1.0 INTRODUCTION

Lake Minnesuing is an approximate 465-acre, meso-eutrophic, deep lowland drainage lake within the Brule River Watershed in Douglas County, Wisconsin (Figure 1.0-1). The lake sustains a species-rich aquatic plant community with 46 native species documented to date.

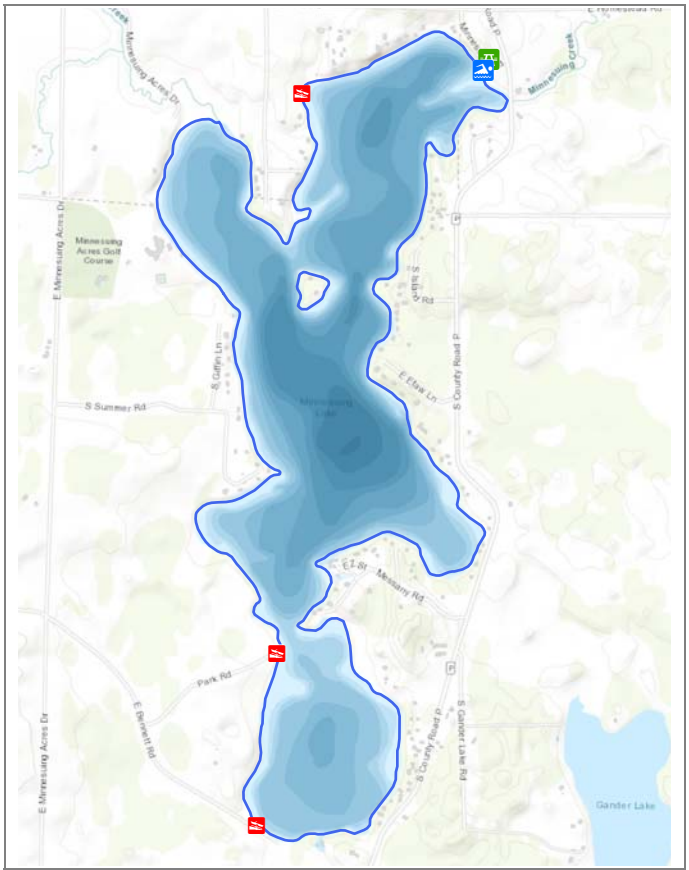


Figure 1.0-1 Lake Minnesuing, Douglas County, Wisconsin.

In August of 2018, the non-native, invasive aquatic plant curly-leaf pondweed (*Potamogeton crispus*; CLP) was discovered in the southern bay of Lake Minnesuing during an aquatic plant point-intercept survey being completed by Onterra ecologists. Because most of the CLP population dies-back by mid-summer, it was unclear what the complete population extent of CLP was in Lake Minnesuing. Onterra ecologists mapped the full extent of the lake's CLP population in June 2019 to coincide with its peak-growth period. During this survey, the majority of the CLP population was located in the southern bay of the lake, while a few occurrences were located elsewhere in the lake.

1.1 Recent CLP Management History

During a series of meetings with a Lake Minnesuing stakeholder planning committee in 2019, Onterra outlined three broad potential CLP population perspectives for consideration including a recommended action plan to help reach CLP management goals. These potential goals included: 1) no coordinated active management of CLP (let nature take its course), 2) minimize navigation and recreation impediment (nuisance control), or 3) reduce the CLP population on population or lake-wide level (lake-wide population management).

While CLP has been observed to naturalize within some northern Wisconsin lakes without behaving invasively, the presence of small yet dense colonies of CLP with high biomass indicated that conditions were present for this species to behave aggressively and expand rapidly in Lake Minnesuing. The Lake Minnesuing Sanitary District (LMSD) elected to initiate an aggressive hand-harvesting program in an effort to prevent the CLP population from reaching levels which could negatively affect lake ecology, water quality, recreation/navigation, and aesthetics (*surface matting*). In addition, the planning committee understood that maintaining a small CLP population in Lake Minnesuing reduces the likelihood of it being spread to other nearby waterbodies.

In early 2020, the LMSD was awarded a Wisconsin Department of Natural Resources (WDNR) Aquatic Invasive Species (AIS) Early Detection and Response (EDR) grant to fund professional hand-harvesting control and monitoring of the CLP population in 2020 and 2021. Understanding that the eradication of CLP from Lake Minnesuing is impossible with current management techniques available, the LMSD's ultimate goal of the active CLP management strategy is to maintain a population which imparts minimal to no detectable impacts to the lake's ecology, water quality, recreation, navigation, and aesthetics. In other words, the goal was to reduce or eliminate large, contiguous, monotypic colonies of CLP, and maintain a population primarily comprised of single-plant occurrences.

The 2020 hand-harvesting was largely met with success as the majority of areas harvested saw an observable decline CLP abundance and met the pre-determined success criteria. However, monitoring conducted in 2021 showed a large increase in the CLP population in the lake including in all sites managed with hand harvesting (Figure 2). The rapid expansion of the CLP population in 2021 proved to outpace the effort of hand-harvesting. Following two years of professional hand-harvesting in Lake Minnesuing, it was clear that a level of hand-harvesting effort beyond which is realistic would be needed to achieve district's goal of reducing or eliminating large, contiguous, monotypic colonies of CLP.

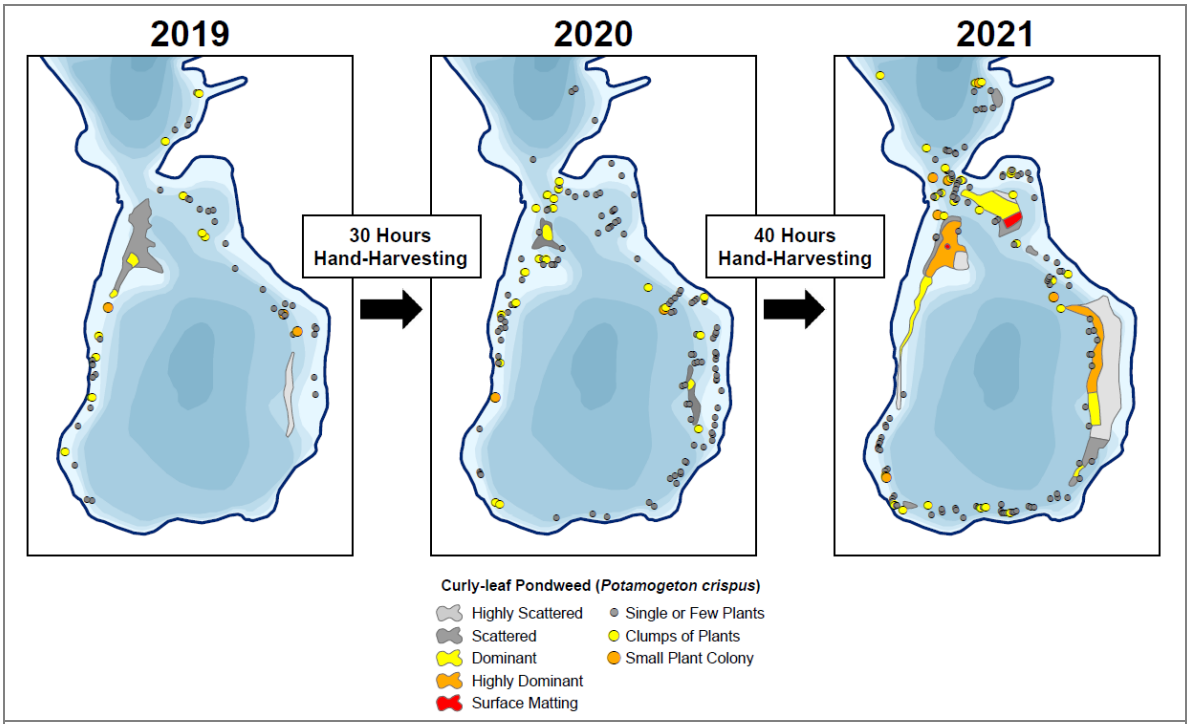


Figure 1.1-1. Southern Basin 2019-2021 CLP Progression. (Data from Onterra Early Season Mapping Surveys).

The LMSD amended its CLP control plan with an addendum to the *Lake Minnesuing Comprehensive Management Plan* to follow an integrated approach to CLP management utilizing annual herbicide treatments of the most abundant areas and continued professional hand-harvesting of the less dense areas. The LMSD self-funded the first herbicide treatment in 2022, along with 5 days of professional hand-harvesting. The updated strategy involves four consecutive years of herbicide applications over the densest colonies of CLP in the southern basin with an

overall goal of reducing the turion reserve in the sediment. Regardless of progress through 2025, no herbicide treatments would be completed in 2026 to allow for an accurate reassessment of the CLP population in absence of management. The LMSD applied for and was awarded a WDNR Large Scale Population Control grant following the fall 2022 cycle which provides funding assistance to carry out the multi-year CLP management and monitoring project. This report details the monitoring surrounding the third year of annual herbicide management conducted during 2024 and serves as a report deliverable for ACEI32623.

1.2 2024 CLP Control Strategy

The objective of CLP management on Lake Minnesuing is not to eradicate it from the lake, as that is currently impossible with available management tools and techniques. The objective is to maintain a CLP population that exerts little to no detectable impacts on the lake's ecology and ecosystem services (i.e., recreation and aesthetics). The goal of CLP management is to annually remove/kill the plants before they are able to produce and deposit new turions, and thus, over continued annual management, deplete the existing reserve of turions in the sediment. To achieve this goal, management of CLP plants must occur in spring (May to early June) before the development of mature turions.

The aim is following multiple years of management, the turion reserve becomes exhausted and the CLP population declines. Typically, CLP management involves annual management for 5-7 years within the same areas before the turion reserve is depleted. However, it may take fewer years in instances where the CLP population is in the early stages of infestation. Following an initial and aggressive management approach, continued population maintenance often occurs to keep the CLP population at a lower level.

Annual endothall treatments have occurred on Lake Minnesuing from 2022-2023 targeting the same sites within the southern bay of the lake where substantial CLP populations were documented during 2019-2021. The 2024 strategy is a continuation of the treatment program and represents the third consecutive year of treatment in the target area.

The treatment design includes three direct application areas with endothall dosing rates of 2.0 ppm ai. Herbicide concentration monitoring conducting in association with the 2023 treatment found the measured concentrations in the southern bay (0.13 ppm ae) are approximately 25% of what a target intentional whole lake treatment design would employ (0.53 ppm ae). In order to achieve plant mortality, this treatment design likely benefits from both initial high concentrations in areas where herbicide was applied as well as an extended period of time with sustained lower concentrations after mixing occurs. The design is likely resulting in impacts to CLP throughout the southern bay based on the lack of CLP being located throughout the untreated areas of the bay after treatment in recent surveys.

The manufacturer of endothall (UPL) and WDNR developed a cooperative agreement in 2013 regarding the use of UPL's endothall products (Aquathol K, Aquathol Super-K) in Wisconsin Lakes. The agreement was in part an effort to ensure treatment strategies are not being designed in a way that limits efficacy of the treatments through insufficient contact exposure times (CET's). One key point of the agreement for spot-treatments is to enact a minimum application size of five acres. This topic was discussed with WDNR in early 2024 as it pertains to the treatment design for Lake Minnesuing. Since the design for Lake Minnesuing also factors in a bay-wide or basin-

wide component, it was determined that the current application areas did not warrant modification even though one of the three application sites is below the five-acre minimum threshold.

The LMLD's Integrated Pest Management strategy also includes professional hand harvesting of CLP located outside of the herbicide management area. In 2024, data from the 2022-2023 CLP mapping surveys are used to guide the harvesting efforts for the season. All known CLP in the lake outside of the southern bay would be targeted for removal during the 2024 hand harvesting effort. The harvesting activities were planned to occur prior to the plants maturing to form reproductive structures. Specific harvesting dates would be determined based on CLP growth observations communicated between local lake residents, Onterra, and the contracted harvesting firm.

1.3 2024 CLP Pretreatment Confirmation and Refinement Survey

On May 15, 2024, Onterra ecologists conducted the Pre-treatment Confirmation and Refinement Survey on Lake Minnesuing. The purpose of the survey was to conduct a pretreatment sub-sample point-intercept survey focused over the application areas, to evaluate the growth stage of the CLP population in the treatment areas, as well as to confirm the average depth of the sites for dosing purposes. This survey was conducted using a combination of survey methods including visual sightings and the use of a submersible camera.

The crew encountered actively growing CLP within all treatment sites and CLP was visible from surface viewing in many areas. Plants were of variable size ranging from small nubile growth to some larger plants with classic crispy leaves. Importantly, no signs of turion formation were observed on the plants. Overall, the sub-sample point-intercept survey yielded 18.0% CLP within the application areas, which is slightly lower than last year and consistent with expectations if the turion base is being reduced over time. Common waterweed (*Elodea canadensis*) and muskgrasses (*Chara spp.*) were common within all treatment sites, while lesser amounts of pondweeds and coontail (*Ceratophyllum demersum*) were also observed.

Photo 1.3-1. CLP plants observed during a May 15, 2024 pretreatment survey on Lake Minnesuing. Photo by Onterra, LLC

Water temperatures within each of the three application sites were 60-61°F at the surface and 58-59°F at mid-depth and near bottom. Actively growing CLP was observed within all application areas, and average depths of the treatment sites were confirmed. Based on water temperatures and the stage of CLP/native plant growth observed during the survey, Onterra advised the district that the treatment should as soon as applicator logistics allow and final approval from WDNR is confirmed.

The herbicide treatment included the application of liquid endothall over 13.6 acres and was completed on the morning of May 23, 2024 (Map 1). The applicator noted west winds between 1-2 mph at the time of the application and the surface water temperature was 58°F.

2.0 PROFESSIONAL HAND HARVESTING ACTIONS

The LMSD contracted with Aquatic Plant Management, LLC (APM) to conduct professional hand-harvesting services of CLP in 2024. The hand harvesting strategy was guided by the CLP mapped during the previous two years (2022-2023) and included all known occurrences outside of the southern-most bay of the lake (Map 2). No harvesting efforts were planned for the southern bay which was included in the herbicide management program. Plant removal specialists from APM conducted three days of hand harvesting between May 30 and June 4, 2024. The dive crews conducted 26 dives over 12 dive locations around the northern basin of the lake. A combined 16.8 underwater diver hours resulted in the harvest of 8.5 cubic feet of CLP from Lake Minnesuing (Appendix A). A summary report authored by APM provides details of the professional hand-harvesting efforts and is included in Appendix A.

Since the annual herbicide treatment and hand harvesting control strategy began in 2022, approximately 105.5 cubic feet of CLP has been harvested from Lake Minnesuing (Table 2.0-1). The harvest totals were highest in 2022 with 86.0 cubic feet harvested compared to just 8.5 cubic feet in 2024. The modest harvest yields over the past two years are indicative of the modest CLP population in the lake during that time span.

Table 2.0-1. Lake Minnesuing, 2022-2024 professional hand-harvesting activities.

Year	Dive Time (hr)	EWM Removed (cubic feet)
2022	30.7	86.0
2023	15.9	11.0
2024	16.8	8.5
Total:	**63.4**	**105.5**

3.0 2024 MONITORING RESULTS

3.1 Early Season CLP Mapping Survey

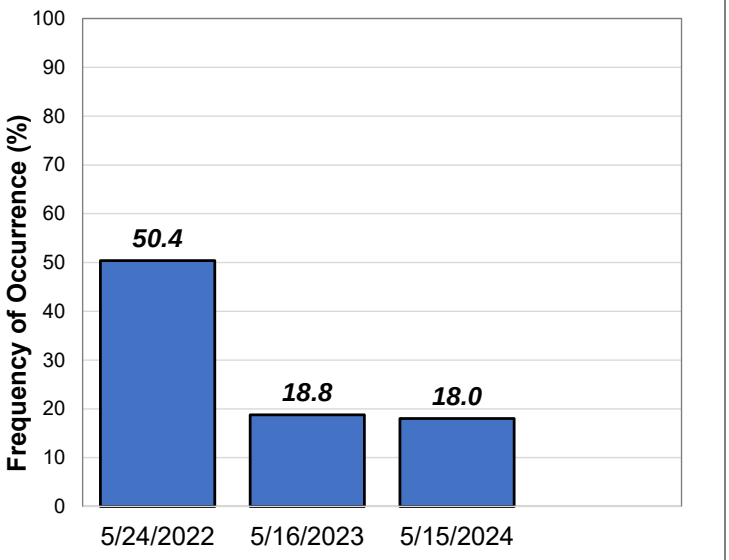
During a CLP Mapping Survey, the entire littoral area of the lake is surveyed through visual observations from the boat (Photograph 3.0-1). Field crews supplement the visual survey by deploying a submersible camera along with periodically doing rake tows. Using sub-meter GPS technology, CLP locations were mapped by using either 1) point-based or 2) area-based methodologies. Large colonies >40 feet in diameter are mapped using polygons (areas) and were qualitatively attributed a density rating based upon a five-tiered scale: *highly scattered* < *scattered* < *dominant* < *highly dominant* < *surface matting.* Point-based techniques were applied to CLP locations that were considered as *Small Plant Colonies* (<40 feet in diameter), *Clumps of Plants*, or *Single or Few Plants*.

Photograph 3.1-1. AIS mapping survey on a Wisconsin Lake. Photo credit Onterra.

Onterra ecologists conducted the Early-Season AIS Survey on June 11, 2024 to map CLP throughout the lake. Crews noted partly sunny conditions with 5-10mph winds during the survey. Water clarity appeared good overall but was somewhat turbid. The field crews surveyed the entire littoral area of the lake visually while also taking rake tows within several sites where CLP colonies have been mapped in recent years. The survey results are displayed on Map 3. Modest amounts of CLP were located around the lake during the survey, all of which consisted of either *single or few plants* or *clumps of plants*. No large contiguous colonies were present anywhere in the lake. The majority of the findings were located along the western shoreline of the lake. One clump of plants and three single plants were spotted within the southern bay of the lake. The crew noted that most plants appeared somewhat unhealthy which may be a function of them nearing natural senescence or herbicide impacts. Overall, the lake-wide CLP population is currently very low.

4.0 CONCLUSIONS & DISCUSSION

The 2024 herbicide treatment appeared to have effectively controlled the CLP population in the treated area based on the presence of significant amounts of plants during the pretreatment survey and minimal CLP present during a mid-June post-treatment site visit. One of the main methods used to determine the effectiveness of the overall CLP herbicide treatment program is to monitor turion germination each year before any control action is taken. To demonstrate a declining CLP turion base in the treated site, the pretreatment point-intercept survey would need to indicate a decreasing occurrence of CLP over time. A pretreatment point-intercept survey just before the 2022 treatment served as the first dataset for this monitoring with CLP present at 50.4% of the sampling locations. A replication of the survey during the 2023 pretreatment survey showed that CLP had a littoral occurrence of 18.8% and the spring 2024 pretreatment survey showed a slight further decrease to 18.0%. Monitoring to-date shows a promising indication of a declining turion base and suggests that the strategy is working as planned (Figure 4.0-1).



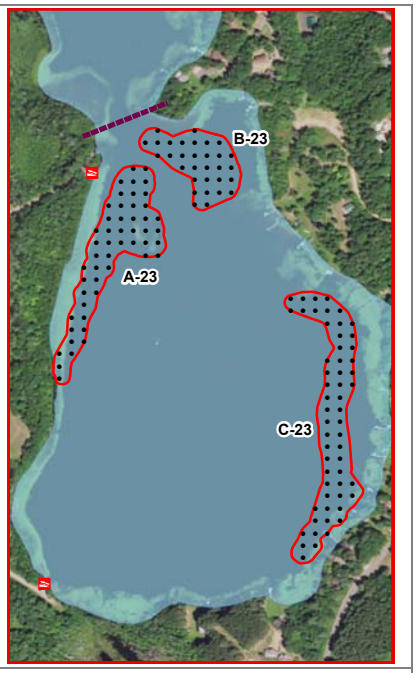


Figure 4.0-1. Pretreatment CLP Frequency of Occurrence in the 2022-2024 spring sub sample point-intercept survey. (N=139).

Assessing the effectiveness of a CLP hand harvesting strategy in any one particular year is difficult. With minimal CLP being located in Lake Minnesuing in 2023 and 2024, including in sites where CLP was reported to have been harvested from, the strategy seems likely to be meeting control goals.

CLP populations can be variable in lakes with some years favoring more turion germination than others when favorable environmental conditions are present. While the active management occurring on the lake is expected to be influencing the population, the low CLP population observed during 2023-2024 may also been a result of it not being particularly good years for turion propagation.

A study completed in Minnesota (Valley and Heiskary 2012) found a significant relationship between CLP occurrence and winter snow depth from the previous season. They concluded that given CLP turions sprout in the fall and overwinter as small plants, they have a greater need for light for winter survival when compared to native plants. In addition to greater snow cover on the ice significantly reducing light availability to these plants in winter, reduced rates of photosynthesis will result in stronger and longer periods of anoxia (without oxygen). Valley and Heiskary (2012) found that for every additional inch of daily average snow depth, CLP occurrence the following summer was reduced by 1%. Wu et al. (2009) found that the growth of sprouted CLP turions was reduced under anoxic sediment conditions and light availability was reduced to 1% (Wu et al. 2009).

4.1 2025 CLP Control & Monitoring Strategy

The 2025 CLP management strategy would mirror those that took place during the past three years and includes both an herbicide treatment and professional hand harvesting. Map 4 displays the proposed endothall treatment sites and application dosing rates which are the same as the 2022-

2024 treatment areas. Three sites in the southern bay of the lake are to be treated with liquid endothall at 2.0 ppm ai. During approximately mid-May, Onterra will conduct a pretreatment survey in advance of the proposed 2025 treatment in order to collect quantitative CLP monitoring data as well as to confirm that plants are actively growing and ready for treatment. Herbicide concentration monitoring does not accompany the 2025 treatment.

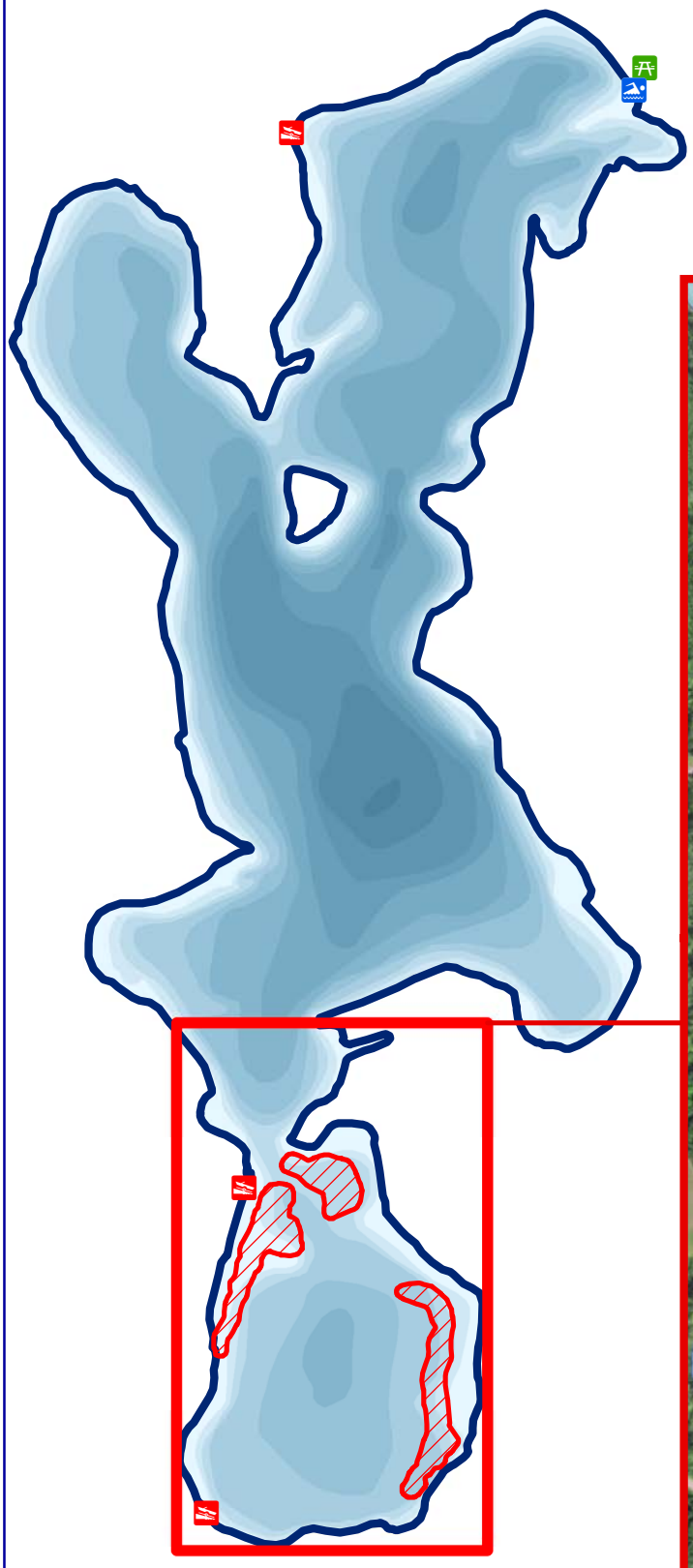
In the event that little or no CLP is located in the proposed 2025 application areas during the pretreatment survey, considerations will be made to either postpone or cancel the herbicide treatment. If only modest CLP is located in the proposed treatment areas, a hand harvesting strategy may be warranted rather than herbicide management. Onterra will convey the results of the pretreatment survey to WDNR, LMSD, and other project partners to ensure all parties are in agreement of the final management strategy decision.

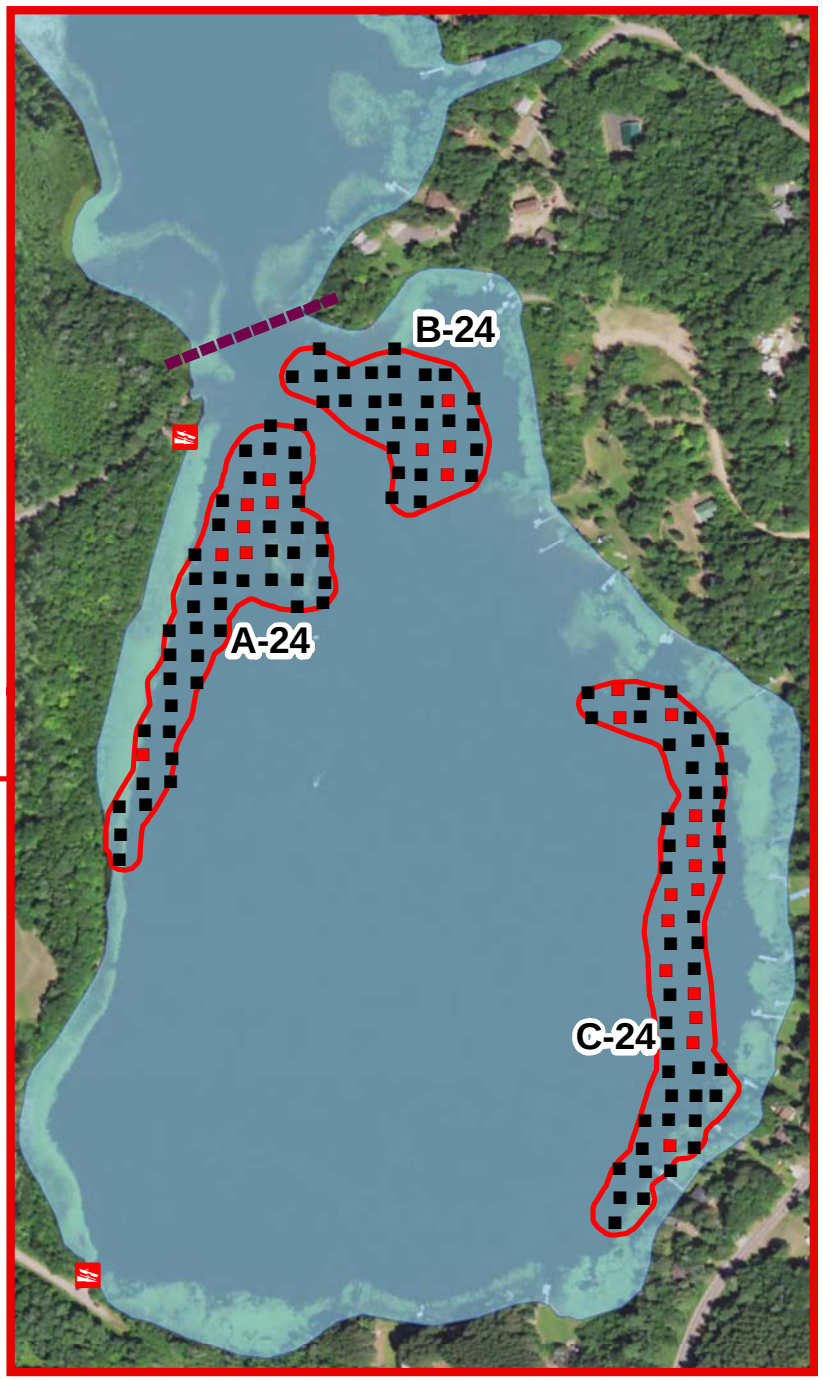
All known CLP occurrences will be considered for inclusion in the professional hand harvesting effort during 2025. A modest CLP population consisting of *single or few plants* or *clumps of plants* was identified during the 2024 survey. These low-density occurrences should lend well to a hand harvesting management strategy. The LMSD will communicate with their contracted hand harvesting firm to estimate the amount of dive time/days may be appropriate to target the known CLP population in 2025. Onterra will provide the spatial data of the CLP population to the contracted professional hand harvesting firm to guide their efforts.

Shortly after the professional hand harvesting efforts are completed, Onterra staff will conduct an ESAIS survey during approximately mid-late-June 2025. This survey will serve to evaluate the sites that were targeted with hand harvesting/herbicide treatment as well as to map the CLP population throughout the lake from which the 2026 management strategy will be determined.

Final 2024 CLP Treatment Strategy				
Site	Acres	Ave. Depth (feet)	Volume (ac-ft)	Endothall PPM ai
A-24	5.0	8.0	40.0	2.0
B-24	3.1	8.0	24.8	2.0
C-24	5.6	7.5	42.0	2.0
Total	**13.7**		106.8	

** Potential 0.227 ppm ai (0.161 ppm ae) south basin concentration*





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1,200
Feet

Onterra LLC
Lake Management Planning
815 Prosper Road
De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Roads and Hydro: WDNR
Aerial Photography: NAIP 2022
Map Date: May 16, 2024 - TWH

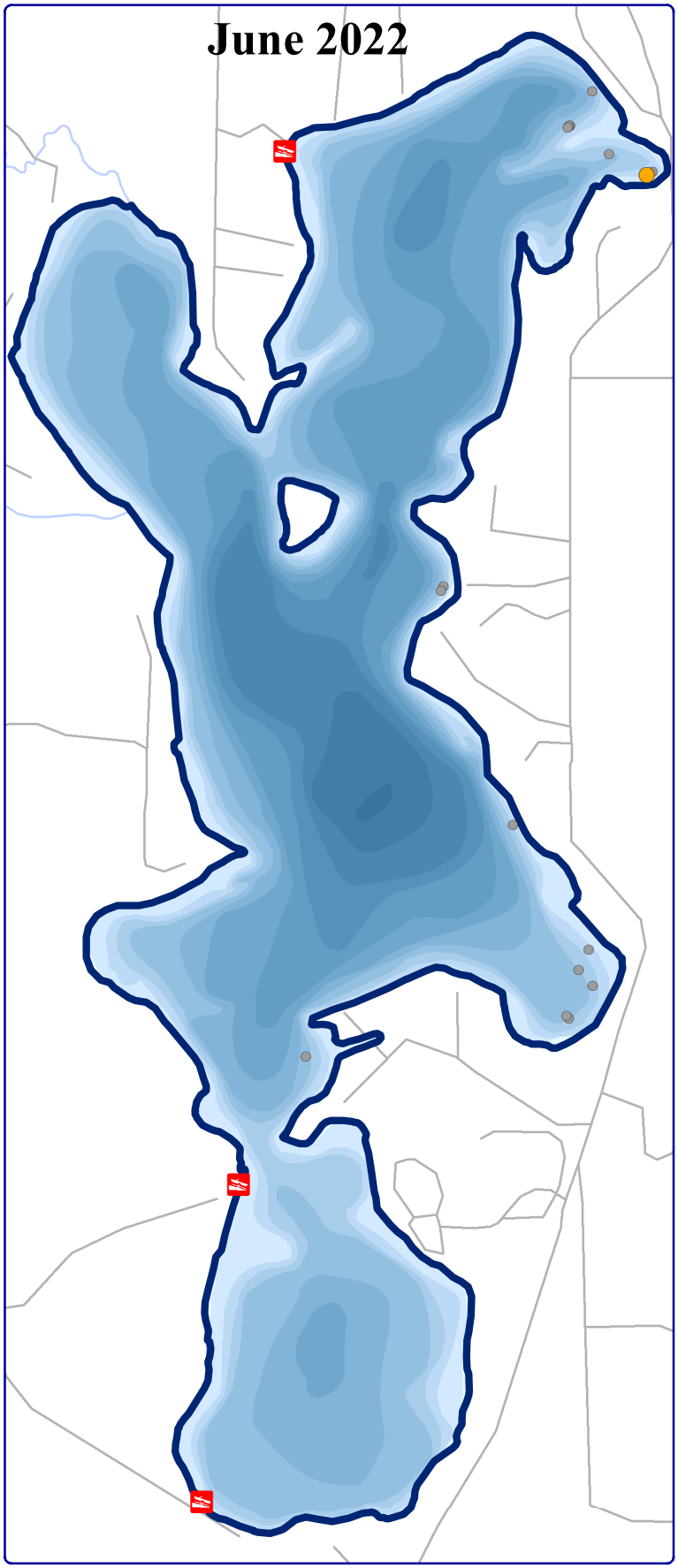
Project Location in Wisconsin

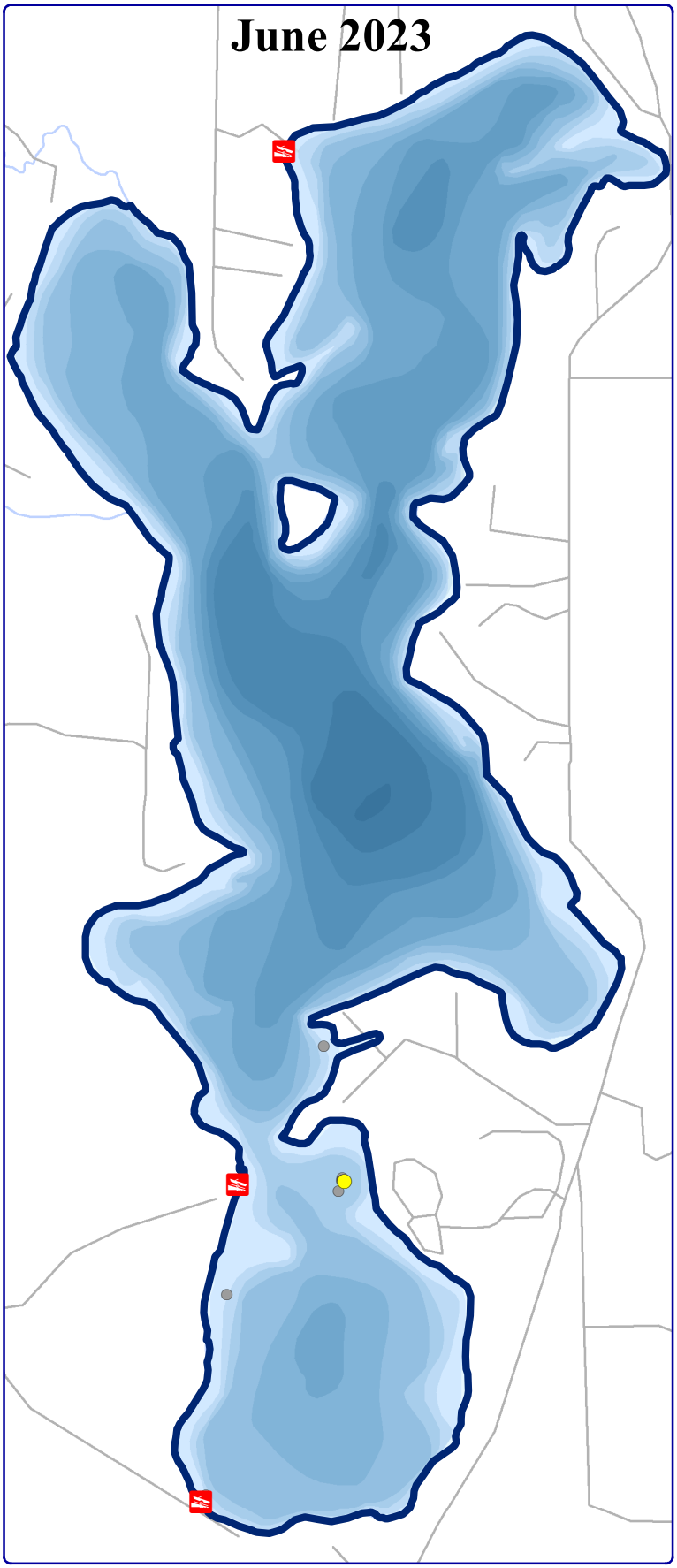
Legend

- Sub Point-Intercept Without CLP
- Sub Point-Intercept With CLP Present (18.0%)
- Final 2024 Herbicide Application Area

Map 1
Lake Minnesuing
Douglas County, Wisconsin

Final 2024 CLP Control Strategy





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1,100
Feet

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Sources
Roads and Hydro: WDNR
Bathymetry: Digitized by Onterra
Aquatic Plants: Onterra, 2022-23

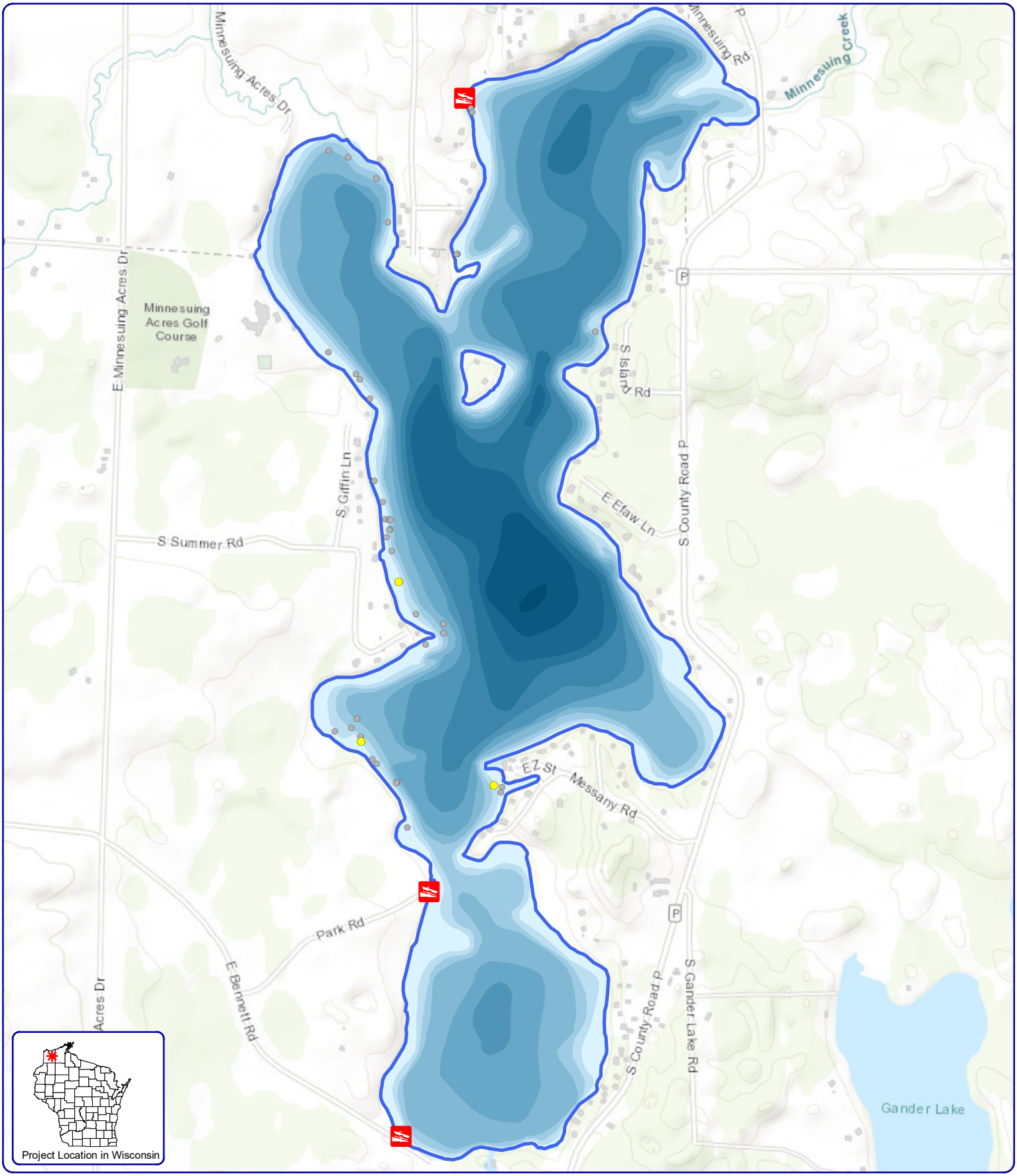
Map Date: 1-9-2025 TWH

Project Location in Wisconsin

Legend

- Highly Scattered
- Scattered
- Dominant
- Highly Dominant
- Surface Matting
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony

Map 2
Lake Minnesuing
Douglas County, Wisconsin
June 2022-2023
Curly-leaf Pondweed Survey Results



1,200
Feet

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Sources
Roads and Hydro: WDNR
Basemap: ESRI
Bathymetry: Digitized by Onterra
Aquatic Plants: Onterra, 2024
Map Date: June 21th, 2024 - RMF

Legend

CLP Survey: June 11, 2024

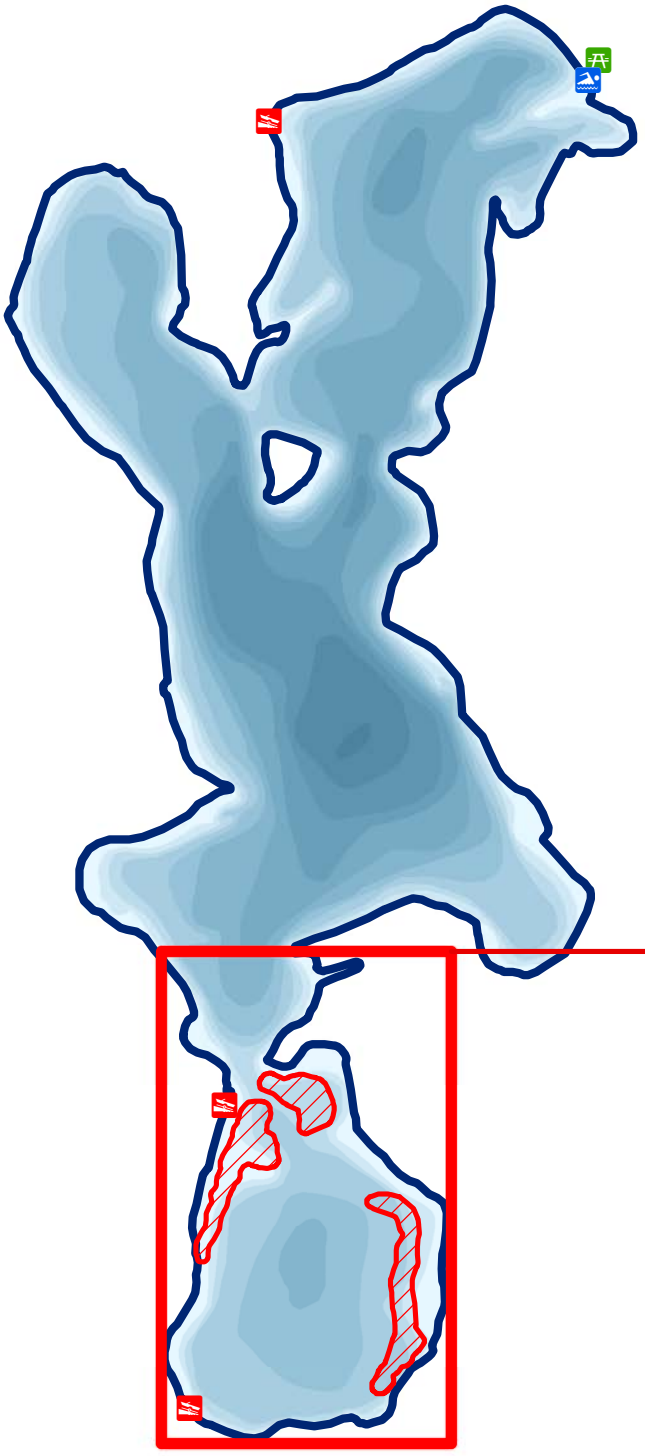
- Highly Scattered *(None)*
- Scattered *(None)*
- Dominant *(None)*
- Highly Dominant *(None)*
- Surface Matting *(None)*
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony *(None)*

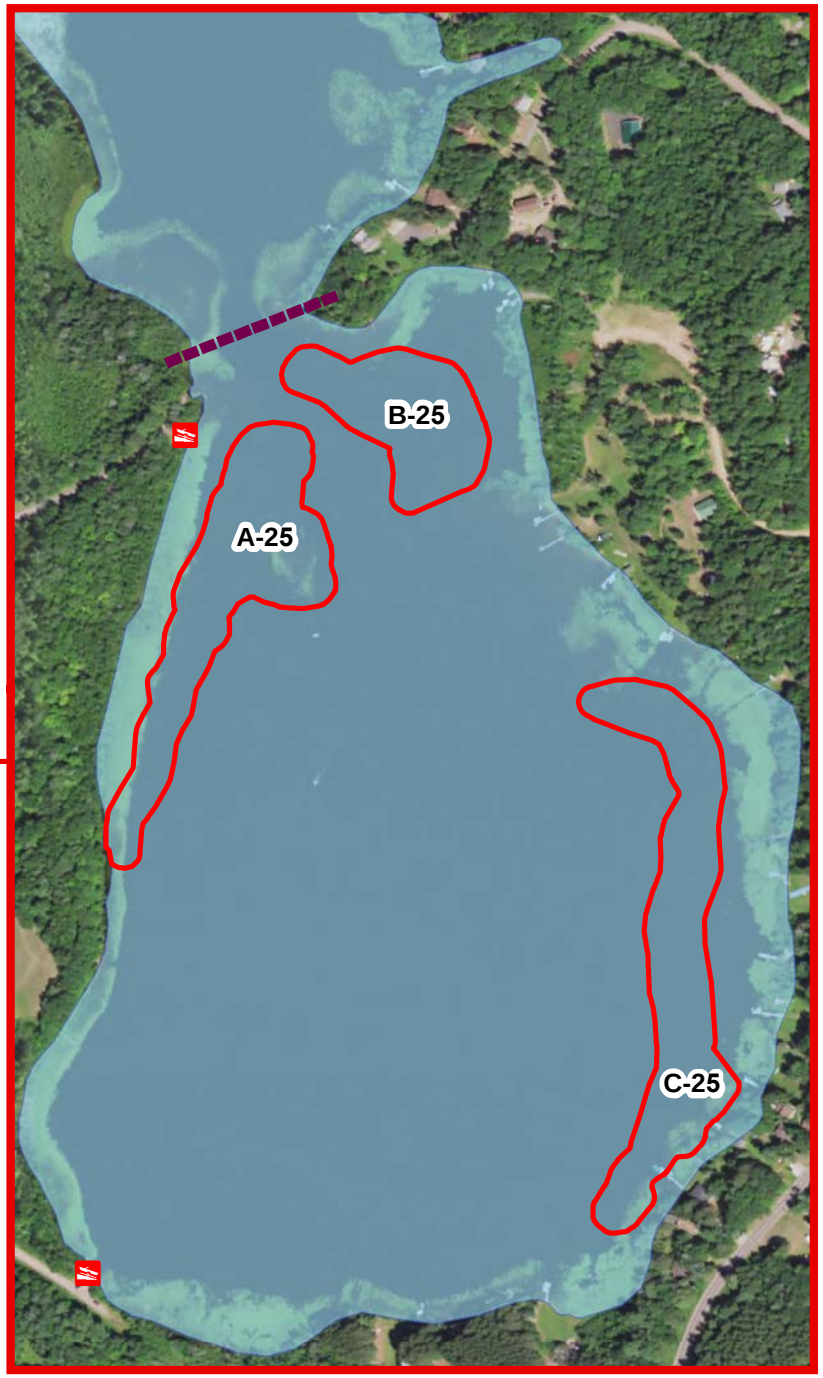
Map 3
Lake Minnesuing
Douglas County, Wisconsin

June 2024 CLP Survey Results

Proposed 2025 CLP Treatment Strategy				
Site	Acres	Ave. Depth (feet)	Volume (ac-ft)	Endothall PPM ai
A-25	5.0	8.0	40.0	2.0
B-25	3.1	8.0	24.8	2.0
C-25	5.6	7.5	42.0	2.0
Total	**13.7**		106.8	

** Potential 0.227 ppm ai (0.161 ppm ae) south basin concentration*





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1,300
Feet

Onterra LLC
Lake Management Planning
815 Prosper Road
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www.onterra-eco.com

Sources:
Roads and Hydro: WDNR
Aerial Photography: NAIP 2022
Map Date: January 31, 2024 - RMF

Project Location in Wisconsin

Legend

Proposed 2025 Herbicide Application Area

Map 4
Lake Minnesuing
Douglas County, Wisconsin

Proposed 2025 CLP Control Strategy

A

APPENDIX A

Lake Minnesuing CLP Removal Report 2024 – Aquatic Plant Management LLC

EST. 2013

AQUATIC PLANT MANAGEMENT

Lake Minnesuing CLP Removal Report 2024

PO Box 1134 Minocqua, WI 54548

Lake Minnesuing CLP Removal Summary 2024

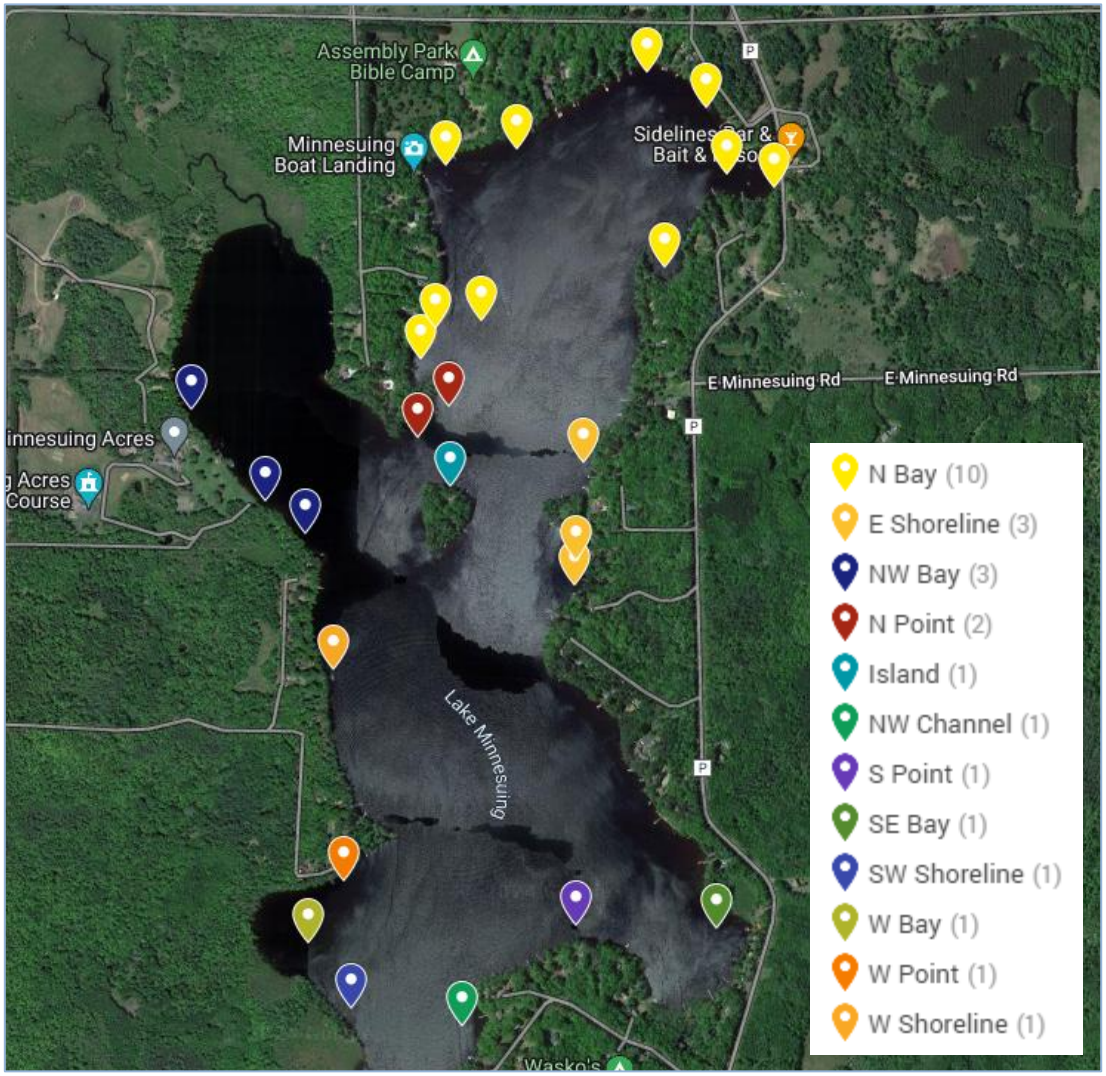
Dive Background: In May and June, Aquatic Plant Management LLC (APM) conducted three (3) days of Hand Harvesting for Curly Leaf Pondweed (CLP) on Lake Minnesuing in Douglas County, WI. The team focused their efforts at 13 sites as prioritized by the Lake Minnesuing Sanitary District. In total APM was able to remove **8.5 cubic feet of CLP** from Lake Minnesuing.

Date	Weather Conditions	Water Temp (F)	Underwater Dive Time (hrs)	AIS Removed (cubic ft)
5/30/2024	Sunny	69	5.0	0.5
5/31/2024	Rain	67	6.0	4.0
6/4/2024	Cloudy	65	5.8	4.0
Grand Total			**16.8**	**8.5**

Dive Location	Avg. Water Depth	# of Dives	Underwater Dive Time	AIS Removed (cubic feet)
E Shoreline	4.7	3	2.1	0.5
Island	2.0	1	0.3	0.5
N Bay	4.4	10	6.7	1.5
N Point	5.8	2	0.7	0.5
NW Bay	4.5	3	1.3	1.5
NW Channel	4.0	1	1.3	1.0
S Point	6.0	1	0.3	0.0
SE Bay	5.5	1	0.7	0.5
SW Shoreline	5.5	1	0.3	0.5
W Bay	3.0	1	0.8	1.0
W Point	4.0	1	1.0	0.5
W Shoreline	6.0	1	1.5	0.5
Grand Total	**4.6**	**26**	**16.8**	**8.5**

Dive Highlights and Recommendations: The dive team was able to target sites across the entirety of the northern basin of the lake, conducting 26 different dives across 12 different areas. In general, the CLP was primarily single or few plants with some areas of scattered plants. The team removed 0.0 – 1.5 cubic feet from the different areas across the 26 dive sites. Overall, Lake Minnesuing should continue to take an Integrated Pest Management (IPM) approach and evaluate different strategies to manage the CLP population on the lake. Continued monitoring and management efforts are important to prevent the spread of CLP throughout Lake Minnesuing.

Map of Lake Minnesuing Dive Sites



Detailed Diving Activities

Date	Dive Location	Latitude	Longitude	Underwater Dive Time (hrs)	AIS Removed (cubic ft)	AIS Density	Avg Water Depth (ft)	Native Species	Native By-Catch	Substrate Type
5/30/2024	N Bay	46.48051	-91.73991	2.17	0.5	Single or Few	4.5	Pondweeds	0.0	Organic/Sand
5/30/2024	N Bay	46.47980	-91.73820	1.17	0.0	None	4.0	Pondweeds	0.0	Sand
5/30/2024	N Bay	46.47848	-91.73760	0.58	0.0	None	6.0	None	0.0	Organic/Sand
5/30/2024	N Bay	46.47661	-91.73940	0.58	0.0	None	2.5	None	0.0	Organic
5/30/2024	E Shoreline	46.47271	-91.74178	0.50	0.0	None	5.0	None	0.0	Organic/Sand
5/31/2024	E Shoreline	46.47026	-91.74202	0.42	0.0	None	5.0	None	0.0	Organic
5/31/2024	E Shoreline	46.47077	-91.74196	1.17	0.5	Clumps	4.0	Pondweeds	0.5	Organic/Sand
5/31/2024	SE Bay	46.46339	-91.73790	0.67	0.5	Scattered	5.5	Pondweeds	0.0	Organic
5/31/2024	S Point	46.46346	-91.74197	0.33	0.0	None	6.0	Pondweeds	0.0	Organic
5/31/2024	NW Channel	46.46144	-91.74529	1.33	1.0	Clumps	4.0	Pondweeds	0.5	Organic/Sand
5/31/2024	SW Shoreline	46.46180	-91.74850	0.25	0.5	Single or Few	5.5	None	0.0	Organic/Sand
5/31/2024	W Bay	46.46311	-91.74976	0.83	1.0	Clumps	3.0	Pondweeds	0.5	Organic/Sand
5/31/2024	W Point	46.46434	-91.74873	1.00	0.5	Scattered	4.0	None	0.0	Sand
6/4/2024	W Shoreline	46.46859	-91.74902	1.50	0.5	Scattered	6.0	Northern Milfoil	0.0	Organic/Sand
6/4/2024	NW Bay	46.47131	-91.74981	0.67	0.5	Scattered	5.0	None	0.0	Organic
6/4/2024	NW Bay	46.47195	-91.75099	0.25	0.5	Single or Few	2.5	None	0.0	Organic/Sand
6/4/2024	NW Bay	46.47378	-91.75314	0.33	0.5	Clumps	6.0	None	0.0	Organic/Sand
6/4/2024	N Point	46.47322	-91.74659	0.33	0.0	None	5.0	None	0.0	Gravel
6/4/2024	Island	46.47225	-91.74561	0.25	0.5	Single or Few	2.0	None	0.0	Sand
6/4/2024	N Point	46.47384	-91.74567	0.33	0.5	Scattered	6.5	None	0.0	Organic/Sand
6/4/2024	N Bay	46.47478	-91.74648	0.50	0.5	Scattered	4.5	None	0.0	Organic/Sand
6/4/2024	N Bay	46.47539	-91.74606	0.25	0.0	None	6.0	None	0.0	Organic/Sand
6/4/2024	N Bay	46.47556	-91.74474	0.33	0.0	None	4.0	None	0.0	Gravel
6/4/2024	N Bay	46.47865	-91.74575	0.33	0.0	None	4.0	None	0.0	Organic
6/4/2024	N Bay	46.47899	-91.74368	0.33	0.0	None	6.0	None	0.0	Organic/Sand
6/4/2024	N Bay	46.47822	-91.73624	0.42	0.5	Single or Few	2.0	None	0.0	Organic
Total	**26**			**16.82**	**8.5**					