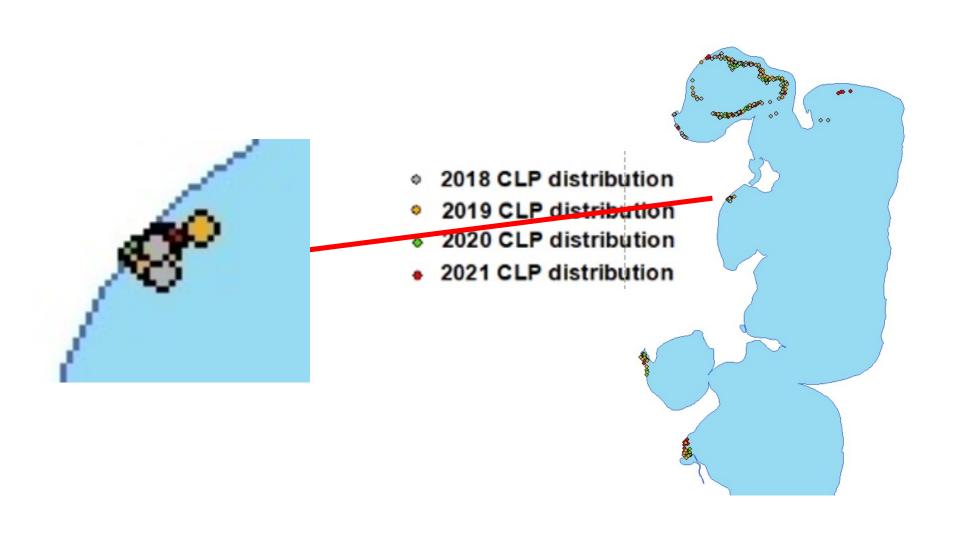


Zone 2: Schwab's Bay

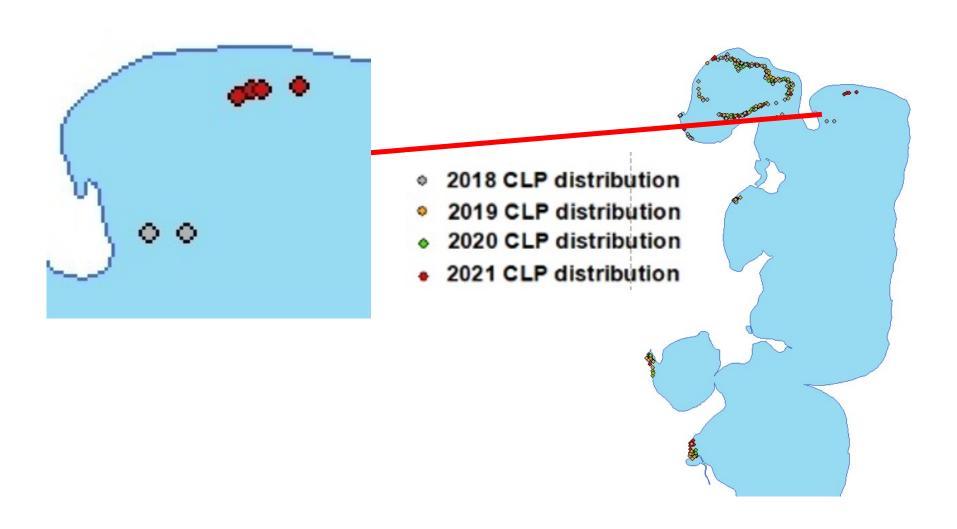




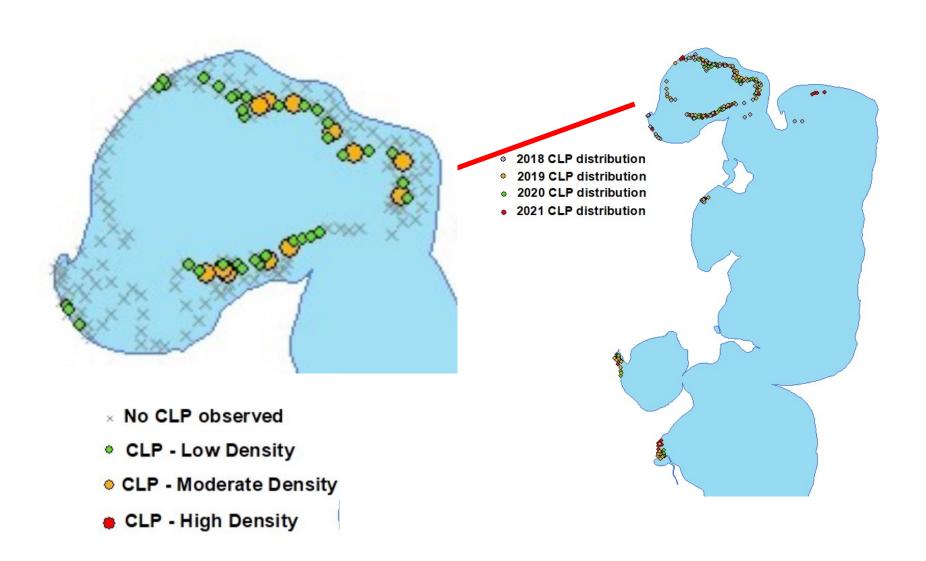
## Zone 3: Christopherson Bay



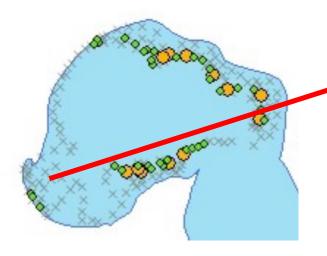
# Zone 5: Big Horn Bay



## Zone 4: Little Ida



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- × No CLP observed
- CLP Low Density
- CLP Moderate Density
- CLP High Density



## Budgeting

#### Costs

<ul> <li>Survey</li> </ul>	900
<ul> <li>Treatment</li> </ul>	15,600
<ul> <li>Total</li> </ul>	\$16,500
Funds	
<ul> <li>Douglas County (75% of treatment)</li> </ul>	11,700
<ul> <li>DNR grant</li> </ul>	3,600
<ul> <li>Lake association</li> </ul>	1,200
• Total	\$16,500

#### **Notes**

- Add \$2,200 in 2022 for close-to-shore treatment
- Could increase treatment by about \$7,500 under county match
- Create annual budget line of \$5,000, roll over surplus for future years

## Final thoughts for discussion

- What are our <u>management objectives and strategy</u>? These are the template for future decision-making. Eradication is impossible. What kind of containment strategies should we consider? What would be the implications of a "do nothing" strategy, as some lakes follow?
- What would be the benefits and costs of <u>deep water treatment</u> of CLP in 12 to 18 feet of water?
- How should we handle <u>in-shore treatment</u> at shallow depths around docks and bot lifts?
- What is the impact of <u>low water levels</u> on CLP and on native plant growth?
- What is the impact of <u>global warming</u> on on CLP and on native plant growth. Warmer lake waters, reduced snow cover, and earlier ice-out favor CLP and native plant growth.