INTRODUCTION

Photo 1. Lake Metonga, Forest County, Wisconsin. Taken from north boat landing.

Lake Metonga, Forest County, is a 1,991-acre drainage lake with a maximum depth of 79 feet and a mean depth of 25 feet (Photo 1). Outlet Creek, Lake Metonga's outlet, leads to the Swamp Creek which flows through Rice Lake on its way to the Wolf River. First officially documented within the system in 1994, Eurasian water milfoil (*Myriophyllum spicatum;* EWM) has been actively managed by the Lake Metonga Association (LMA) to reduce its amount and density through 2,4-D chemical applications and biological control introductions since 1998. Between 2005 and 2007, the management activities were conducted under the auspices of a Wisconsin Department of Natural Resources (WDNR) Aquatic Invasive Species (AIS) Grant. The LMA created an approved lake management plan in December 2007 and received an additional WDNR Grant to cover the costs of an EWM Control & Prevention Project (Phase I) spanning treatments between 2008 and 2011. In February 2011, the LMA received an additional AIS Control Grant (Phase II) to cover the remaining costs of the project. The results of this project were discussed in the 2013 EWM Control & Prevention Project Final Report. The LMA was unsuccessful in obtaining a grant for the 2014 EWM control program costs and instead raised funds independently to cover the 2014 EWM control and monitoring activities. In 2015, the LMA received a grant to cover monitoring and control costs for 2015 and 2016. This report discusses the monitoring and control activities conducted during 2016.

WDNR Long-Term EWM Trends Monitoring Research Project

Starting in 2005, WDNR Science Services began conducting annual point-intercept aquatic plant surveys on a set of lakes to understand how EWM populations vary over time. This was in response to a commonly held belief of the time that once EWM becomes established in a lake, its population would continue to increase over time. Because the State of Wisconsin's waters are managed for multiple uses (Statue 281.11), the WDNR wanted to understand if EWM populations would increase and cause either 1) ecological impacts to the lake and/or 2) reductions in ecosystem services (i.e. navigation, recreation, aesthetics, etc.) to lake users. As outlined in *The Science Behind the "So-Called" Super Weed* (Nault 2016), EWM population dynamics on lakes are not that simplistic.

Like other aquatic plants, EWM populations are dynamic and annual changes in EWM frequency of occurrence have been documented in many lakes, including those that are not being actively managed for EWM control (no herbicide treatment or hand-harvesting program). The data are most clear for unmanaged lakes in the Northern Lakes and Forests Ecoregion (Figure 1). Some lakes, such as Hancock Lake, maintained low EWM populations over the study averaging 2.3% between 2008 and 2015. At these low levels, there are likely no observable ecological impacts to the lake and are no reductions in ecosystem services to lake users. The EWM population of Hancock Lake has increased in recent years to 5.2% in 2015 and over 10% in 2016 (preliminary data not shown in Figure 1).

Eurasian water milfoil populations in other lakes, such as Bear Paw Lake and Little Bearskin Lake trended to almost 25% only to decline to approximately 5% by the end of the study period. There are many factors that could contribute to the decline in the EWM population of these lakes, including climactic conditions and water quality parameters. Little Bearskin is known to contain a robust population of milfoil weevils, and this native insect may be having an impact on the EWM population within the lake. Boot Lake is a eutrophic system with low water clarity (approx. 3-ft Secchi depth) due to naturally high phosphorus concentrations. It is hypothesized that water clarity conditions in some years may favor EWM growth whereas in other years it may keep the population suppressed. Extreme changes in EWM populations like those observed on Weber Lake have also been documented. The EWM population in 2010-2011 was approximately 20% before spiking above 50% in 2012. Then the population declined back to approximately 15% in 2014 and 2015.

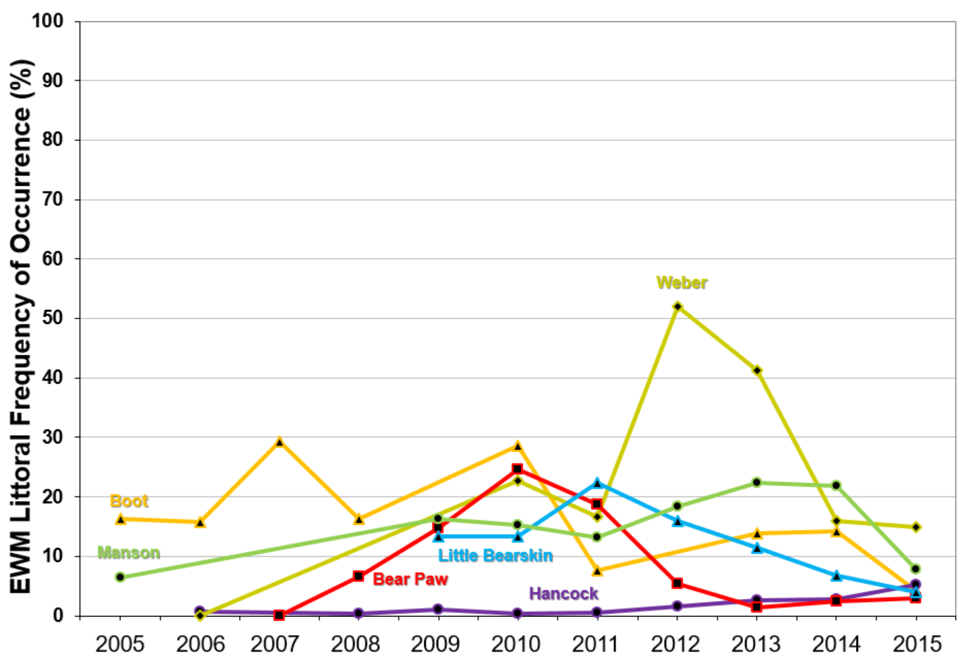


Figure 1. Littoral frequency of occurrence of EWM in the Northern Lakes and Forests Ecoregion without management. Data provided by and used with permission from the WDNR Bureau of Science Services.

The results of the study clearly indicate that EWM populations in unmanaged lakes can fluctuate greatly between years. Following initial infestation, EWM expansion was rapid on some lakes, but overall was variable and unpredictable (Nault 2016). On some lakes, the EWM populations reached a relatively stable equilibrium whereas other lakes had more moderate year-to-year variation. Some lake managers interpret these data to suggest that in some circumstances it is not appropriate to manage the EWM population may decrease naturally on its own. However, even a lowered EWM population of approximately 10% exceeds the comfort level of many riparians because it is potentially at or above a level that may negatively impact the function of the lake, as well as not allow the lake to be enjoyed by riparians as it had been previously.

2016 HWM CONTROL STRATEGY

Herbicides that target submersed plant species are directly applied to the water, either as a liquid or an encapsulated granular formulation. Factors such as water depth, water flow, treatment area size, and plant density work to dilute herbicide concentration within aquatic systems. Understanding Concentration-Exposure Times (often referred to as CETs) is an important consideration for the use of aquatic herbicides. Successful control of the target plant is achieved when it is exposed to a lethal concentration of the herbicide for a specific duration of time.

Ongoing studies are indicating that in small spot treatments (working definition is less than 5 acres) the herbicide dissipates too rapidly to cause EWM mortality if systemic herbicides like 2,4-D are used. Even in some cases where larger treatment areas can be constructed, their narrow shape or exposed location within a lake may result in insufficient herbicide concentrations and exposure times for long-term control. Ongoing field trials are assessing the efficacy (EWM control) and selectivity (collateral native plant impacts) of herbicides that may be effective with a shorter exposure time.

Since 2007, varying herbicides and herbicide application strategies have been employed on Lake Metonga in an attempt to control EWM. While short-term control was observed in many of the treatment sites over the years, EWM population rebound was observed occurring as soon as one year after treatment. This *seasonal control* did not meet lake managers' expectations and number of different herbicide treatment strategies have been attempted since 2007 in an effort to provide longer-term control (Figure 2).

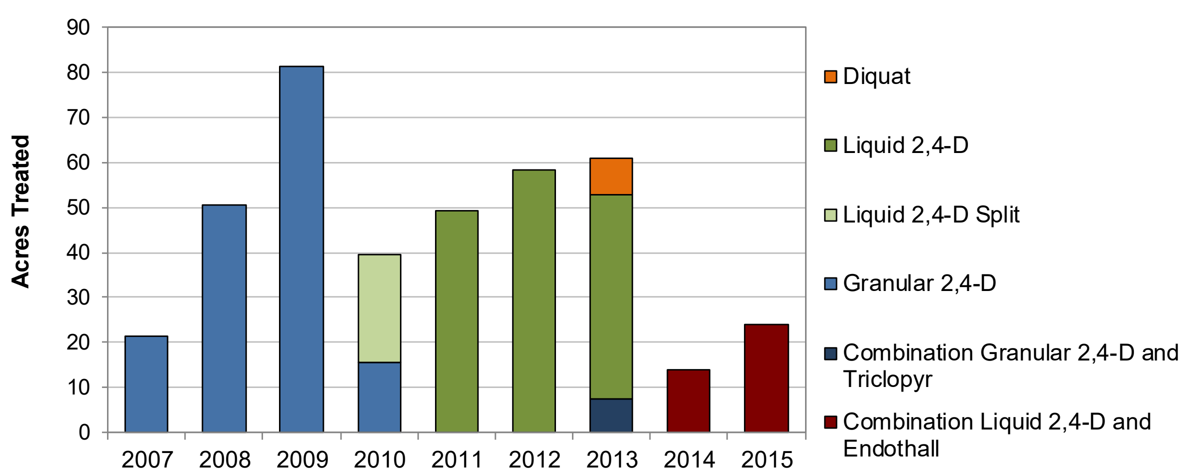


Figure 2. Lake Metonga treatment history.

A set of disappointing trial treatments occurred in 2013, followed by a lapse of funding in 2014. With Onterra's direction, the another trial treatment was conducted in 2014 using a combination of liquid 2,4-D/endothall. This treatment met short-term control goals and for the first time, lake managers believe that longer-term control may be observed from this treatment. Prior to its use on Lake Metonga, this combination herbicide application strategy had been proven successful in some large-scale treatment situations but had not been fully evaluated in spot-treatment situations. Combination applications of 2,4-D/endothall are theorized to have additive and potentially synergistic effects compared to when the respective herbicide is used independently. While often referred to as a contact herbicide, endothall may have systematic effects on aquatic plants when used at low water temperatures (50-60°F).

Based on the preliminary success of the 2014 trial treatment, the LMA proposed conducting an expanded control strategy in 2015 using the same herbicide treatment strategy. Based on feedback from Onterra and the WDNR, the LMA reservedly paired down the proposed treatment strategy to only consist of areas near the two main public access locations with aims to postpone the larger management strategy until 2016. Overall, the 2015 combined 2,4-D/endothall herbicide treatment on Lake Metonga did not meet expectations. The assessment of the herbicide control strategy indicated that both qualitative and quantitative success criteria thresholds were not met, as EWM occurrence and density was only slightly impacted. The EWM population within the area targeted with this strategy in 2014 was observed to have fully recovered during the late-summer 2015 EWM Mapping Survey.

Many of the past herbicide control strategies used on Lake Metonga have been seasonally effective at best, and the EWM population of Lake Metonga has not been reduced over time. While some treatments have proven slightly more effective over others, the rate of success has not been greater than the increase of the EWM population lake-wide. The results of a tracer-dye study conducted in 2015 clearly show that target concentrations and exposure times were not met for the 2015 strategy. This may have been impacted by winds that increased following the treatment. However, it is suspected that even in absence of the wind-induced water exchange, the exposure time required to achieve EWM control from this herbicide combination may be longer than can be achieved on exposed parts of Lake Metonga where natural sub-surface water movement is high.

Numerous meetings, teleconferences, and email exchanges occurred between the LMA, Onterra, the WDNR Lakes Coordinator, the WDNR Fisheries Manager, and the Sokaogon Chippewa Community's fisheries biologist during the winter of 2015-2016. All entities understand the difficulty of conducting successful active management on Lake Metonga. A number of alternative strategies have emerged from these discussions and will be pursued by the LMA in the future. One method is to use barrier curtains to contain an herbicide treatment within a specific area for the intended concentration and exposure times required for control. The LMA hopes to understand the costs, limitations, and permitting realities of this method moving forward.

In the interim, a *Nuisance Control and Containment Strategy* was devised for 2016. This involved targeting approximately 60 acres near the lake's public access and high-use areas (Map 1). The WDNR has agreed to allow a portion of this acreage to be applicable to the LMA's current AIS-Established Population Control Grant, in an effort to minimize EWM near the boat landings and the potential risk of EWM from Lake Metonga being taken out of the lake and spread to other lakes from transient boating activity (i.e. containment).

Since control goals cannot be reached using the herbicide strategies conducted on Lake Metonga in the past, a combination herbicide consisting of diquat and endothall using the commercially available Aquastrike® herbicide was proposed for 2016. The long-term efficacy and selectivity of this herbicide have not been fully evaluated in the field, but preliminary results are promising. There are concerns that these treatments may have increased risk to the native plant community within treated areas. Quantitative pretreatment sub-sampling data was collected during the late-summer of 2015 to allow an evaluation of the native plant community response in these areas.

PRETREATMENT CONFIRMATION AND REFINEMENT SURVEY

On May 18, 2016, Onterra staff visited Lake Metonga to complete the Spring Pretreatment Confirmation and Refinement Survey. A temperature and dissolved oxygen profile collected at this time indicated the water temperatures ranged from 10.9°C (51.6°F) near the surface to 10.2°C (50.0°F) at deeper depths. During this survey, the proposed herbicide application areas were assessed to ensure EWM was actively growing within these areas and that their boundaries as determined in 2015 were still appropriate. As a result of this survey, a few small site boundary adjustments were made. Because part of E-16 was too shallow to be navigable, that part of the treatment area was removed. Site C-16 was also adjusted in relation to the extents of the EWM colony at time of the treatment.

During the pretreatment survey, Onterra staff noted that much of the EWM in shallower (approx. < 6 ft) water was green and bushy and was likely actively growing; whereas the EWM in deeper water was brown and stringy. Lake Metonga is a large and deep lake that warms up slower than most lakes in northern Wisconsin. This fact, in combination with the purpose of this treatment (i.e. nuisance/containment); the 2016 treatment on Lake Metonga was planned to occur after the more time-sensitive early-season herbicide treatments have been completed. This would allow the applicator to have the time flexibility to conduct the treatment when winds are <5 mph as well as the WDNR to coordinate a tracer-dye study in association with the treatment.

Schmidt's Aquatic was in position to conduct the treatment on June 5th, but weather conditions postponed the treatment a few days. The 2016 final herbicide treatment strategy on Lake Metonga was executed on June 8, 2016 by Schmidt's Aquatics. The applicator reported a water temperature of approximately 61°F and northwest winds at 1-4 mph at the time of application.

Wind speed and direction data were also obtained from nearby weather stations (Figure 3). These data indicate that winds were predominantly out of the west/southwest at the time of the application, ranging in speed from 0 to 7 mph during herbicide application. Winds remained southwesterly and relatively light for at least seven hours after the treatment.

Figure 4 shows how frequent the winds blew from cardinal and intercardinal directions during approximately 2 hours before and 7 hours after herbicide was applied to Lake Metonga during early-June 2016. The most frequent directions were winds coming from the northwest (31.6%), north (23.4%), and southwest (22.8%).

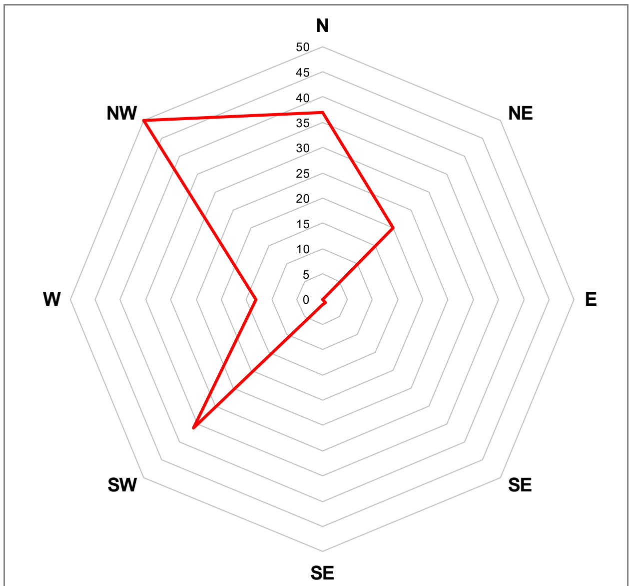


Figure 4. Wind direction count near Lake Metonga surrounding 2016 herbicide treatment. Created using data obtained from Weather Underground Argonne station.

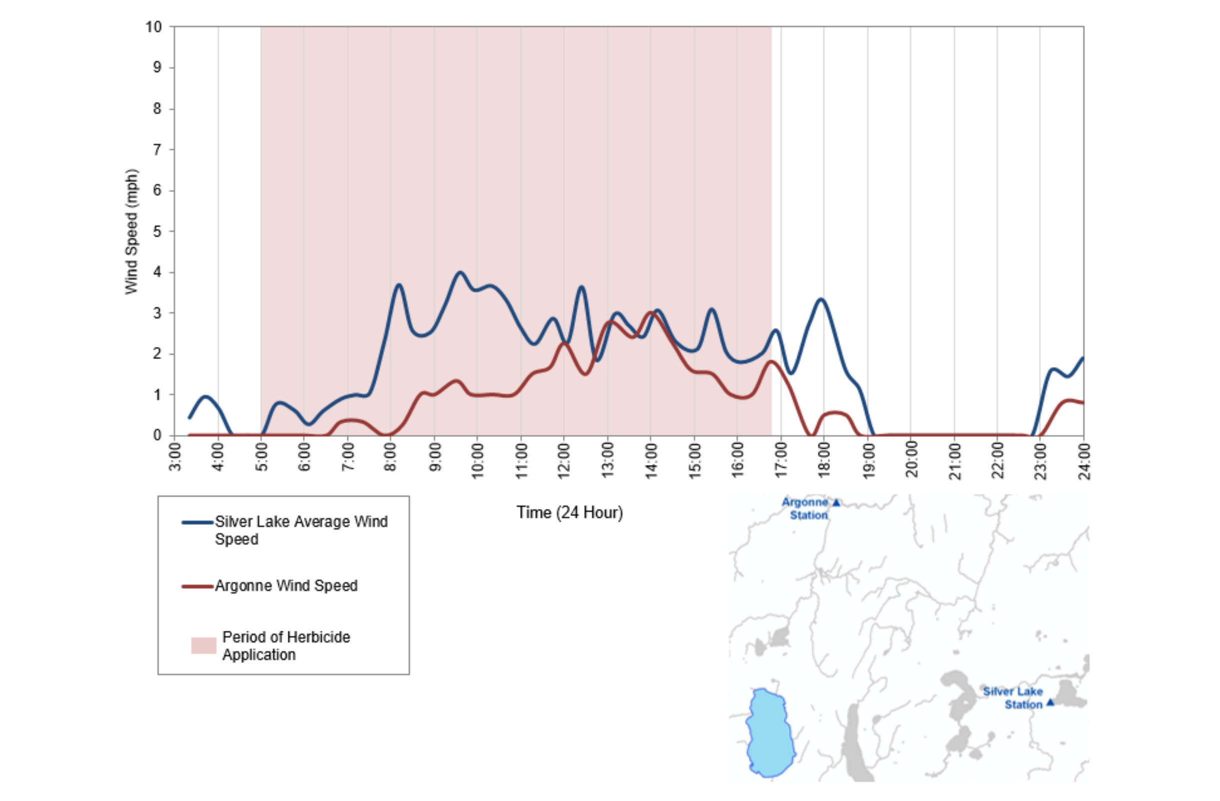


Figure 3. Wind speed surrounding 2016 herbicide treatment. Created using data obtained from Weather Underground Argonne and Silver Lake stations.

2016 HERBICIDE TREATMENT RESULTS

Quantitative Aquatic Plant Monitoring (Point-intercept Data)

On Lake Metonga, quantitative data were collected at approximately 269 locations (Figure 4). Pretreatment data were collected during the late-summer of 2015 and post treatment data were collected during the late-summer of 2016. In the late-summer of 2016 prior to treatment, 87% of the sub-sample point-intercept sampling locations within treatment sites contained EWM (Figures 5-6)). In the late-summer of 2016 following the treatment, 29.9% of the sub-sampling point-intercept sampling locations contained EWM, resulting in a 66% reduction in EWM occurrence. The largest reduction in EWM occurrence was observed in C-16, whereas the other sites continued to contain a relatively high frequency of EWM following the treatment albeit less than the prior to the treatment.

Native plant impacts were also observed in association with the 2016 Aquastrike treatment. Aside from coontail, all species present displayed a statistically valid reduction of occurrence following the treatment. While some of the native plant population declines were consistent with Onterra's experience of similar early-season spot treatments, a few of the species that declined were atypical and require further discussion. Some of the increased impacts to native species could be explained by the slightly later treatment timing in 2016. However, muskgrasses, a group of macro-algae, are almost universally resilient to most herbicide treatments. As an alga, herbicides are not moved through (translocated) the tissue as the "plant" is a colony of individual cells. Wild celery emerges later than many native plant species (late-June) and perhaps is dormant during the herbicide treatment and thus less susceptible to impacts from this herbicide.

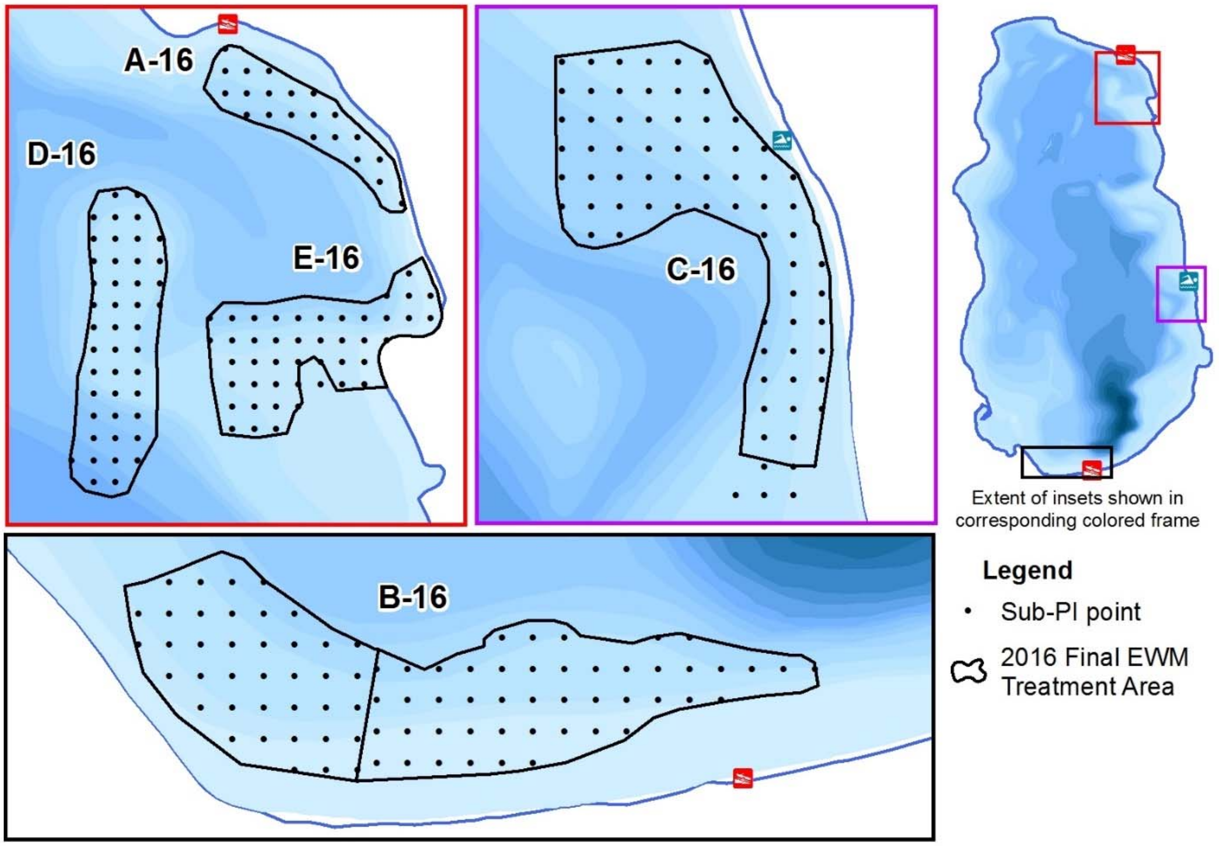


Figure 4. Quantitative sub-sampling locations

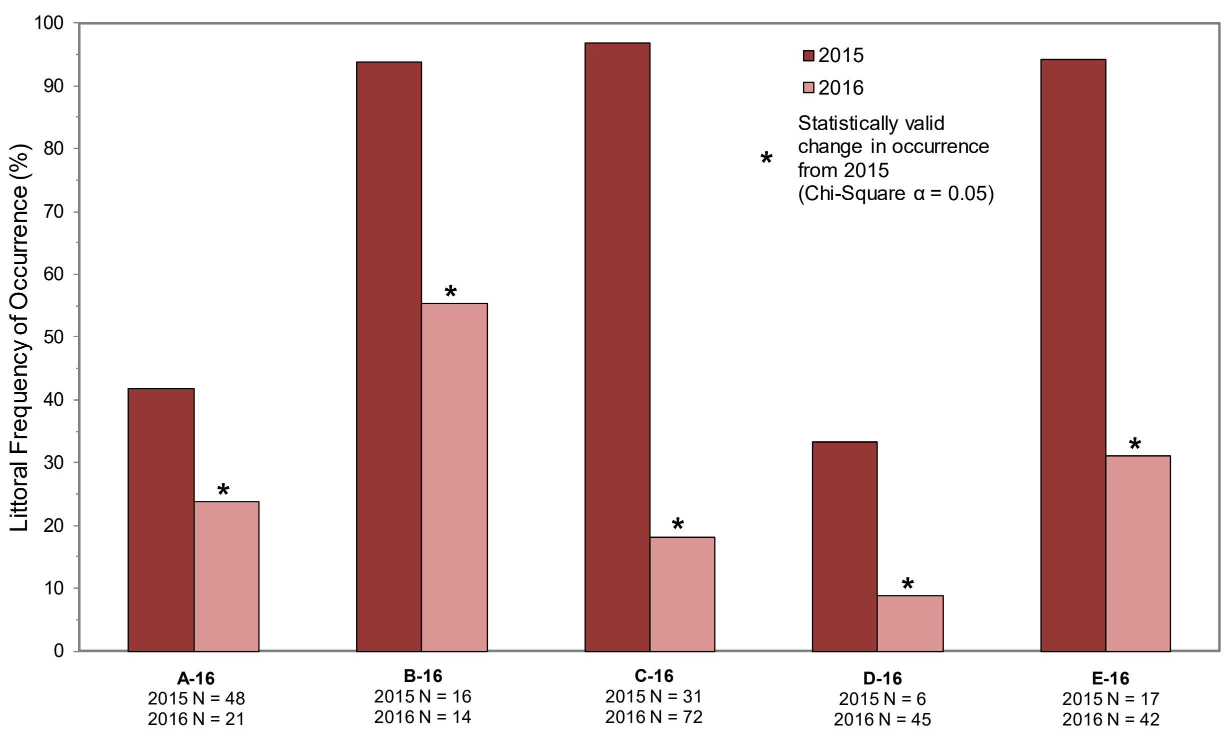


Figure 5. Quantitative EWM sub-sampling results by treatment site

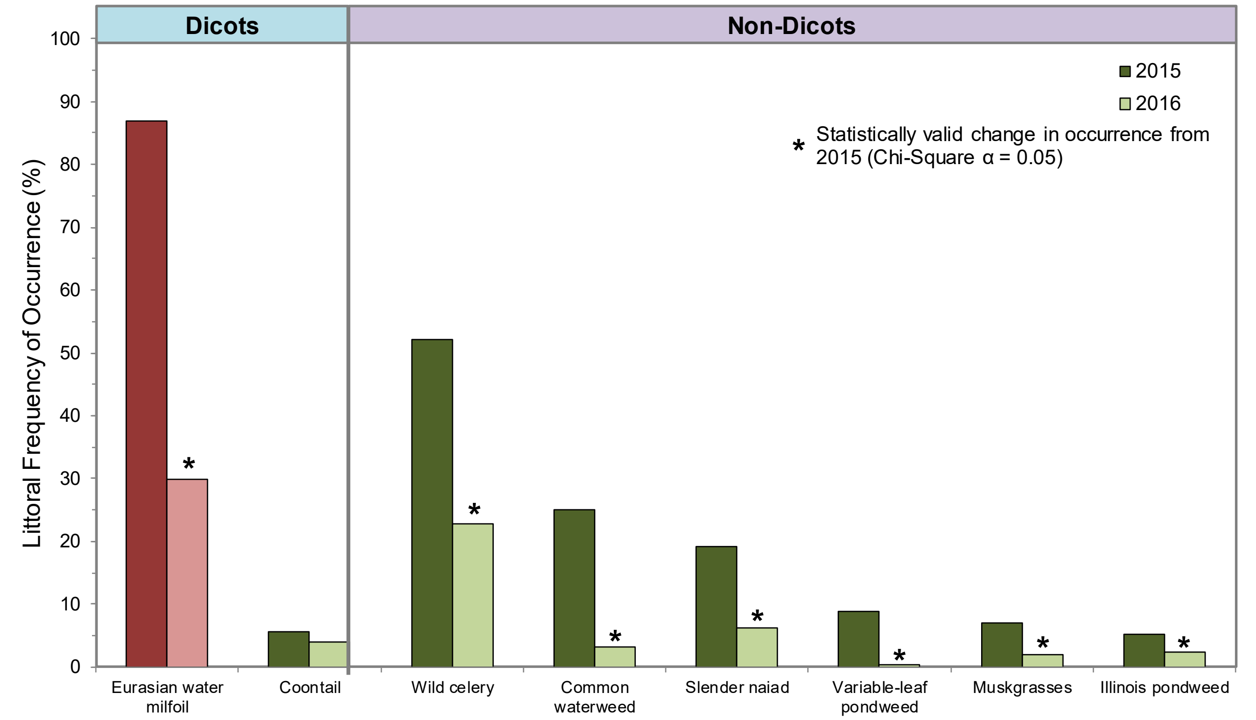


Figure 6. Overall quantitative sub-sampling results

Qualitative Aquatic Plant Monitoring (EWM Mapping)

Using sub-meter GPS technology, EWM locations were mapped the year prior to treatment (2015) in late-summer when EWM is at or near its peak growth, and in the late summer immediately following the treatment (2016). The EWM population was 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 from *Highly Scattered* to *Surface Matting*. Point-based techniques were applied to EWM locations that were considered as *Small Plant Colonies* (<40 feet in diameter), *Clumps of Plants*, or *Single or Few Plants*). Comparisons of the survey mapping results are used to qualitatively evaluate the 2016 herbicide treatment on Lake Metonga. Qualitatively, a successful treatment o would include a reduction of EWM density as demonstrated by a decrease in density rating (e.g. highly dominant to dominant) of at least 75% of the acreage treated.

Based on the quantitative monitoring, C-16 had an 81% reduction in EWM frequency of occurrence (Map 2, Figure 5). Based on the qualitative mapping surveys, the EWM population of this site was reduced from a *highly scattered* density to almost no visible EWM except for in the northern portion of the site (Figure 7).

The EWM population in the northeastern part of the lake targeted with treatment sites A-16, D-16, and E-16 had quantitative EWM reductions to a lesser degree as C-16. The qualitative mapping data indicates the population remained largely the same from the late-summer of 2015 to the late-summer of 2016 (Figure 8). However, anecdotal reports indicate the EWM population was suppressed during much of June, July, and August when the bulk of the recreational activities took place. The EWM population rebound took place largely at the end of the growing season.

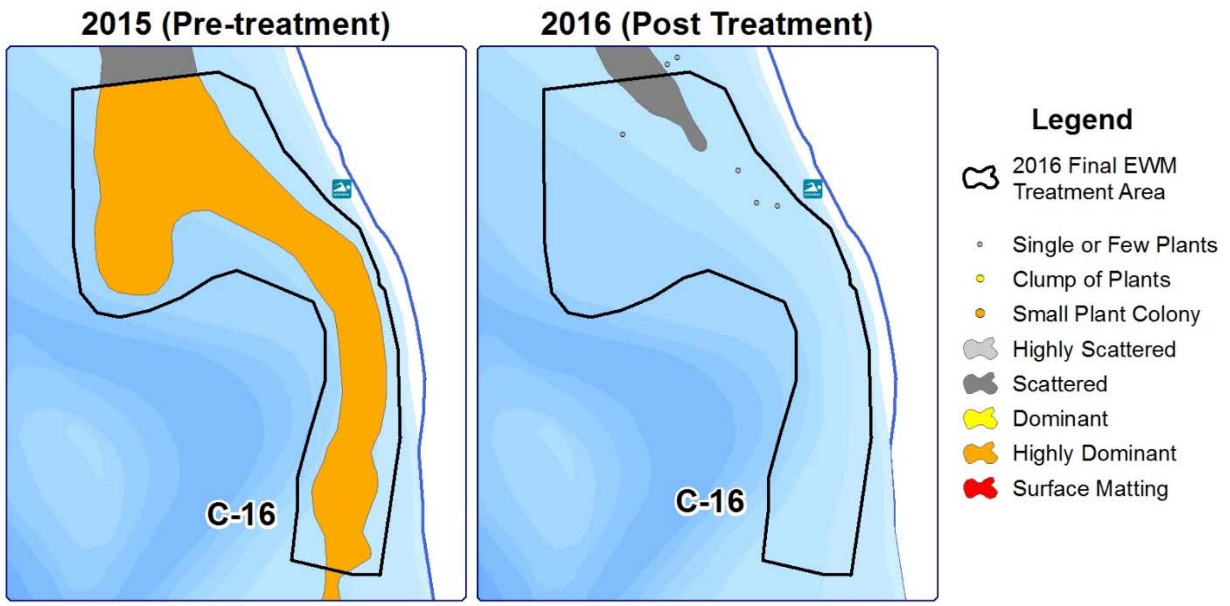


Figure 7. Qualitative EWM mapping results within C-16 from summer 2015 pre- and summer 2016 post-treatment mapping surveys.

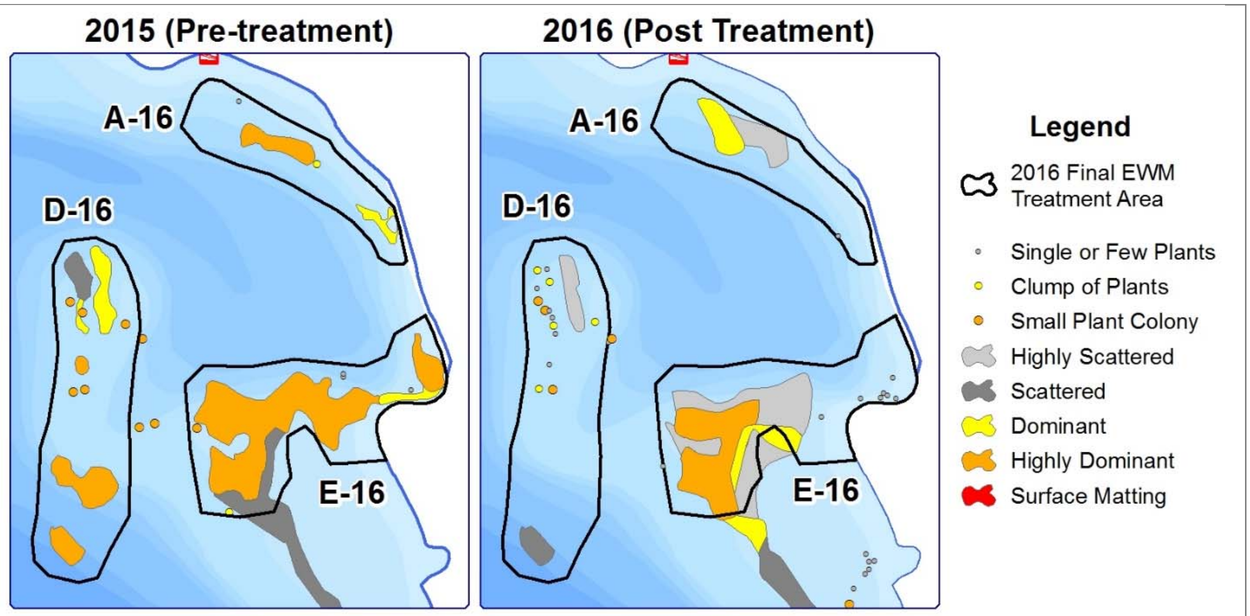


Figure 8. Qualitative EWM mapping results within A-16, D-16, & E-16 from summer 2015 pre- and summer 2016 post-treatment mapping surveys.

Site B-16 had quantitative reductions in EWM frequency of occurrence following the treatment, but continued to contain over 55% EWM occurrence following the treatment. The late-summer 2016 EWM survey indicated about the same population extent of EWM compared to the late-summer of 2015, albeit slightly denser in 2016.

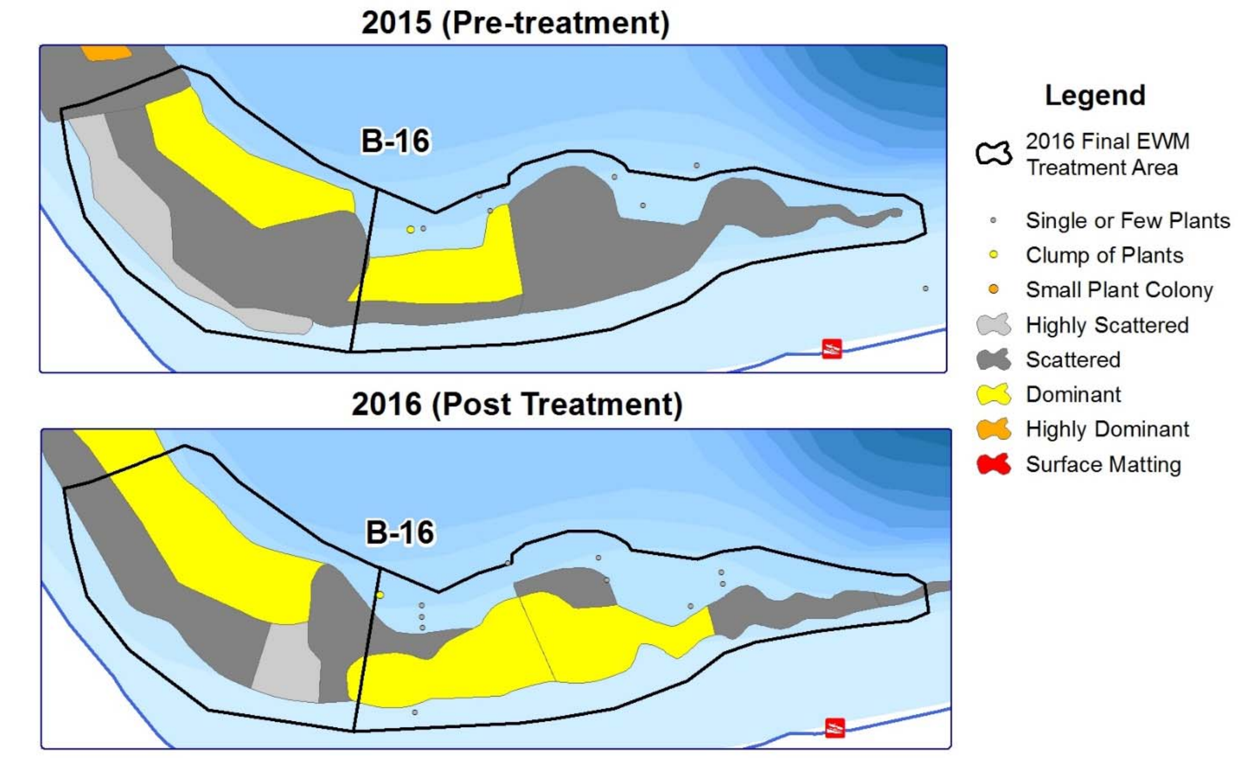


Figure 9. Qualitative EWM mapping results within B-16 from summer 2015 pre- and summer 2016 post-treatment mapping surveys.

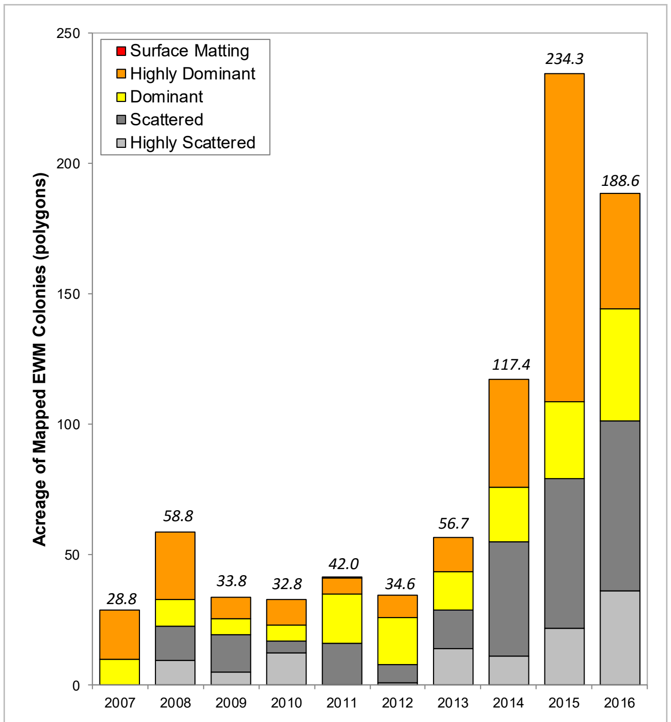


Figure 10. Acreage of mapped EWM colonies on Lake Metonga from 2007-2015.

Figure 10 indicates that the acreage of EWM colonies increased to its highest levels in 2015, with a reduction in EWM acreage from 2015 to 2016 being documented (Map 2). As discussed in the Introduction Section, WDNR monitoring unmanaged EWM populations have documented declines in lake-wide EWM populations like those observed on Lake Metonga in 2016. Please note that Figure 10 represent the acreage of mapped EWM polygons, not EWM mapped within point-based methodologies (*Single or Few Plants, Clumps of Plants,* or *Small Plant Colonies*). Taken out of context, this figure can be misleading as large changes in EWM colonial acreage may be the results of differences in EWM populations fluctuating from point-based data to areas best delineated with polygons. This is illustrated on Map 1, where the EWM population north of the swimming beach on the east side of the lake was mapped as colonies in 2015 and reduced to levels marked with point-based methods in 2016.

CONCLUSIONS

As discussed in the 2015 *EWM Monitoring & Control Strategy Assessment Report*, the EWM population of Lake Metonga is likely to levels that are having an impact to the overall ecology of the lake. The changes are most notably a result of increased plant biomass within the lake that are having an influence on biotic and abiotic factors within the lake. In the short term, some of these changes may appear beneficial to lake users, such as increases in certain fish species (i.e. yellow perch) that benefit from the cover and the resulting change in the food web that have occurred. However, other fish species (i.e. bullhead species) have also increased and fisheries managers are devoted resources to balancing the ecosystem in fluctuation.

On many lakes, when EWM populations reach the levels observed on Lake Metonga, lake managers may opt to formulate a large-scale herbicide control plan. From an ecological perspective, large-scale (whole-lake) treatments are those where the herbicide is applied to specific sites, but when the herbicide reaches equilibrium within the entire volume of water (of the lake, lake basin, or within the epilimnion of the lake or lake basin), it is at a concentration that is sufficient to cause mortality to the target plant within that entire treated volume. A large-scale 2,4-D strategy was explored for Lake Metonga and a list of the primary implementation challenges are documented below:

- The potential costs for a large-scale 2,4-D treatment would approach $400,000.
- The herbicide applied would only mix within the upper layer of water (epilimnion). Understanding the depth of the epilimnion on a large lake with the characteristics of Lake Metonga (deep, clear) are difficult and the probability of incorrect dosing may be high.
- Lake Metonga contains a robust rusty crayfish population. If the treatment was effective at reducing the EWM population to low levels, the likelihood of the native plant population increasing in the lake is low considering the rusty crayfish population and their tendency to prefer native vegetation over EWM.

Based on the primary implementation challenges, along with others not discussed here, a large-scale herbicide treatment program is not recommended at this time. However, the EWM population in many areas of the lake has increased to levels that they are decreasing the ecosystem services the lake provides including impeding navigation and recreation. Therefore, a *Nuisance Control and Containment Strategy* that was implemented in 2016. The primary goal of the strategy is to minimize EWM near the boat landings and public beaches to restore the ecosystem services to lake users in these areas. The second goal is to contain the EWM population, as the potential risk of EWM from Lake Metonga being taken out of the lake and spread to other lakes from transient boating activity is highest at the public boat landings.

The EWM population in all locations targeted in 2016 showed a quantitative reduction. However, all sites contained at least a modest amount of EWM present following the treatment. Except for site C-16 by the east public beach/sandbar, the late-summer post treatment mapping assessments yielded little or no practically significant change in the EWM population. But as indicated, there were reliable anecdotal reports of reduced EWM populations in these areas for the majority of the summer before they rebounded late in the year.

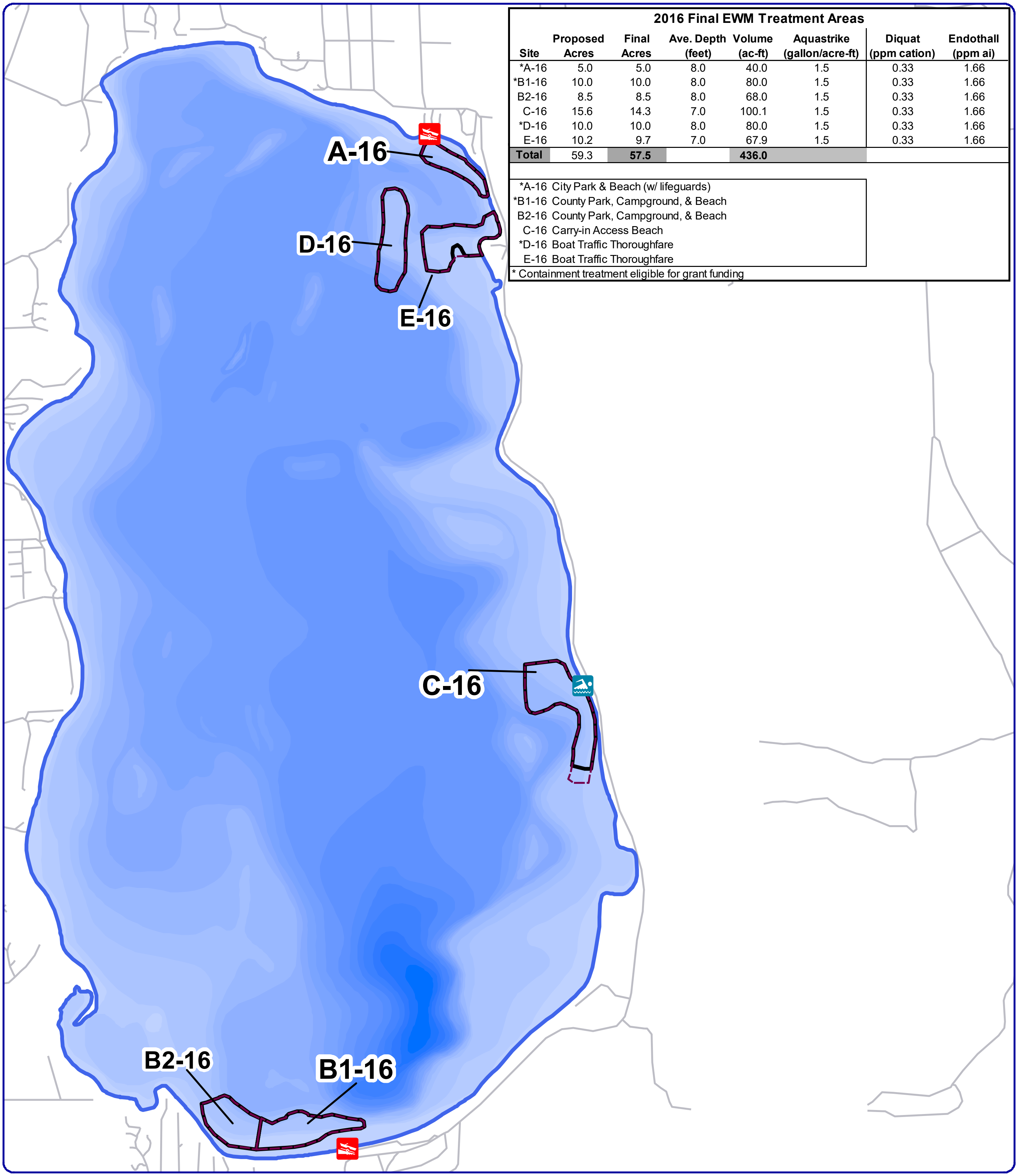
The EWM populations were reduced for the majority of the summer in many of the targeted sites, allowing recreation and navigation activity to occur in these areas. The reduction of the EWM population in these areas may have also resulted in lessened chance of EWM being transported out of the lake by transient lake users. Based on these two findings, the goal of the 2016 *Nuisance Control and Containment Strategy* has arguably been met. However, it is clear that the EWM populations of almost all sites except C-16 rebounded to near pretreatment levels by the end of the summer and only resulted in a single season of control. Similar to when mechanical harvesting is used to restore ecosystem services to specific areas, the strategy needs to be repeated each year, as little to no impacts past a single season occur. This also demonstrates that expanding the strategy to additional areas in the lake may temporarily reduce the EWM population within these targeted areas for a portion of the summer, but will have no long-term impact on the lake-wide EWM population.

A tracer-dye study conducted on Lake Metonga during the 2016 herbicide treatment yielded some interesting observations. While the results are not quantifiable, reports of rapid water movement from seemingly riptide-like currents from the northeastern treatment sites was observed. Even though the wind conditions were low during the 2016 treatment, not exceeding 4 mph, the wind direction may have had a factor in water exchange rates. Winds moving perpendicular to shore may hold the herbicide within the near-shore site longer than winds blowing parallel to shore or blowing from shore toward the lake. The LMA believes that the positive control of site C-16 was due to primarily west winds holding the herbicide within this treatment site. These issues are complex and Onterra's current understanding of water movement does not allow for judgements or predictions to be made based on wind direction.

The LMA would like to continue the *Nuisance Control and Containment Strategy* for 2017, possibly with inclusion of additional sites where EWM populations are reducing ecosystem services to riparians and lake users. If the LMA wishes to retreat areas that were targeted as part of the strategy in 2016, sufficient quantitative and qualitative data exist for evaluation. During this treatment, the LMA would like to coordinate with the herbicide applicator to have the treatment occur during a period of low winds and when the winds are at a specific direction for each treatment site. Onterra would be willing to produce a map of the retreated areas and include the same herbicide use pattern employed in 2016 for permitting purposes. By comparing the results from the 2016 treatment with those from 2017, an understanding if managing each individual treatment site based upon wind direction can have an influence on the level and longevity of control can be made.

With the lack of longer-term control being documented in 2016 and the native plant reductions observed within the treatment sites, Onterra does not recommend expansion of the program past strategic high use areas (e.g. swimming beaches, boat landings) until a control strategy with a higher degree of probably for control has been determined.

The LMA would like to update their Comprehensive Lake Management Plan, potentially during 2018 following a WDNR grant application during the next applicable grant cycle (December 10, 2017). The planning project would allow the LMA to better define their EWM control goals and if the associated management actions required to reach the management goals are supported by lake association members. While the updated Plan would include a strong aquatic plant-related component, it would also include investigations of the system's water quality, watershed, shoreland habitat, stakeholder perceptions, and fisheries that will lead to a holistic management strategy for the LMA. The LMA's previous Aquatic Plant Management Plan was finalized in December 2007 with a management update occurring in January 2014 following a multi-year AIS – Established Population Control grant-funded project.



2016 Final EWM Treatment Areas

Site	Proposed Acres	Final Acres	Ave. Depth (feet)	Volume (ac-ft)	Aquastrike (gallon/acre-ft)	Diquat (ppm cation)	Endothall (ppm ai)
*A-16	5.0	5.0	8.0	40.0	1.5	0.33	1.66
*B1-16	10.0	10.0	8.0	80.0	1.5	0.33	1.66
B2-16	8.5	8.5	8.0	68.0	1.5	0.33	1.66
C-16	15.6	14.3	7.0	100.1	1.5	0.33	1.66
*D-16	10.0	10.0	8.0	80.0	1.5	0.33	1.66
E-16	10.2	9.7	7.0	67.9	1.5	0.33	1.66
Total	59.3	**57.5**		**436.0**			

*A-16	City Park & Beach (w/ lifeguards)
*B1-16	County Park, Campground, & Beach
B2-16	County Park, Campground, & Beach
C-16	Carry-in Access Beach
*D-16	Boat Traffic Thoroughfare
E-16	Boat Traffic Thoroughfare

* Containment treatment eligible for grant funding

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Feet

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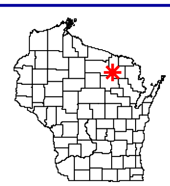
920.338.8860
www.onterra-eco.com

Sources:
Roads and Hydro: WDNR
Bathymetry: WDNR, digitized by Onterra
Aquatic Plant Survey: Onterra, 2015
Map Date: May 23, 2016



Project Location in Wisconsin

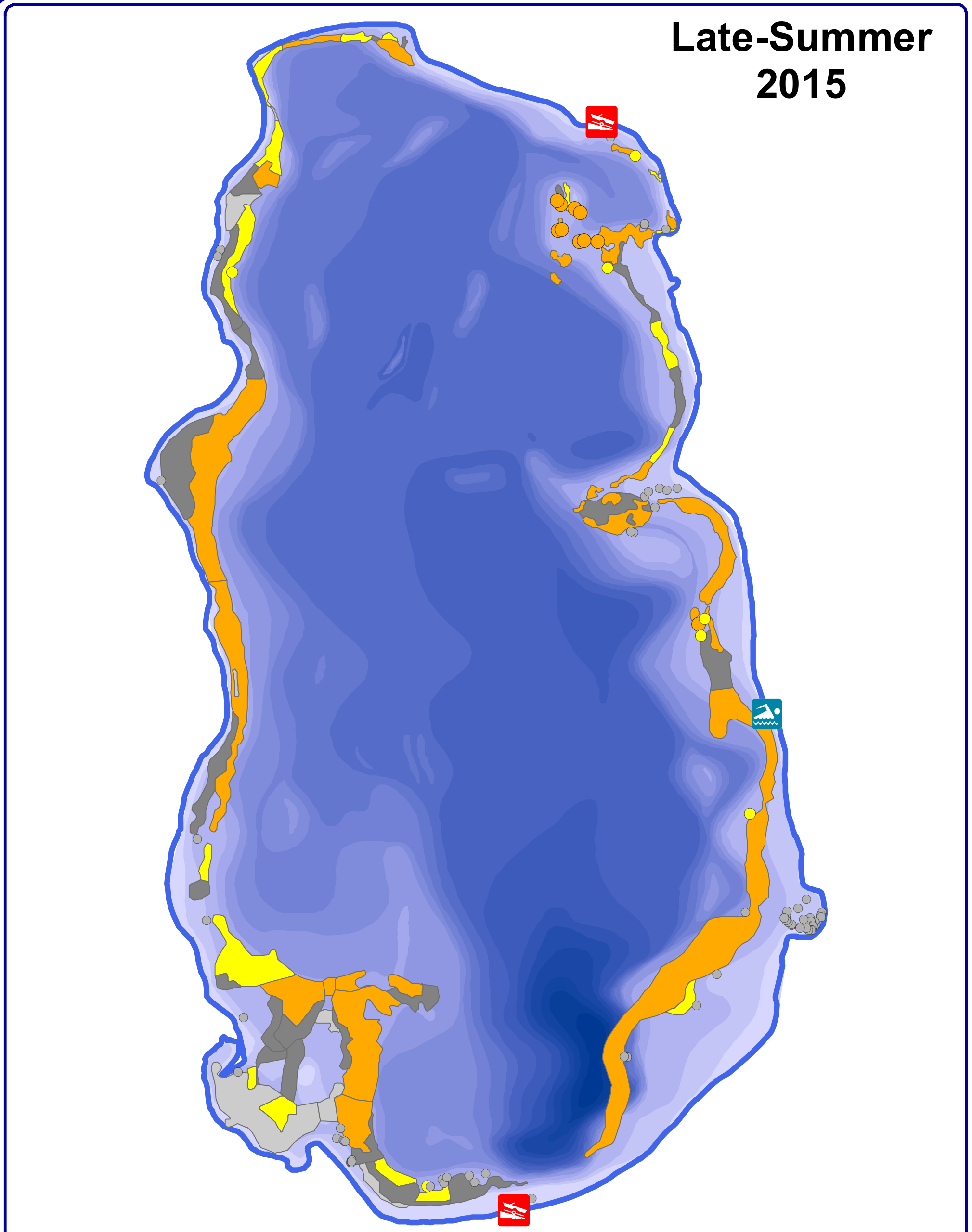
Legend

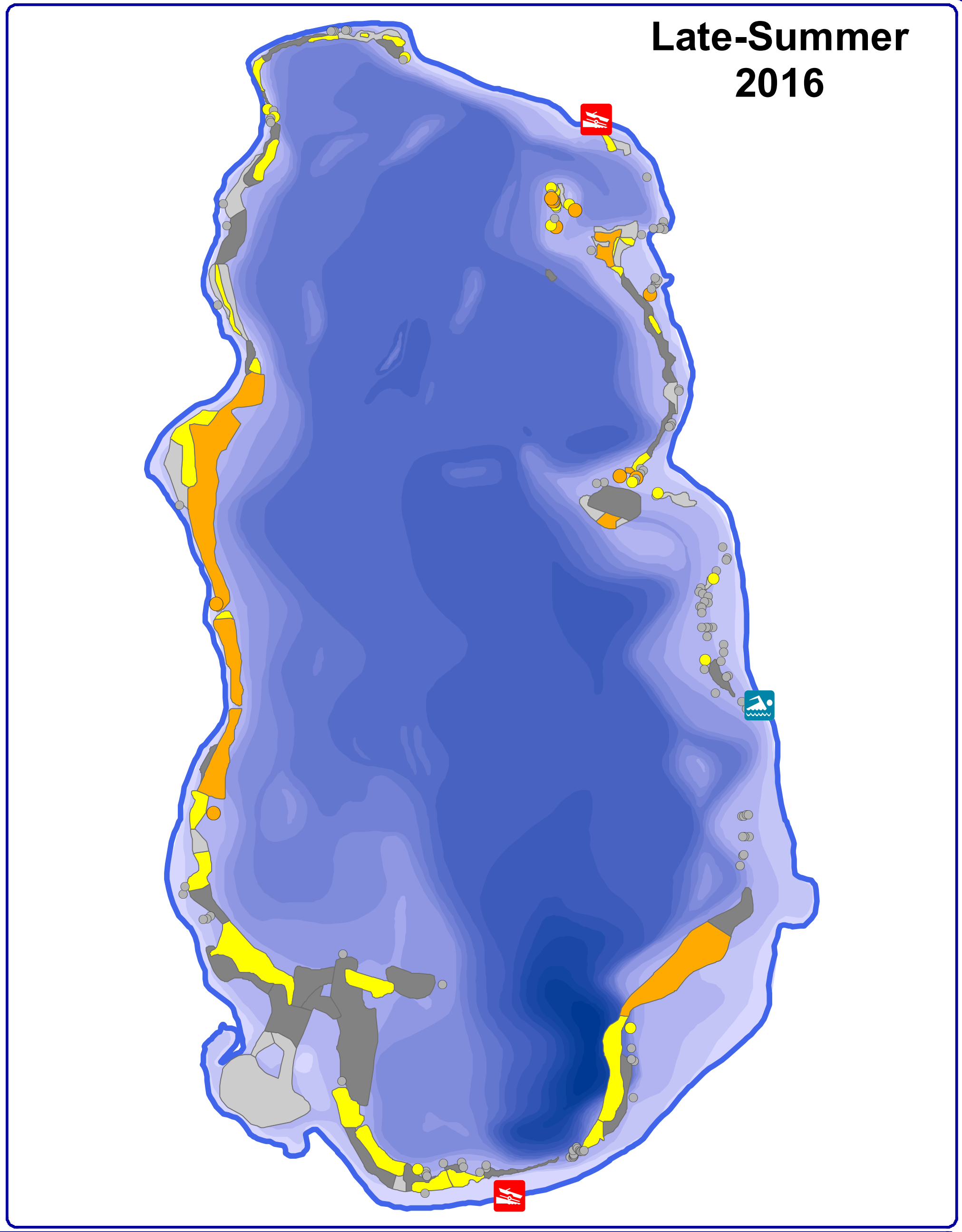
Final Herbicide Treatment Site
(Diquat + Endothal)

Preliminary Herbicide Treatment Site
(Diquat + Endothal)

Map 1
Lake Metonga
Forest County, Wisconsin

2016 Final EWM Control Strategy





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2,300
Feet

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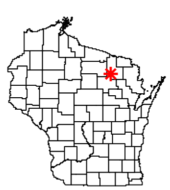
De Pere, WI 54115
920.338.8860
www.onterra-eco.com

Sources:
Roads and Hydro: WDNR
Aquatic Plants: Onterra, 2015-2016
Map Date: April 3, 2017
Filename: Metonga_EWM_2015&2016.mxd


Project Location in Wisconsin

Legend

Eurasian watermilfoil

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

Map 2
Lake Metonga
Forest County, Wisconsin
EWM Survey Results
2015 & 2016