2019 AIS Management Assessment and Summary Report: ACEI-22218 Round Lake

Prepared for: Round Trade Lakes Improvement Association Trade Lake, Wisconsin Polk and Burnett Counties

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Contents

Introduction
2019 LEAPS Contracting with the RTLIA5
2019 CLP and EWM Management Planning – Round Lake6
2019 CLP Management Implementation - Round Lake8
2018 Aquatic Plant Survey Work – Round Lake
2019 Native Aquatic Plant Survey Results11
2019 Fall EWM Bed-mapping on Round Lake12
Historic Fall EWM Mapping Results13
Past Management Implications14
2019 AIS Education
2019 Clean Boats, Clean Waters15
AIS Signage16
2019 AIS Monitoring
2019 AIS Identification and Removal Workshop16
2019 ZM Dockout Day16
2019 Newsletters
Round Trade Lake Improvement Association Meetings17
2019 Water Quality Sampling17
2019 Purple Loosestrife
Final Notes

Figures

Figure 1: Survey sample points and final treatment areas (ERS, 2019)	7
Figure 2: 2019 Final Round Lake CLP chemical treatment map and details	8
Figure 3: 2019 Pre/Post CLP density and distribution (ERS, 2019)	9
Figure 4: 2019 Pre/Post EWM density and distribution (ERS, 2019)	. 10
Figure 5: 2019 Pre/Post changes in CLP rake fullness (ERS, 2019)	. 10
Figure 6: 2019 Pre/Post changes in EWM rake fullness (ERS, 2019)	.11
Figure 7: 2019 Round Lake Fall EWM Bed Mapping Results	.13
Figure 8: Decontamination signage at the Round Lake public landings	.16

Tables

Table 1: Contracted LEAPS Services and Completion Status for Round Lake in 2019	6
Table 2: Changes in treatment acreage after pre-treatment survey results (ERS, 2019)	7
Table 3: Pre/Post Surveys Summary Statistics Round Lake, Burnett County May 7 and June 19, 2019	.12
Table 4: Fall EWM Bed-mapping Summary – Round Lake	.14
Table 5: Past management results on Round Lake	.15

Introduction

This summary report discusses the 2019 aquatic invasive species education, management planning, and management implementation completed on Round Lake. Curly-leaf pondweed (CLP) and Eurasian Watermilfoil (EWM) management was planned on Round Lake in 2019, however, only CLP was chemically treated. The amount of EWM in Round Lake in 2019 was not sufficient enough to support a chemical treatment plan. In addition, the original grant was setup to encourage physical removal of EWM in 2019 instead of using herbicides. 2019 grant actions were guided by Lake Education and Planning Services (LEAPS) and completed in part by volunteers from the Round Trade Lakes Improvement Association (RTLIA).

The following actions from the 2018-21 AIS Control of an Established Infestation (ACEI) grant funded project on Round Lake are included in this project summary.

- 2019 LEAPS Contracting with the RTLIA
- 2019 CLP and EWM Management Planning
- 2019 CLP and EWM Management Implementation
- 2019 Aquatic Plant Survey Work
- 2019 AIS Education
- 2019 Purple Loosestrife Control
- 2019 Water Quality Sampling

2019 LEAPS Contracting with the RTLIA

A contract was drawn up between LEAPS and the RTLIA covering the time frame from April 1, 2019 to March 31, 2020. Table 1 reflects the tasks that were included in that contract and the extent of completion for each as of the end of February 2020.

	Earned Value Table Calculation of Estimated Progress									
	Lake Education and Planning Services 2019 RTLIA-RoundLake-AIS					F	V Table Date		mm/dd/yy	
			Start	Finish	Task		Percent	-	Earned	
	Task Description	Manager	Date	Date	Budget		Complete		Value	
ost Code			1-Apr-19	31-Mar-20	\$ 4,410		75.8%	\$	3,34	
1	2019 CLP/EWM Management Planning	DLB				х				
1.1	CLP/EWM management planning		1-Apr-19	30-Jun-19	900	х	100.0%		90	
1.2	Preparation of WDNR permit		1-Apr-19	30-May-19	300	х	100.0%		30	
1.3	Applicator support		1-May-19	30-Jun-19	300	х	100.0%		30	
2	2019 Aquatic Plant Survey Support	DLB				х				
2.1	CLP-EWM Pre-Post Treatment Survey		1-May-19	30-Jun-19	150	х	90.0%		1:	
2.2	CLP Bedmapping Supprt		1-Jun-19	31-Jul-19	120	х	90.0%		1(
2.3	Fall Bed-mapping		1-Aug-19	28-Feb-20	150	х	90.0%		1:	
2.4	Summer EWM survey and physical removal		1-Jul-19	30-Sep-19	160	х	100.0%		10	
3	2019 Purple Loosestrife Biocontrol	DLB				х				
3.1	Beetle rearing support		1-Apr-19	30-Aug-19	240	х	100.0%		24	
4	2019 AIS Education Support	DLB				х				
4.1	AIS Workshop		1-Jun-19	30-Sep-19	160	х	100.0%		16	
4.2	ZM Dock-Out Day		1-Sep-19	31-Oct-19	240	х	0.0%			
5	2019 Water Quality Monitoring Support	DLB	•			х				
5.1	Preparation of bottles, labslips, coolers		1-Apr-19	31-Oct-19	160	х	100.0%		10	
6	2019 Project Management Support	DLB	·			х				
6.1	End of Year Summary Report		1-Oct-19	31-Mar-20	600	х	0.0%			
6.2	Meetings		1-Apr-19	31-Mar-20	450	х	80.0%		3	
6.3	General Expenses		1-Apr-19	31-Mar-20	480	х	80.0%		3	
		TOTALS			4,410				3,3	
	Total Project Progress:	\$3.342			\$ 4.410	=	75.8%			

Table 1: Contracted LEAPS Services and Completion Status for Round Lake in 2019

In 2019, contracting between LEAPS and the RTLIA was set up with equal monthly payments throughout the project. This was done to provide the RTLIA with a consistent and unchanging invoice payment allowing them to plan accordingly. Billing was done in a way where each invoice sent was the same increase in the percentage of completion for every task in the project, even though in reality, tasks are completed at different times. As an example, CLP and EWM planning is 100% completed early in the year, but is billed the same way that the End of Year Summary is which is not completed until near the end of the project. Table 1 reflects the actual percent completion of each task as of February 2020. The invoices included in the 2019 Reimbursement Request for this project reflect a 28.33% completion rate for all tasks through the end of July 2019.

Completion of the 2019 Summary Report (this document) and small percentages of a few other items have yet to be completed. These few services related to the 3-yr ACEI project will be completed and a new contract will be drawn up for 2020 LEAPS services. Consultant support for a ZM Dockout Day was not needed.

2019 CLP and EWM Management Planning – Round Lake

Based on how the 3-yr ACEI grant was set up, EWM management was not planned in Round Lake in 2019. Property owners were encouraged to complete physical removal of EWM in lieu of using herbicides to treat it. CLP management planning and implementation was completed in Round Lake in 2019. The intent of the 3-yr ACEI project was to chemically treat CLP in Round Lake for three years in a

row. However, because of very low density of CLP in Round Lake in 2018, no CLP was treated. CLP was treated in 2019.

Initially 5.3 acres of CLP in six beds were proposed for chemical treatment in 2019 (Figure 1). But after a pre-treatment survey of 110 points in the initial six beds completed by Endangered Resource Services (ERS) on May 7, 2019, the chemical treatment area was reduced to 3.0 acres in four beds (Table 2). Figure 2 reflects the final 2019 CLP chemical treatment plan.

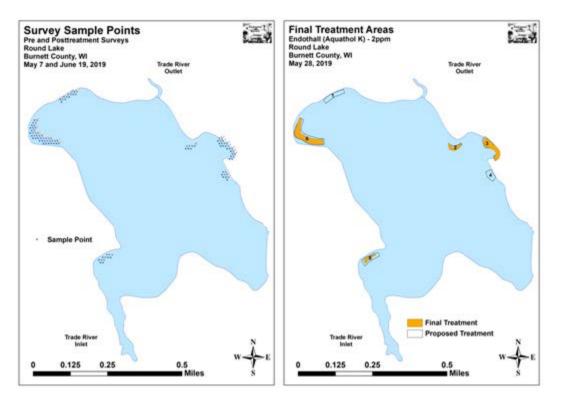


Figure 1: Survey sample points and final treatment areas (ERS, 2019)

Table 2: Changes in treatment acreage after pre-treatment survey results (ERS, 2019)

Treatment	Proposed	Final	Difference		
Area	Acreage	Acreage	+/-		
1	0.68	0	-0.68		
2	0.32	0.34	0.02		
3	1.09	0.94	-0.15		
4	0.47	0	-0.47		
5	0.70	0.25	-0.45		
6	2.04	1.47	-0.57		
Total Acres	5.30	3.00	-2.30		

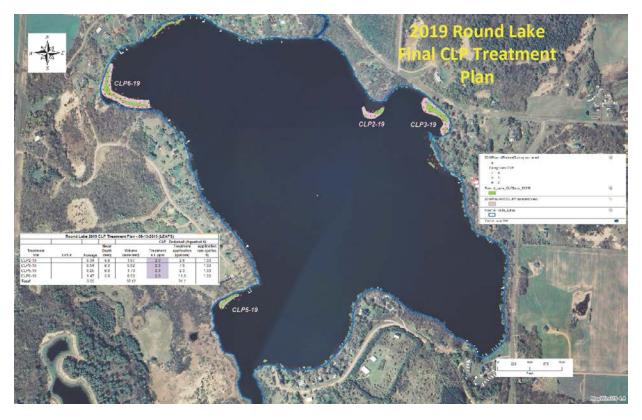


Figure 2: 2019 Final Round Lake CLP chemical treatment map and details

2019 CLP Management Implementation - Round Lake

The required WDNR herbicide application permit was completed by LEAPS, the RTLIA, and Northern Aquatic Services in April and all property owners adjacent to the proposed treatment areas contacted as required by the permit, and signs were posted at the properties on the day of application.

Application of herbicide to control CLP in Round Lake was completed on May 28, 2019 by Northern Aquatic Services. Herbicide was applied starting at 1:00pm and was completed by 3:00pm. Water temperature was 57°F and air temperature was 55°F. Wind speed was very light at 0-2mph out of the N. Liquid endothall (Aquathol K) was applied at 2.0 ppm in all areas. At the time of treatment, CLP, EWM, coontail, white water lily and filamentous algae was present.

2018 Aquatic Plant Survey Work - Round Lake

In 2019, pre-treatment, post-treatment, and fall EWM bedmapping was completed by Endangered Resource Services (ERS). A point-intercept style plant survey that included 110 points in 5.3 acres of the lake was completed on May 7, 2019. The number of points surveyed approximated to over 20 pts/acre – well over the minimum of 4-10 points/acre required by WDNR protocol for pre/post treatment surveys (Figure 1).

During the pre-treatment survey, CLP was found at 16 of 110 points sampled (Figure 3). EWM was not found at any point during the pretreatment survey, but it was present at four points in the post-treatment survey completed June 19, 2019 (Figures 4&6).

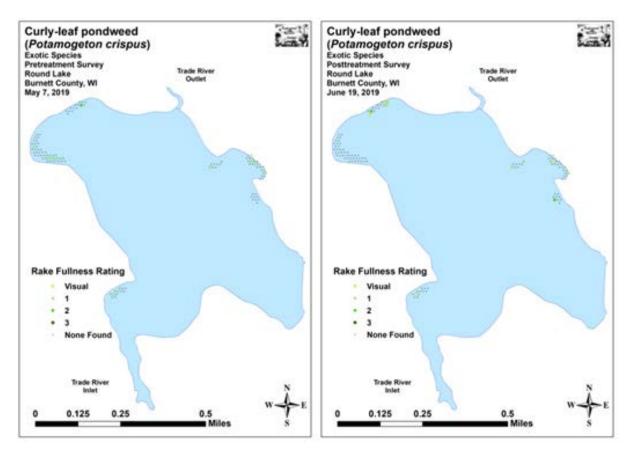


Figure 3: 2019 Pre/Post CLP density and distribution (ERS, 2019)

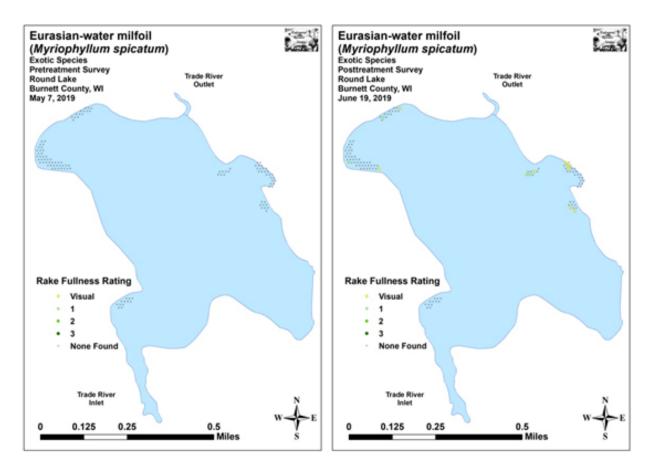


Figure 4: 2019 Pre/Post EWM density and distribution (ERS, 2019)

The post-treatment survey was completed by ERS on June 19, 2019. During the post-treatment survey, CLP was found at 8 points. CLP was also noted four visual sightings. The increase in CLP mean rake fullness and decrease in total distribution were not significant, but the results indicated a significant decrease in rake fullness 1; and a significant increase in visual sightings (Figure 5).

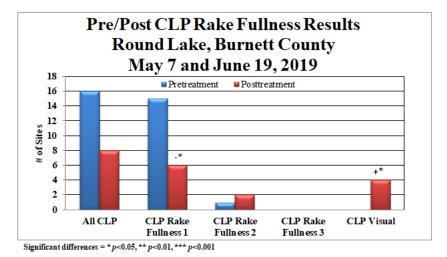


Figure 5: 2019 Pre/Post changes in CLP rake fullness (ERS, 2019)

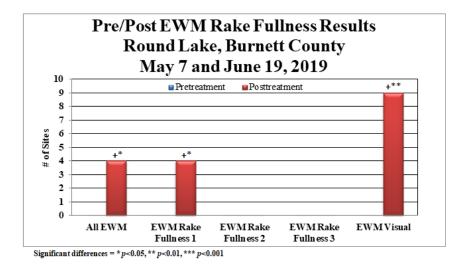


Figure 6: 2019 Pre/Post changes in EWM rake fullness (ERS, 2019)

Round Lake responded better to the 2019 CLP treatment than Long Trade Lake did. Except for visual sightings, the CLP that was present pre-treatment in Round Lake was reduced post-treatment. It is not surprising that more was visual identified for the same reasons that seemed to render the Long Trade CLP treatment less effective. The cool water season was somewhat extended in 2019 as compared to 2018. The chemical treatments were completed on pretty much the same day of the same month in both 2018 and 2019. However, water and air temperatures were significantly different. In 2018 the water and air temperatures during treatment were up in the 70s. In 2019, water temperature was 57 degrees and the air temperature was 55 degrees when the treatment was completed. The cool water and air temperature lasted for several more weeks likely encouraging more CLP growth, and delaying native aquatic plant growth.

2019 Native Aquatic Plant Survey Results

The littoral zone within the planned treatment areas extended to 7.5ft during both the pre and posttreatment surveys. The frequency of plant occurrence increased from 70.5% pre-treatment to 84.0% post-treatment. Total richness tripled from five species pre-treatment to 15 post-treatment. The Simpson's Diversity Index also rose sharply from a moderate pre-treatment value of 0.62 to a high posttreatment value of 0.81. The Floristic Quality Index (another measure of native plant community health) climbed from 9.5 pre-treatment to 19.1 post-treatment.

Mean native species richness at points with native vegetation experienced a highly significant increase from 1.32 species/point pre-treatment to 1.92 species/point post-treatment. Visual analysis of the maps showed much of this increase occurred in nearshore environments; especially in the sheltered areas of bays where the "duckweeds" tend to proliferate (Figure 6). Total mean rake fullness experienced a non-significant increase (p=0.29) from a low/moderate 1.66 pretreatment to 1.72 posttreatment (Figure 7) (Appendix IV).

Coontail and Common waterweed were the most common native species during both the pre and posttreatment surveys. Present at 57 sites with a mean rake fullness of 1.63 during the pre-treatment survey, Coontail experienced a nearly-significant increase in distribution to 70 sites, and a nonsignificant increase in mean rake fullness to 1.66 post-treatment. Conversely, Common waterweed (32 sites – mean rake 1.38 pre-treatment) saw a nearly significant decrease in distribution post-treatment (23 sites), but a nearly significant increase in mean rake fullness to 1.65. No species experienced a significant decline post-treatment, but many expanded their range. Specifically, White water lily, Small duckweed, Large duckweed, and Common watermeal all enjoyed highly significant increases in distribution; and, in addition to EWM, Slender naiad saw a significant increase. Duckweeds, watermeal, and lilies are all plants that can do well under poor water quality conditions because it is easier for them to access the sunlight they need to grow. Submersed vegetation has a harder time under degraded water quality conditions. Round Lake is considered highly eutrophic or nutrient rich.

Pre and post treatment point-intercept survey statistics are included in Table 3.

Summary Statistics:	Pre	Post
Total number of points sampled	110	110
Total number of sites with vegetation	74	89
Total number of sites shallower than the maximum depth of plants	105	106
Freq. of occur. at sites shallower than max. depth of plants (in percent)	70.5	84.0
Simpson Diversity Index	0.62	0.81
Mean Coefficient of Conservatism	4.8	5.3
Floristic Quality Index	9.5	19.1
Maximum depth of plants (ft)	7.5	7.5
Mean depth of plants (ft)	3.5	3.6
Median depth of plants (ft)	3.0	3.0
Average number of all species per site (shallower than max depth)	1.05	1.73
Average number of all species per site (veg. sites only)	1.49	2.06
Average number of native species per site (shallower than max depth)	0.90	1.61
Average number of native species per site (sites with native veg. only)	1.32	1.92
Species richness	5	15
Mean rake fullness (veg. sites only)	1.66	1.72

Table 3: Pre/Post Surveys Summary Statistics Round Lake, Burnett County May 7 and June 19, 2019

Chemical treatment of CLP will again be proposed in 2019. Chemical treatment of EWM will also be proposed based on 2019 fall EWM bedmapping. Additional pre and post treatment aquatic plant survey data is available in the Final 2019 Plant Survey Summary Report generated by ERS and included as an appendix to this summary.

2019 Fall EWM Bed-mapping on Round Lake

On October 8th, the entire visible littoral zone of Round Lake was searched for EWM. The fall EWM bedmapping survey is a visual survey specifically looking for EWM and then marking individual plants and beds of EWM with GPS. A "bed" is determined to be any area where EWM is visually estimated to make up >50% of the area's plants and is generally continuous with clearly defined borders. During the

2019 fall survey, 17 areas with EWM were located on the lake ranging in size from <0.01acre to 2.66 acres. In total, these beds covered 4.6 acres or 2.21% of the lake's surface area (Figure 7). This was an increase of 2.42 acres (+111.01%) from the seven areas totaling 2.18 acres that were mapped in 2018. It was also higher than the 15 beds totaling 2.76 acres found in fall 2017. However, it was still lower than the recent high of 7.57 acres mapped in 2016. Outside these beds, EWM was relatively uncommon and scattered as 44 additional plants were mapped throughout the rest of the lake.

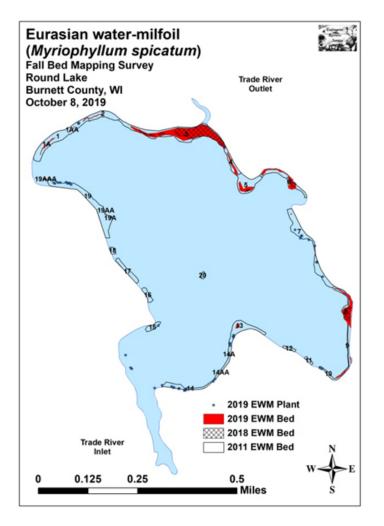


Figure 7: 2019 Round Lake Fall EWM Bed Mapping Results

Historic Fall EWM Mapping Results

Table 4 reflects the changes in EWM each year based on fall bedmapping. Two years, 2011 and 2012 have the highest fall totals and basically occurred before management with herbicides began. The amount of EWM stays relatively constant except in years where either no EWM was treated (2019), or the treatment was in effectual (2016).

Bed Number	2019 Area (in Acres)	2018 Area	2017 Area	2016 Area	2015 Area	2014 Area	2013 Area	2012 Area	2011 Area	2019 Acreage Change	2019 Rake Range; Mean Rake Fullness	2019 Field Notes	
Merged 1-6	3.68	1.93	1.24	5.66	2.16	-	-	-	-	1.75	-		
l and lA/AA	0.10	0	0.17	Merged	0	0	0	0.52	1.91	0.10	<< <l-l; <<l<="" td=""><td colspan="2">More of a HDA</td></l-l;>	More of a HDA	
2	0.06	0	0.14	Merged	0	0.16	0.10	0.47	0.74	0.06	<< <l-l; <<l<="" td=""><td>More of a HDA</td></l-l;>	More of a HDA	
3 and 3A/AA	2.66	1.82	0.59	Merged	1.55	1.81	1.00	2.58	3.57	0.84	<1-3; 3	Canopied mat	
4	0.19	Merg. w/3	Merg. w/3	Merged	Merg. w/ 3	Merg. w/ 3	0.11	0.68	0.63	0.19	< <l-l; l<="" td=""><td>Merging towers</td></l-l;>	Merging towers	
5	0.26	0.02	0.06	Merged	0.49	0.26	0	0.46	1.21	0.24	<1-3; 2	Canopied mat	
6	0.41	0.09	0.28	Merged	0.11	0.06	0	0.43	0.61	0.32	<1-3;1	Merging towers	
7 and 7A	<0.01	0	0.28	0.78	0.65	0.05	0	0.80	1.73	<0.01	<1-1;1	Cluster of towers	
8	0.71	0.25	0.52	0.57	0.43	0.23	0	0.19	0.55	0.46	<1-3; 3	Dense canopied mat	
9	0.02	0	0.06	0	0	0	0	0.20	0.26	0.02	<1-2; 1	Narrow ribbon	
10	0.08	0	0	0	0	0	0	0.06	0.11	0.08	<1-2;1	Narrow ribbon	
11	0	0	0	0	0	0	0	0.06	0.11	0	0	No EWM seen	
12	0	0	0	0	0	0	0	0	0.13	0	0	No EWM seen	
13	0.05	0	0.25	0.08	0.28	0	0	0.44	1.04	0.05	1-3; 2	Expanding mat	
14 and 14A/AA	0.02	0	0.39	0.19	0.06	0.07	0	0.39	0.92	0.02	2-3; 2	Microbed	
15A	0	0	0	0.01	0.04	0	0	0	0	0	<<<1	3 EWM Plants	
15	0	0	0	0	0	0	0	0.12	0.27	0	<< <l><<<l></l></l>	1 EWM Plant	
16	0	0	0	0	0	0	0	0.09	0.26	0	0	No EWM seen	
17	0	0	0	0	0	0.10	0	0.15	0.46	0	0	No EWM seen	
18	0	0	0	0	0	0	0	0	0.13	0	0	No EWM seen	
19A/AA/AAA	0.04	<0.01	0.03	0.27	0.03	0.46	0.19	1.15	2.27	0.04	<<<1-2; 2	Three microbeds	
20	0	0	0	0	0	0	0.01	0.05	0.10	0	0	No EWM seen	
Total	4.60	2.18	2.76	7.57	3.65	3.20	1.41	8.84	17.01	+2.42			

Table 4: Fall EWM Bed-mapping Summary – Round Lake

Past Management Implications

Table 5 reflects management history on Round Lake since 2011. The last really large chemical treatment of EWM in Round Lake was completed in 2013 when 15.74 acres were treated. Since that time, only an average of 4.6 acres has been treated in each year, including one year (2019) where no EWM was chemically treated. Since the 2013 treatment, the amount of EWM mapped in the fall of the same year as chemical management has average 3.62 acres, except in two years. In 2016, diquat was used on all treatment areas in the lake. Diquat proved to be ineffectual with the amount of fall EWM jumping to its highest level (7.57 acres) since the 2013 treatment. In 2019, no EWM was chemically treated and the amount of EWM mapped in the fall went to its second highest level (4.60 acres) since 2013. If these two years are removed, the average amount of EWM mapped in the fall drops to only 2.64 acres. Furthermore, if the EWM mapped near the outlet of Round Lake (Bed 3) where application of herbicide is not generally completed due to rapid water movement to and through the outlet, the average amount of fall EWM in the lake drops much further to only 1.29 acres. The EWM mapped in Bed 3 on average is more than 50% of the total EWM mapped each year in the lake.

Several things can be inferred from the previous paragraph. Treating no EWM in a given year likely means a sizable expansion in EWM for the following fall. Using an herbicide like diquat, which is a contact herbicide, was not effective with results similar to not treating EWM at all. The 2,4-D products used in all other years are effective at reducing seasonal EWM and keeping fall levels below two acres, but don't necessarily have longer term benefits. The largest area of EWM in the lake is near the outlet. Under current practices, this area is not chemically treated, and is too large and dense for physical removal or Diver Aided Suction Harvest (DASH). Physical removal has been tried in several years. DASH has not been used.

In the last couple of years, a new chemical herbicide has been used in WI with promising results leading to longer term relief after a single year treatment. The new herbicide is ProcellaCOR and it is supposed to be very fast-acting like a contact herbicide (diquat), but also systemic, meaning it is drawn into the plant through its leaves and roots, like 2,4-D. This new herbicide could be used in the future on Round Lake. To make application near the outlet in Bed 3 feasible, installation of a curtain to hold the applied herbicide in place longer could be completed. Recent work has been done in Marinette County treating several persistent areas of EWM in a lake aided by installation of a curtain. Future grant requests should consider this for Round Lake.

Round Lake EWM Management 2011-2019									
Year	Chemically Treated (acres)	Fall Bedmapping (acres)	Bed 3 (acres)	% of Fall Bedmapping Total	Total Fall Bedmapping w/out Bed 3				
2011	0	17.01	3.57	21.0					
2012	5.96	8.84	2.58	29.2					
2013	15.74	1.41	1	70.9	0.41				
2014	5.68	3.2	1.81	56.6	1.39				
2015	4.08	3.65	1.55	42.5	2.1				
2016	4.16	7.57	5.66	74.8	1.91				
2017	4.84	2.76	0.59	21.4	2.17				
2018	8.86	2.18	1.82	83.5	0.36				
2019	0	4.6	2.56	55.7	2.04				
Average (2011-2019)	5.48	5.69	2.35	50.6	1.48				
Average 2013-2019	4.60 (w/out2013)	3.62	2.14	57.89	1.48				

Table 5: Past management results on Round Lake

2019 AIS Education

The 2019 AIS education projects include watercraft inspection (Clean Boats, Clean Waters), AIS monitoring and removal, ZM Dockout Day, an AIS Training Workshop, and Newsletter articles. The time and people indicated in this report have been documented in the grant reimbursement process.

2019 Clean Boats, Clean Waters

Records indicate that a total of 61.25 hours of paid and volunteer watercraft inspection were completed on the Round Lake Public Access at the end of Stillson Road in 2019. The first recorded day of volunteer monitoring was on June 2 and the last day was August 24, 2019. All time was voluntary. A total of 67 boats and 144 people were contacted during the hours at the landing in 2019.

AIS Signage

A Decontamination Station installed at the Round Lake landing in 2018 continued to be stocked and replenished for use in decontaminating boats entering and leaving Round Lake. A volunteer on Round Lake monitored the station on a regular basis in 2019.



Figure 8: Decontamination signage at the Round Lake public landings

2019 AIS Monitoring

AIS including CLP, EWM, Purple Loosestrife, and Zebra Mussels were monitored for in June, July, August, September, and October in 2019. At least 15 different volunteers spent at least 73.5 hours on Round Lake looking for AIS and removing most of what they found. Twelve volunteer recorded 42 hours of physical removal.

2019 AIS Identification and Removal Workshop

At least one Round Lake volunteer attended a CBCW/AIS monitoring workshop in April 2019. Another volunteer hosted a meet and greet at her home where neighbors gathered to discuss lake issues and AIS management. On July 20, 2019 23 people participated in an AIS Workshop provided during the annual picnic. A representative from LEAPS spent an hour at the picnic with AIS samples available for inspection. Proper identification and removal techniques were discussed during the event.

2019 ZM Dockout Day

ZM Dockout Day inspections were held on between 10/03 and 10/27/2019 with at least three property owners documented as taking part.

2019 Newsletters

Three newsletters were sent out in 2019, one in January, one in May, and one in August. A fourth was just sent out in January 2020. These newsletters provide an update for AIS management actions, CBCW, and AIS monitoring for all who receive it.

The RTLIA holds at least four meetings each year: May, June, August, and September. The September meeting serves as the official annual meeting of the organization. Property owners on Long Trade Lake also hold one event each year that serves as a local informational meeting. These meetings were all completed in 2019.

2019 Water Quality Sampling

Round Lake - Deep Hole was sampled 10 different days during the 2019 season. Parameters sampled included: water clarity, temperature, dissolved oxygen, chlorophyll A, and total phosphorus. The average summer (July-Aug) secchi disk reading for Round Lake was 3.45 feet. This was less than the 4.25 feet recorded in 2018. The average for the Northwest Georegion was 8.6 feet. Typically the summer (July-Aug) water was reported as MURKY and GREEN. This suggests that the secchi depth may be mostly impacted by algae. Algal blooms are generally considered to decrease the aesthetic appeal of a lake because people prefer clearer water to swim in and look at. Algae are always present in a balanced lake ecosystem. They are the photosynthetic basis of the food web. Algae are eaten by zooplankton, which are in turn eaten by fish.

Chemistry data was collected on Round Lake - Deep Hole in 2019. The average summer Chlorophyll was 41.3 μ g/l (compared to a Northwest Georegion summer average of 13.2 μ g/l). The summer Total Phosphorus average was 77.0 μ g/l. Lakes that have more than 20 μ g/l and impoundments that have more than 30 μ g/l of total phosphorus may experience noticeable algae blooms.

The overall Trophic State Index (TSI) (based on secchi) for Round Lake - Deep Hole was 63. Again higher than the 56 recorded in 2018 though this may be due to missed tests in 2018 that were not missed in 2019. The TSI values are a means to compare several different water quality parameters in the same format. The TSI scale generally ranges from 0-100 with values below 40 being considered representative of lake water in deeper lakes that is clear, low in nutrients, and with generally more available oxygen. Values above 50 reflect lakes that are often shallower, often with more aquatic vegetation, cloudy, greener water that may be impacted by suspended sediment or algae. As TSI values get closer to 100, the amount of nutrients in the water increase, water clarity decreases, and lakes may be more algae dominated systems than actual large aquatic plant dominated systems. TSI values for Round Lake suggest that the lake is impacted by decreased clarity, fewer algal species, oxygen-depleted bottom waters during the summer, plant overgrowth evident, and a warm-water fisheries (pike, perch, bass, etc.) only. Dissolved oxygen and temperature profiles were collected three times during the season, and like 2018 they confirmed oxygen depletion in the lake by mid-summer below about 9-ft of water through the end of August.

All sampling included as a part of the Citizen Lake Monitoring Network and extra sampling completed in September and October were completed by Round Lake volunteers. Total phosphorus levels late August through the end of October were quite high on Round Lake suggesting that internal loading of phosphorus could be going on.

2019 Purple Loosestrife

No beetles were reared and released in 2019; however a Round Lake volunteer worked with a representative from LEAPS to monitor the shoreline of Round Lake and remove purple loosestrife when it was found. At the same time, property owners with purple loosestrife present on their lake front were contacted and informed about purple loosestrife and how and why it should be removed.

Final Notes

2019 was the second year of a three year grant funded project for Round Lake. Two additional grants were received for Big/Little Trade lakes and Long Trade Lake. Expenses claimed in this reimbursement are the large costs associated with actual chemical control work and consultant support. Not all expenses and activities are included in this reimbursement request as there will be additional requests to follow.