INTRODUCTION

Eurasian water milfoil (*Myriophyllum spicatum;* EWM) first documented in the Phillips Chain of Lakes in 2000 within Duroy Lake. Following this discovery, EWM spread and could be located within areas of the other three lakes (Elk, Long, Wilson) by 2002. In 2009, studies were conducted by Onterra on the Phillips Chain as part of a Wisconsin Department of Natural Resources (WDNR)-funded lake management planning project that was initiated by the Phillips Chain O'Lakes Association (PCOLA). These studies revealed that EWM was indeed present within all four lakes of the chain. Because the EWM population poses a threat to the high-quality native aquatic plant communities that are present within these lakes and interferes with recreation and degrades aesthetics, the Phillips Chain of Lakes Comprehensive Management Plan (2011) contains, amongst others, a goal to: *Control Existing and Prevent Further AIS Infestations within the Phillips Chain of Lakes.*

The PCOLA took the first step in this process by successfully applying for a WDNR Aquatic Invasive Species (AIS) Education, Prevention, and Planning Grant to complete a chain-wide assessment of EWM in 2011 and develop potential control strategies in 2012. Subsequently, the PCOLA successfully received a one-year WDNR AIS Established Population Control Grant to carry out the control strategy in 2012. This control strategy consisted of a whole-lake treatment within Wilson Lake and localized spot treatments in areas of Duroy and Long Lakes. The treatment in Wilson Lake was found to be largely successful at controlling EWM at the lake-wide level, but there were also some adverse impacts observed to native aquatic plant species. The spot treatment in Long Lake was also determined to be successful; but while the spot treatment in Duroy Lake did reduce the density level of EWM within the treatment area, it did not meet predetermined expectations.

During the 2012 Late-Summer EWM Peak-Biomass Survey, Onterra ecologists only located approximately 3.5 acres of colonized EWM within the upstream-most portion of Wilson Lake that was designated as *scattered* (Map 1). Because of this low level of EWM and the impacts observed to some native species within the lake following the 2012 treatment, no treatment was proposed to occur in Wilson Lake in 2013. Similarly, because of the success seen in 2012 in Long Lake, no treatment was proposed to occur in 2013. The only areas of EWM that were proposed for treatment in 2013 were located in Duroy Lake (Map 2), consisting of approximately 20 acres. In February of 2013, the PCOLA successfully received a one-year WDNR AIS Education, Prevention, and Planning Grant to aid in covering the monitoring costs of the 2013 treatment. The herbicide application costs were fully funded by the PCOLA.

2013 TREATMENT PLANNING

Approximately 22,400 square miles of northern Wisconsin was ceded to the United States by the Lake Superior Chippewa tribes in 1837 and 1842, within which the Phillips Chain of Lakes falls. The Great Lakes Indian Fish and Wildlife Commission (GLIFWC) represent the eleven Chippewa Tribal Nations within the Upper Midwest to protect and enhance the natural resources of the ceded territory, particularly as they relate to the treaty rights of the member tribes.

Wild rice is a valuable emergent grass found within Duroy Lake. In addition to the ecosystem services this plant provides, it also holds great cultural significance to the Native American communities of this area. For this reason, GLIFWC focuses on the "preservation and enhancement of manoomin (wild rice) in ceded territory lakes." The state of Wisconsin works actively with GLIFWC to review all activities that have the potential to negatively impact wild rice populations. While the use of

herbicides to control aquatic invasive species has broad intentions of benefiting the lake ecosystem, the herbicides may have the capacity to impact non-target plants such as wild rice.

Little information exists regarding the impacts of aquatic herbicides on wild rice, particularly as it applies to collateral effects on wild rice associated with targeted herbicide treatments of aquatic invasive species in lakes. Natural wild rice populations are known to fluctuate greatly and unpredictably from year to year; therefore, linking population changes of wild rice to herbicide use in field settings can be problematic. Two studies (Nelson et al 2003; Madsen et al. 2008) evaluated the effects of various herbicides and concentrations on wild rice within outdoor mesocosums (tanks that replicate natural conditions). While this research concludes that wild rice is susceptible to aquatic herbicides, closer investigation of this research may identify potential herbicide use patterns that would minimize the impact on wild rice.

On January 10, 2012, the 2012 Treatment Report for the Phillips Chain was submitted to the PCOLA, WDNR, and GLIFWC biologists. Along with detailing the results of the 2012 treatments on Wilson, Long, and Duroy Lakes, this report also outlined a 2013 herbicide treatment strategy for Duroy Lake. This report discussed ways in which the 2013 treatment program would be carried out to minimize the impacts to wild rice, as well as outlined a monitoring strategy to objectively understand the treatment impacts.

PRETREATMENT CONFIRMATION & REFINEMENT SURVEY

On May 30, 2013, Onterra ecologists conducted the EWM Spring Pretreatment Confirmation and Refinement Survey on Duroy Lake. During this survey, the proposed treatment sites A-13 and B-13 were assessed, and sufficient EWM warranting treatment was confirmed in both of the proposed treatment areas. Treatment sites B-13 was reduced slightly 9.9 acres, as EWM was not observed growing in the southwestern lobe of the proposed treatment area. No modifications were made to site A-13, as dense EWM was observed throughout this site.

The Voigt Intertribal Task Force is comprised of nine GLIFWC members plus the chairperson, and recommends policy relating to natural resource management issues within the ceded territories. On June 5, 2013, the members of the Voigt Intertribal Task Force voted to object to the entire 2013 EWM treatment on Duroy Lake for cultural reasons and concerns that the rice would be negatively impacted by the treatment. The WDNR upheld the decision of the Voigt Intertribal Task Force and indicated that A-13 would not be permitted for treatment. However, B-13 was not within proximity of known wild rice colonies and therefore was permitted by the WDNR to be treated as proposed.

The treatment of B-13 was conducted by Stantec, Inc. during the morning of June 20, 2013. The applicator reported 10 mph winds out of the south during the time of application and near-surface water temperatures of around 65°F.

MONITORING METHODOLOGIES

The objective of an herbicide treatment strategy is to maximize target species (EWM) mortality while minimizing impacts to valuable native aquatic plant species. Monitoring herbicide treatments and defining their success incorporates both quantitative and qualitative methods. As the name suggests, quantitative monitoring involves comparing number data (or quantities) such as plant frequency of

occurrence before and after the control strategy is implemented. Qualitative monitoring is completed by comparing visual data such as EWM colony density ratings before and after the treatments.

Quantitative Aquatic Plant Monitoring

Ideally, point-intercept sub-sampling surveys should be conducted the summer prior (pretreatment) and summer immediately following (post treatment) implementation of the treatment strategy. However, due to the logistics surrounding this treatment, a summer 2012 pretreatment sub-sample point-intercept survey was not conducted on Duroy Lake. Since a pretreatment point-intercept survey was not completed during the summer of 2013, this survey was completed just prior to the treatment during the spring of 2013. Comparing the spring 2013 survey with a summer 2013 survey allows for a quantitative understanding of how much the EWM population was reduced by the treatment. However, most native plants are not actively growing during the spring of the year. Therefore it is not appropriate to use this data to evaluate the native plant community.

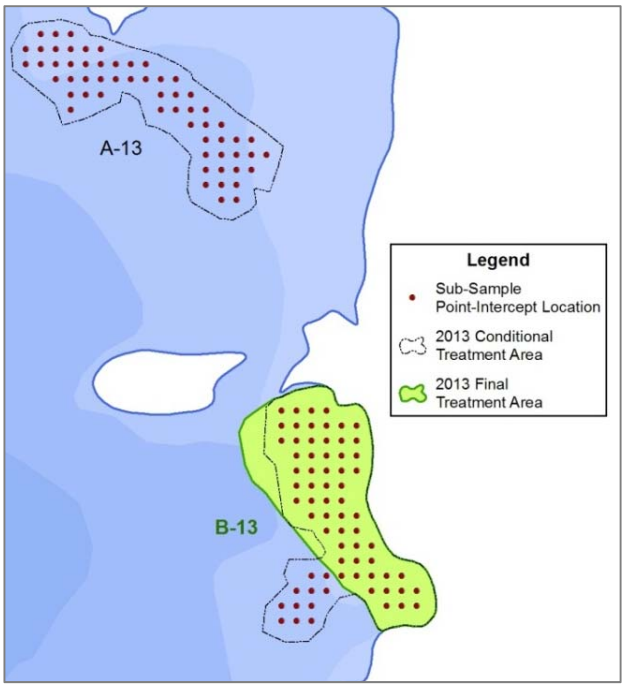

Figure 1. 2013 quantitative treatment monitoring plan for Duroy Lake, Price County.

In Duroy Lake, quantitative evaluation was made through the collection of data at a total of 129 point-intercept sub-sample locations (Figure 1), following protocols outlined within Appendix D of the WDNR Guidance Document, *Aquatic Plant Management in Wisconsin* (WDNR 2010). Because A-13 was not treated, the data collected could be used as a control to compare against the treated site B-13.

Comparing data collected before and after the treatment allows for a statistical comparison of aquatic plant occurrences and a quantitative determination of treatment efficacy within the herbicide application areas. Based upon a pre-determined success criterion, the 2013 herbicide treatment strategy would be deemed effective if the point-intercept data show that the EWM frequency of occurrence within site B-13 decreased by at least a statistically valid 50% ($\alpha = 0.05$). It is important to note that changes in aquatic plant frequencies following the herbicide treatment cannot be extrapolated to the lake-wide level, and can only be considered within the areas where herbicide was directly applied and the monitoring occurred.

In association with the whole-lake treatment conducted on Wilson Lake in 2012, whole-lake point-intercept surveys were conducted during the summer prior to the treatment (pretreatment) and the summer following the treatment (post treatment). This method is described in Recommended Baseline Monitoring of Aquatic Plants in Wisconsin: Sampling Design, Field and Laboratory Procedures, Data Entry, and Analysis, and Applications (WDNR PUB-SS-1068 2010). Another whole-lake point-intercept survey was conducted on Wilson Lake in 2013 to gain an understanding of the native aquatic plant and EWM populations within the lake one year following the treatment. However, there was a

technological error with the ruggedized mobile computer used in the field to record data; and unfortunately, about half of the data were corrupted and lost. This data loss was not realized until the early fall when the data were going to be analyzed, making it too late to re-conduct this survey again in 2013. Because of this, a whole-lake point-intercept survey will be conducted on Wilson Lake in 2014 to assess the aquatic plant community two years following the 2012 whole-lake treatment.

Qualitative EWM Monitoring

Using sub-meter GPS technology, EWM locations were mapped the year prior to treatment (2012) in late-summer when EWM is at or near its peak growth, and in the late summer immediately following the treatment (2013). 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*.

Qualitative monitoring of herbicide treatments includes comparing spatial data reflecting EWM locations and densities during the peak-growth stages the summer before the treatment the summer immediately following the treatment. Based upon a pre-determined success criterion, an effective treatment would include a 75% reduction of EWM as demonstrated by a decrease in density rating (e.g. *Highly Dominant* to *Dominant*).

Wild Rice Monitoring

Similar to the qualitative methodologies used to map and compare EWM colonies and densities, a methodology has been developed by Onterra to monitor changes in wild rice populations over time. While wild rice populations were not specifically delineated during the 2009 lake management planning studies on the Phillips Chain of Lakes, the emergent plant communities that contained wild rice were mapped. During the summer of 2013, a wild rice mapping survey was conducted in which wild rice colonies were delineated and assigned a two-tiered density rating (dense or sparse). While it is understood that wild rice populations fluctuate from year to year, a multi-year dataset would provide insight to whether the herbicide applications are directly affecting wild rice populations. If a drastic reduction in the wild rice population is observed that has not been observed on similar, non-treated systems, lake managers will be able to attribute the change to the control strategy.

Herbicide Concentration Monitoring

In-lake herbicide concentrations are also monitored as a part of some treatment strategies to understand if adequate concentration-exposure times are being met to effectively control the EWM. For this type of monitoring, water samples are collected by trained volunteers from multiple locations within the herbicide application area, non-treated area, and near Duroy Lake's outlet into Elk Lake over the course of hours following treatment (Figure 2). The samples are fixed (preserved) with acid and shipped to the U.S. Army Engineer Research and Development Center (USAERDC) where the herbicide analysis is completed.

In Duroy Lake, water samples were collected at three, two in B-13, and one near the lake's outlet as mentioned. Water samples were collected by the trained volunteer at time intervals of 1, 2, 3, 4, 6, 8, 24, and 48 hours after treatment.

POST TREATMENT MONITORING RESULTS

Herbicide Concentration Monitoring Results

Appendix A contains the USAERDC draft *Duroy Lake, Price County 2,4-D Concentration Monitoring Summary 2013* (January 6, 2014) with contains more detail regarding the herbicide concentration monitoring sampling study on Duroy Lake. The information within Appendix A is referenced within the following section.

During 2012, 6.3 acres (21.9 acre-feet) were targeted in Duroy Lake with liquid 2,4-D at 3.0 ppm ae. This treatment targeted EWM within approximately the same area as A-13. The 2012 treatment was largely ineffective and a greater dose of liquid 2,4-D (4.0 ppm ae) was proposed for A-13 and B-13. As discussed above, A-13 was not treated in 2013.

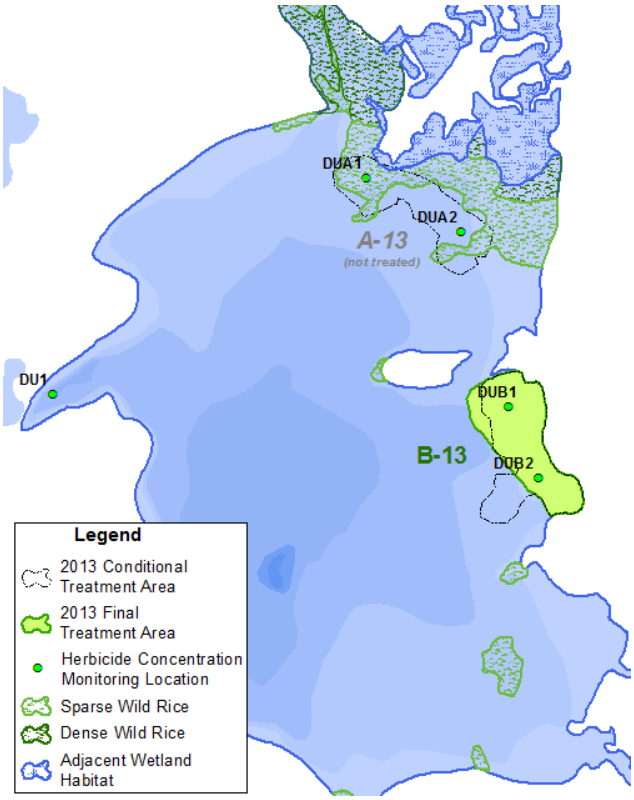

Figure 2. 2013 herbicide concentration monitoring plan for Duroy Lake, Price County.

The herbicide concentration data collected from treatment site B-13 indicated rapid dissipation of the herbicide following application. Figure 2 from Appendix A illustrates that herbicide concentrations were consistently higher at sampling site DUB1 than at DUB2 over the 48-hour sampling period. Herbicide concentrations peaked at 1 to 2 hours after treatment (HAT) with a concentration of nearly 2.0 ppm ae at site DUB1 and just over 0.5 ppm ae at site DUB2. Concentrations 24 HAT fell to 0.528 ppm ae and 0.161 ppm ae at sites DUB1 and DUB2, respectively, and concentrations at both sites fell below the irrigation standard (0.100 ppm ae) by 48 HAT.

Herbicide concentrations collected at DU1 (outflow into Elk Lake) exceeded the detection limit (0.01 ppm ae) only at the 24 HAT sampling interval (result was ~0.065 ppm ae), indicating that only a small amount of 2,4-D from B-13 migrated out of Duroy during the sampling period. Data from DUA1 and DUA2 were also collected during all sampling events, but only registered above the detection limit during one sampling event (result was 0.012 ppm ae). This indicates that essentially no herbicide from B-13 dissipated into the wild rice colonies adjacent to and within A-13.

Aquatic Plant Monitoring Results

Post-treatment surveys were completed by Onterra ecologists on August 13, 2013, and Maps 1-4 display the results of the chain-wide EWM Peak-Biomass Survey. As shown on Map 2, the EWM within treatment site B-13 in Duroy Lake was reduced to a few single plant occurrences, exceeding the qualitative success criterion of at least 75% of the colonial acreage being reduced by at least one density rating. Elsewhere in Duroy Lake, EWM density and distribution remained relatively similar to

what was mapped in 2012; however, there was a slight increase in EWM density within the southern portion of the lake (Map 2).

Quantitative data were collected from 59 sub-sample point-intercept locations within the untreated site A-13 and from 70 sub-sample point-intercept locations within treated site B-13 before and following the treatment (Figure 1). Prior to treatment in late-May of 2013, approximately 37% of the 70 locations within site B-13 contained EWM, while only 1.4% contained EWM following the treatment (Figure 3). This 96% reduction was statistically valid, and exceeds the quantitative success criterion of at least a 50% reduction in occurrence. Data collected from the untreated site A-13 indicates that the occurrence of EWM did not change from May to August 2013, with approximately 75% of the 59 sampling locations containing EWM in both surveys (Figure 3).

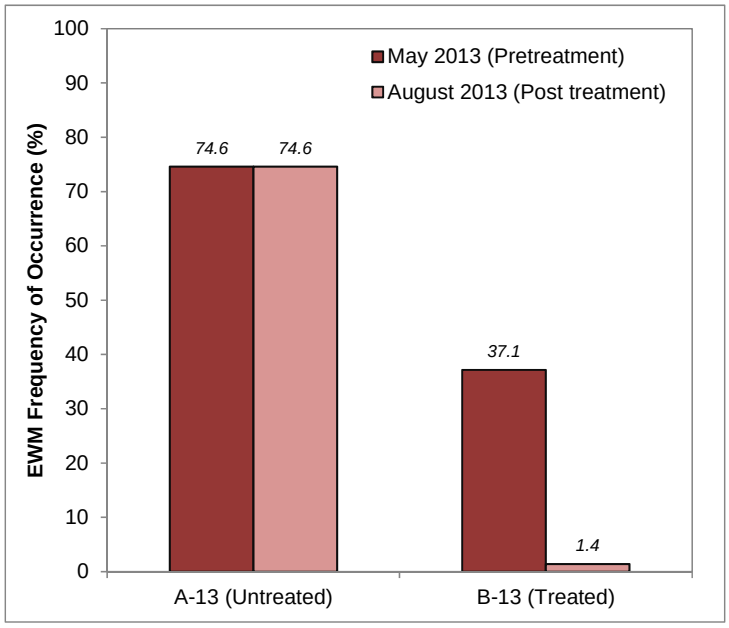

Figure 3. Frequency of occurrence of EWM within untreated site A-13 and treated site B-13. Samples collected from May and August 2013 as determined from 59 (A-13) and 70 (B-13) sub-sample point-intercept locations.

Without a summer 2012 pretreatment point-intercept sub-sampling survey, quantitative analysis of native plant response to the treatment cannot be made. However, because the presence of native aquatic plant species were recorded at sub-sample sites during the 2013 post treatment survey, a comparison of their occurrences within treated site B-13 to the untreated control site A-13 can be made. Figure 4 displays the occurrences of native aquatic plants within sites A-13 and B-13 as determined from the August post treatment survey.

All of the species located in the untreated site A-13 were located within treated site B-13, and at relatively the same frequency. Because of the absence of native species occurrence data prior to treatment, it cannot be said that the native aquatic plants within treated site B-13 were not impacted at some level by the treatment; however, it can be said that the community composition in terms of the species present and their occurrences within treated site B-13 was similar to that within a nearby, untreated control site.

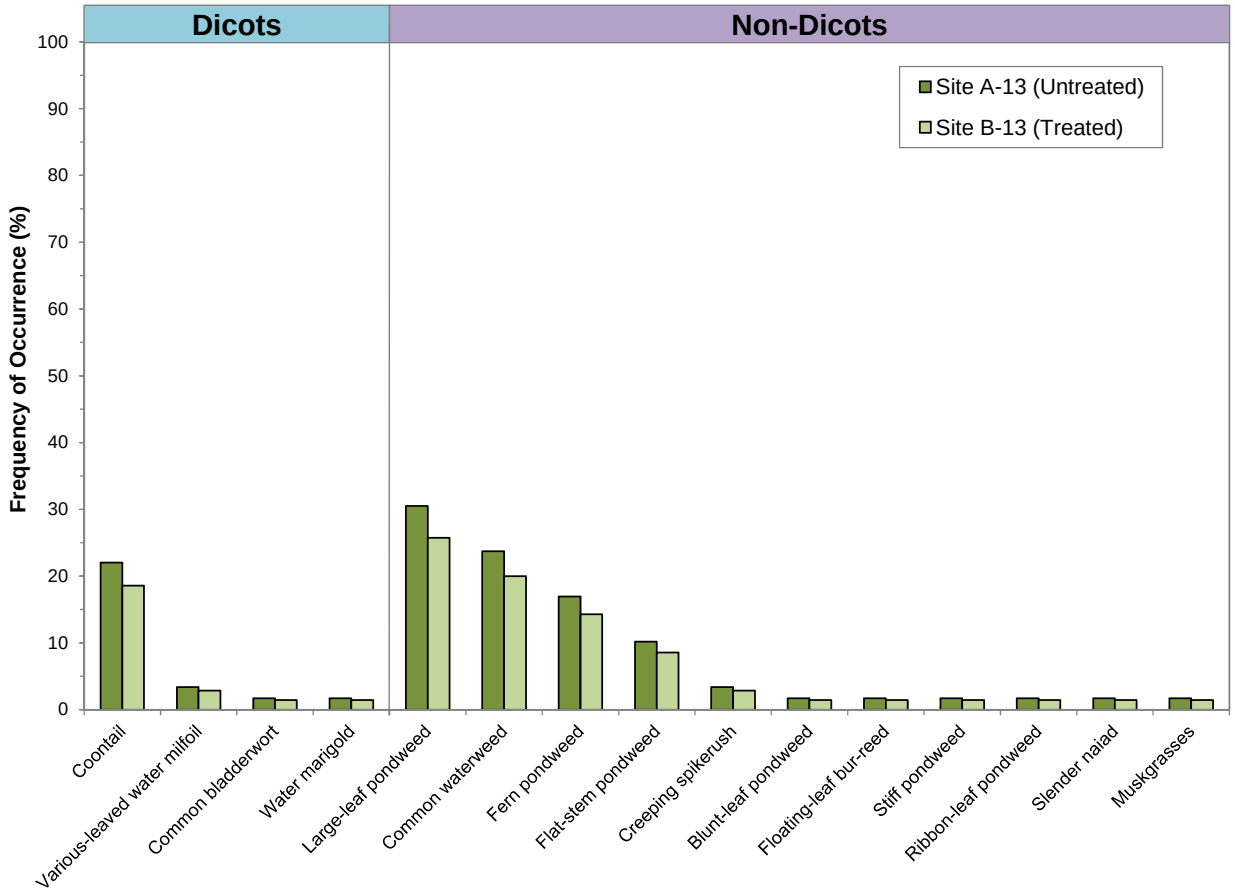

Figure 4. August 2013 (post treatment) frequency of occurrence of native aquatic plants within untreated site A-13 and treated site B-13. Samples collected from May and August 2013 as determined from 59 (A-13) and 70 (B-13) sub-sample point-intercept locations.

CHAIN-WIDE MONITORING RESULTS

During the chain-wide EWM survey conducted during the late-summer of 2013, no EWM was located in Elk Lake in 2013 (Map 3). In Long Lake, there was a slight increase in the occurrence of EWM within the northeastern portion of the lake, but no areas that warrant treatment at this time. EWM also increased slightly within Wilson Lake in 2013, mainly in the form of *single or few plants* along the eastern shoreline (Map 1). A dense, surface-matted colony of EWM was also located in the northwestern portion of Wilson Lake.

Within the southern part of Wilson Lake and within many of the bays on Long Lake, dense and surface-matted coontail (*Ceratophyllum demersum*) was observed. Anecdotal reports from Phillips Chain of Lakes users indicated these areas contained EWM; however this was not the case in most instances.

Photo 1. Blue-green algae on Long Lake, Phillips Chain of Lakes. Photo taken during August 2013 surveys.

Particularly on Long Lake, a significant algal blue-green algae bloom was observed during this survey. The Phillips Chain of Lakes is not alone, blue-green algae blooms have been observed on numerous area lakes this year. Many species of blue-green algae can naturally be found in Wisconsin waters, some of which (but not all) can produce toxins potentially dangerous to people and animals. Because dogs and other domestic animals actively drink water from lakes, they have an increased risk of health issues associated with these toxins.

The following information was provided by WDNR state-wide algae specialist, Gina LaLiberte:

> For a good rule of thumb, if you can wade knee-deep into water (without disturbing the sediment) and cannot see your feet, you should stay out. Algae cell densities are high enough that if the algae are producing toxins, you could become ill if you swallow water or inhale water droplets. Small children and animals should always be kept away from water in these conditions.
>
> The Department of Natural Resources' recommendations for staying safe are:
> - Do not swim in water that looks like "pea soup", green or blue paint, or that has a scum layer or puffy blobs floating on the surface.
> - Do not boat, water ski, etc. over such water (people can be exposed through inhalation).
> - Do not let children play with scum layers, even from shore.
> - Do not let pets or livestock swim in, or drink, waters experiencing blue-green algae blooms.
> - Do not treat surface waters that are experiencing blue-green algae blooms with any herbicide or algaecide-- toxins are released into the water when blue-green algae cells die.

- Always take a shower after coming into contact with any surface water (whether or not a blue-green algae bloom appears to be present; surface waters may contain other species of potentially harmful bacteria and viruses).
- Pets should be washed off immediately after swimming, before they groom.

The Wisconsin Department of Health Services is tracking illnesses in humans and animals that are potentially related to blue-green algae exposure. If you or your pets become ill from exposure to blue-green algae, please visit the DHS website (after seeking medical or veterinary assistance) to report your case at: www.dhs.wisconsin.gov/eh/bluegreenalgae/. The DHS website also includes more information about the health effects of blue-green algae. There is additional information, including a YouTube video about blue-green algae, on the DNR website at http://dnr.wi.gov/lakes/bluegreenalgae/ .

During the post treatment surveys on Duroy Lake, Onterra ecologists encountered a number of curly-leaf pondweed (*Potamogeton crispus*; CLP) occurrences near the Squaw Creek and Elk River inlets (Map 4). All of these occurrences were comprised of *single or few plants* or *clumps of plants* (Photo 2). Like EWM, CLP is a non-native, invasive species, and this is the first documentation of this aquatic plant within the Phillips Chain of Lakes. Specimens were collected and sent to the UW-Stevens Point herbarium for verification. Given their location near the mouths of two inlets to Duroy Lake, it is likely these plants came from upstream populations of CLP that are present in Solberg, Big Dardis, and Musser Lakes. Given CLP's life cycle of reaching peak growth and then senescing by early summer, it was surprising, though unfortunate, to find so many apparently healthy plants in mid-August.

Photo 2. One of a number of curly-leaf pondweed clumps located in Duroy Lake during the August 2013 surveys.

The results of the wild rice mapping survey are displayed on many of this report's maps and figures, but best displayed on Map 4. Wild rice colonies were only located on Duroy Lake during 2013. Floating-leaf and emergent community mapping surveys conducted by Onterra in 2009 also only located wild rice in Duroy Lake.

During the 2013 surveys, 34.1 acres of wild rice were observed from Duroy Lake, almost exclusively from the northeast Squaw Creek and Elk River inlets (Table 1, Map 4). It is interesting to note that wild rice colonies mapped in 2013 were located in areas treated within 2,4-D during 2012. A few small and sparse wild rice colonies were located in the southeastern part of Duroy Lake in front of the Chase Creek.

Table 1. Acres of wild rice colonies from Duroy Lake during 2013 surveys.

Wild Rice Density	Acres
Dense	14.0
Sparse	20.1
Total	***34.1***

CONCLUSIONS AND DISCUSSION

The 2013 liquid 2,4-D spot treatment in Duroy Lake was highly successful at reducing EWM, as indicated by the qualitative and quantitative aquatic plant monitoring data. In addition, many native aquatic plants were recorded within the 2013 treatment area and their occurrences were comparable to those in the untreated control site A-13. Other parts of Duroy Lake continue to contain EWM warranting herbicide treatment. However, no treatment is proposed in 2014 due to the fact that these areas will currently not be permitted to be treated due to their proximity to wild-rice colonies. The PCOLA would like to use the calendar year 2014 to continue conversations with the WDNR, GLIFWC, and Onterra in determining solutions for reaching EWM control goals and protecting valuable wild rice resources.

The PCOLA intends on continuing to monitor the aquatic invasive species populations within the Phillips Chain of Lakes during 2014, including the newly discovered CLP population. It is recommended that an early-summer aquatic invasive species (ESAIS) survey be conducted to locate and map the CLP population at its peak growth stage. In instances where CLP is found in flowing water, such as exists within this flowage system, the CLP can be found growing quite healthily in late-summer. It is therefore proposed that a follow-up survey be conducted in late-summer to ensure all CLP occurrences have been located. The PCOLA will investigate funding sources to partially cover the monitoring costs, including the WDNR AIS-Early Detection and Response Grant program.

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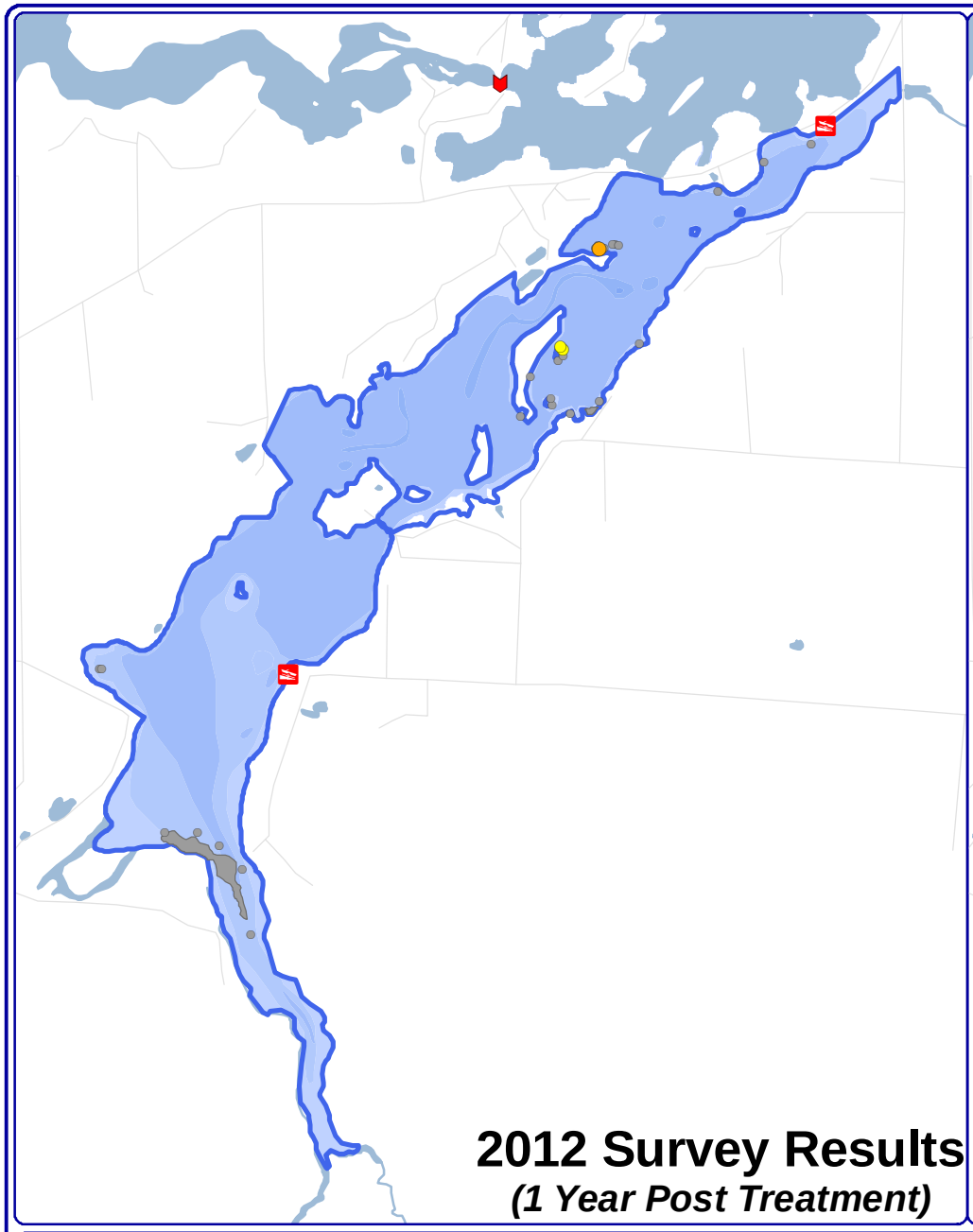
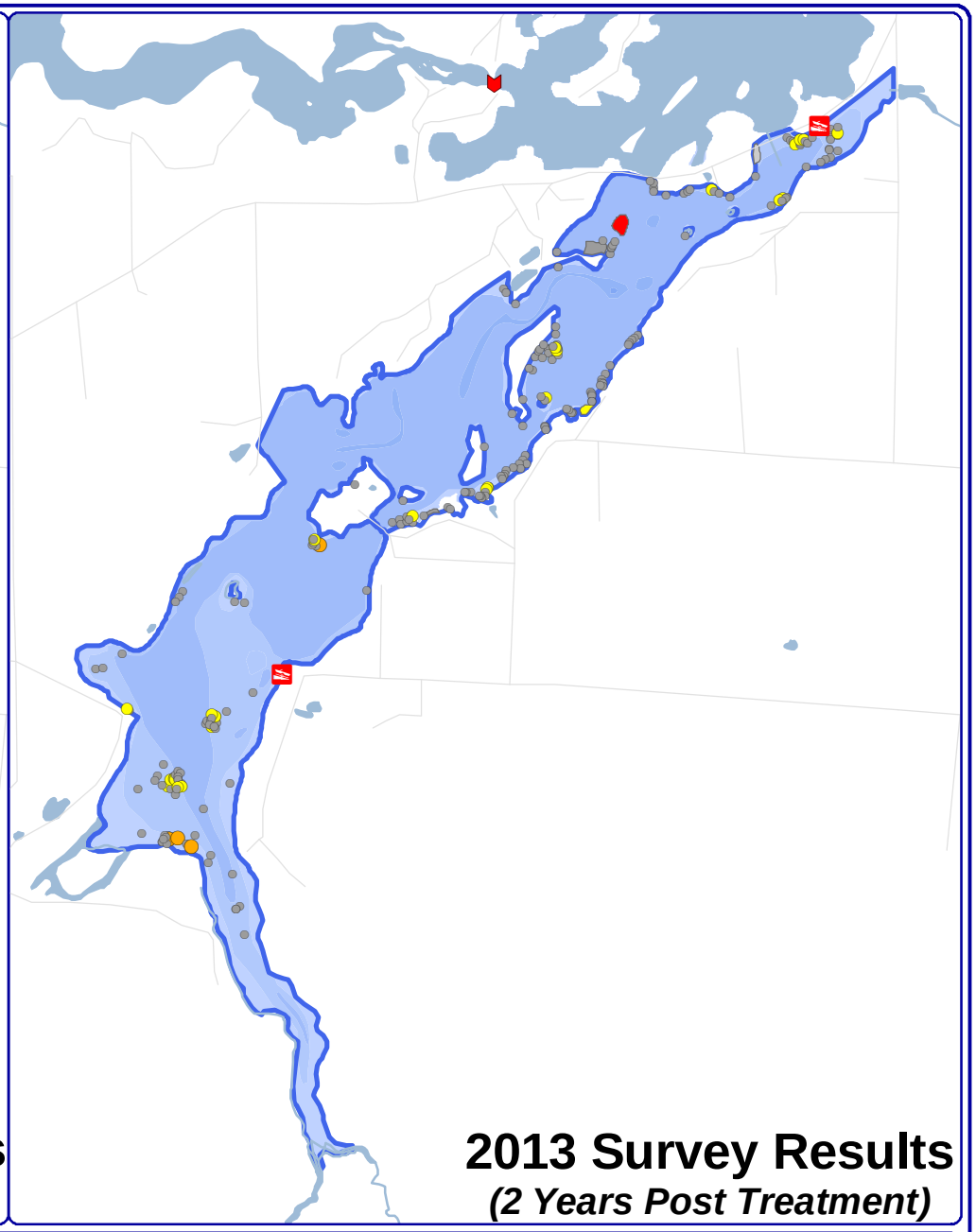


2012 Survey Results
(1 Year Post Treatment)



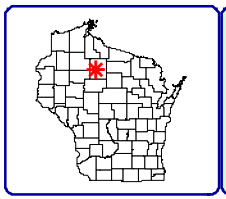
2013 Survey Results
(2 Years Post Treatment)

N
W E
S

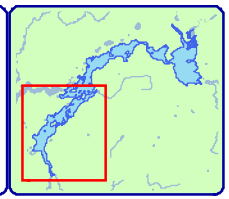
1,250
Feet

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

Sources:
Roads and Hydro: WDNR
Bathymetry: WDNR, digitized by Onterra
Aquatic Plants: Onterra, 2012-13
Map Date: January 13, 2014
Filename: Map1_Wilson_EWM_2013&2013.mxd



Project Location in Wisconsin



Extent of Large Map Shown in Red

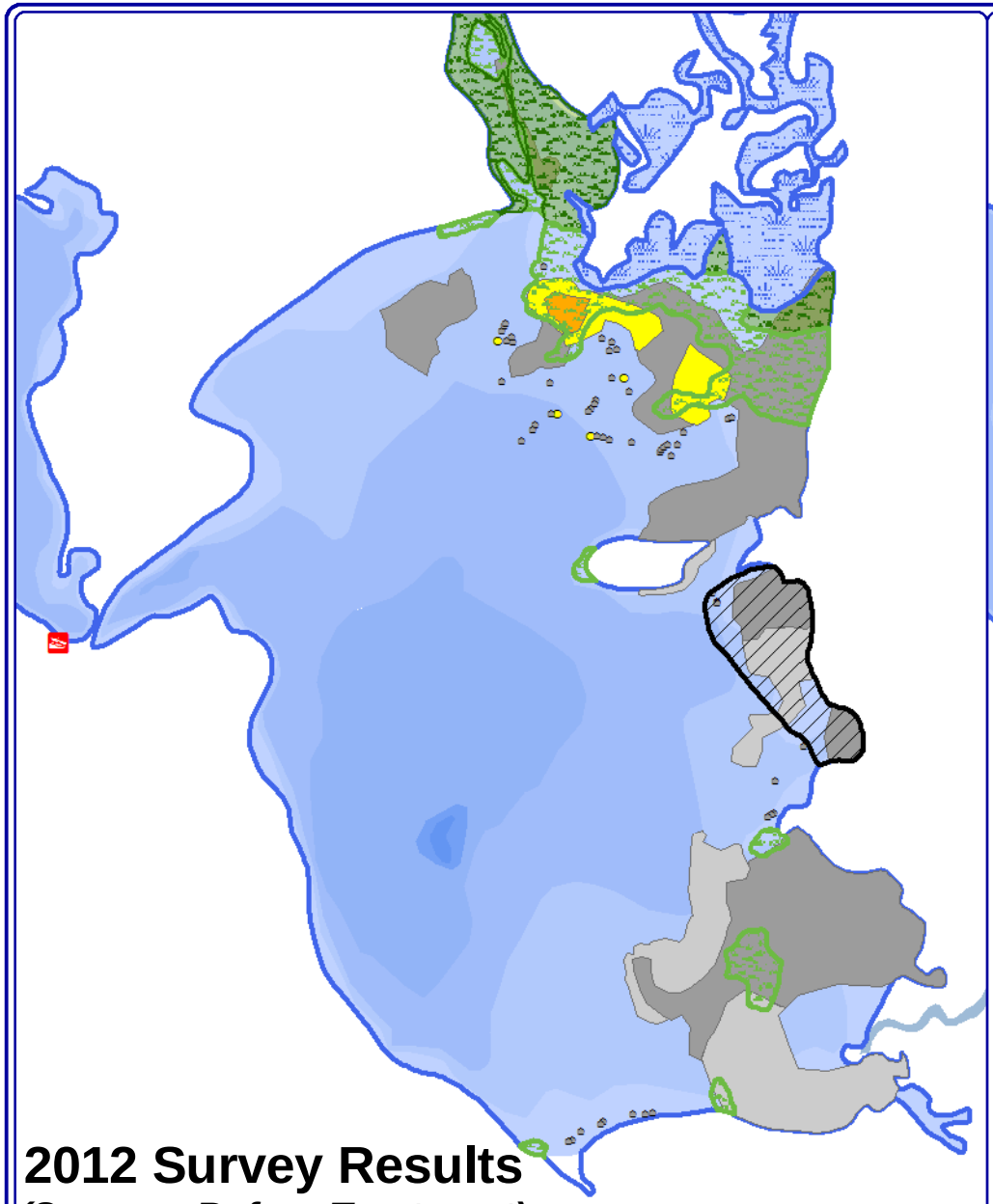
Legend

- Highly Scattered
- Scattered
- Dominant
- Highly Dominant
- Surface Matting *(none found)*
- Single or Few Plants
- Clump of Plants
- Small Plant Colony

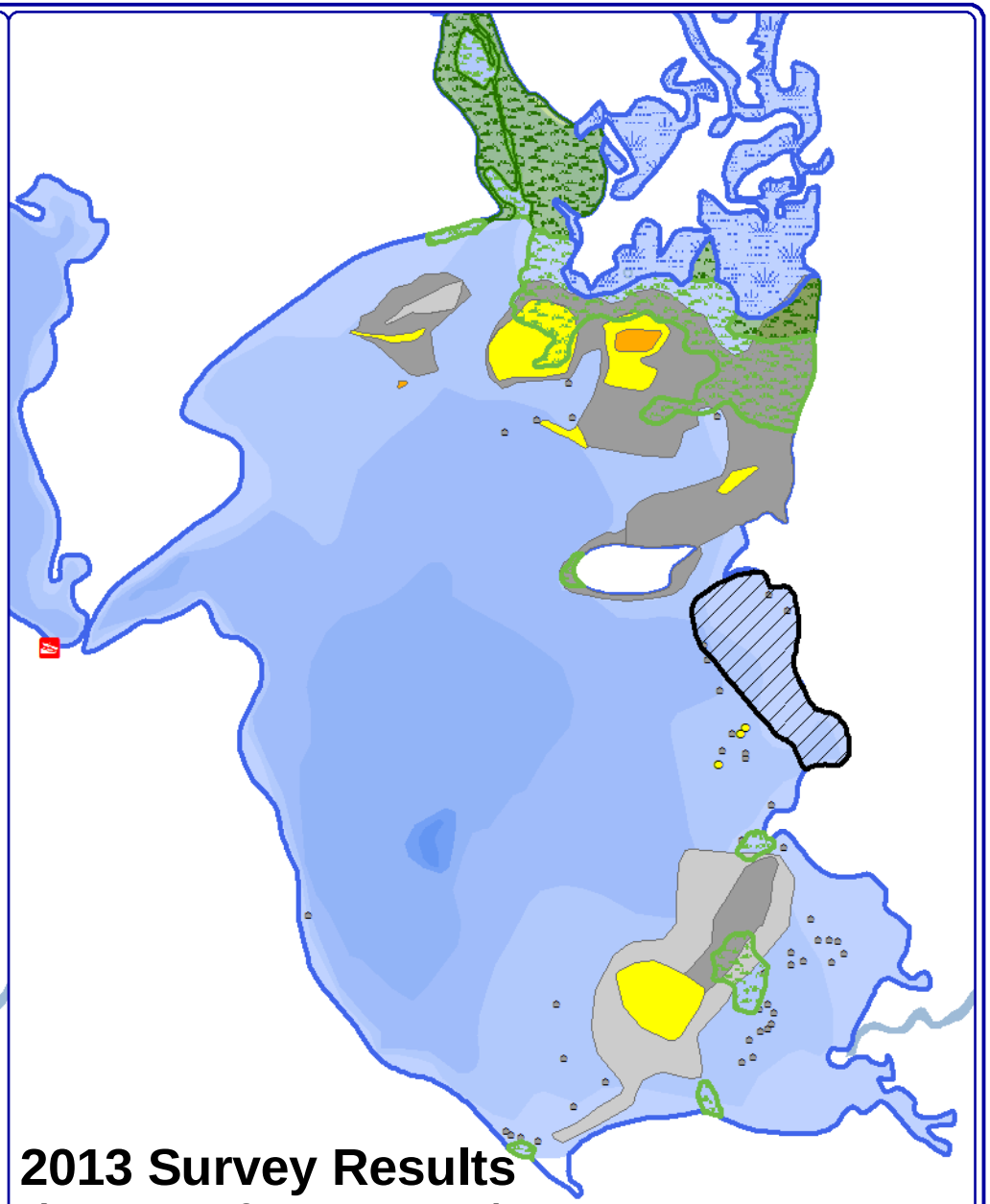
Map 1

Wilson Lake
Price County, Wisconsin

2012 & 2013 EWM Survey Results



2012 Survey Results
(Summer Before Treatment)



2013 Survey Results
(Summer After Treatment)

N
W E
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1,250
Feet

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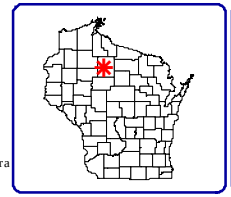
Sources:
Roads and Hydro: WDNR
Bathymetry: WDNR, digitized by Onterra
Aquatic Plants: Onterra, 2012-13
Map Date: January 13, 2014
Filename: Map1_Wilson_EWM_2013&2013.mxd



Project Location in Wisconsin

Extent of Large Map Shown in Red

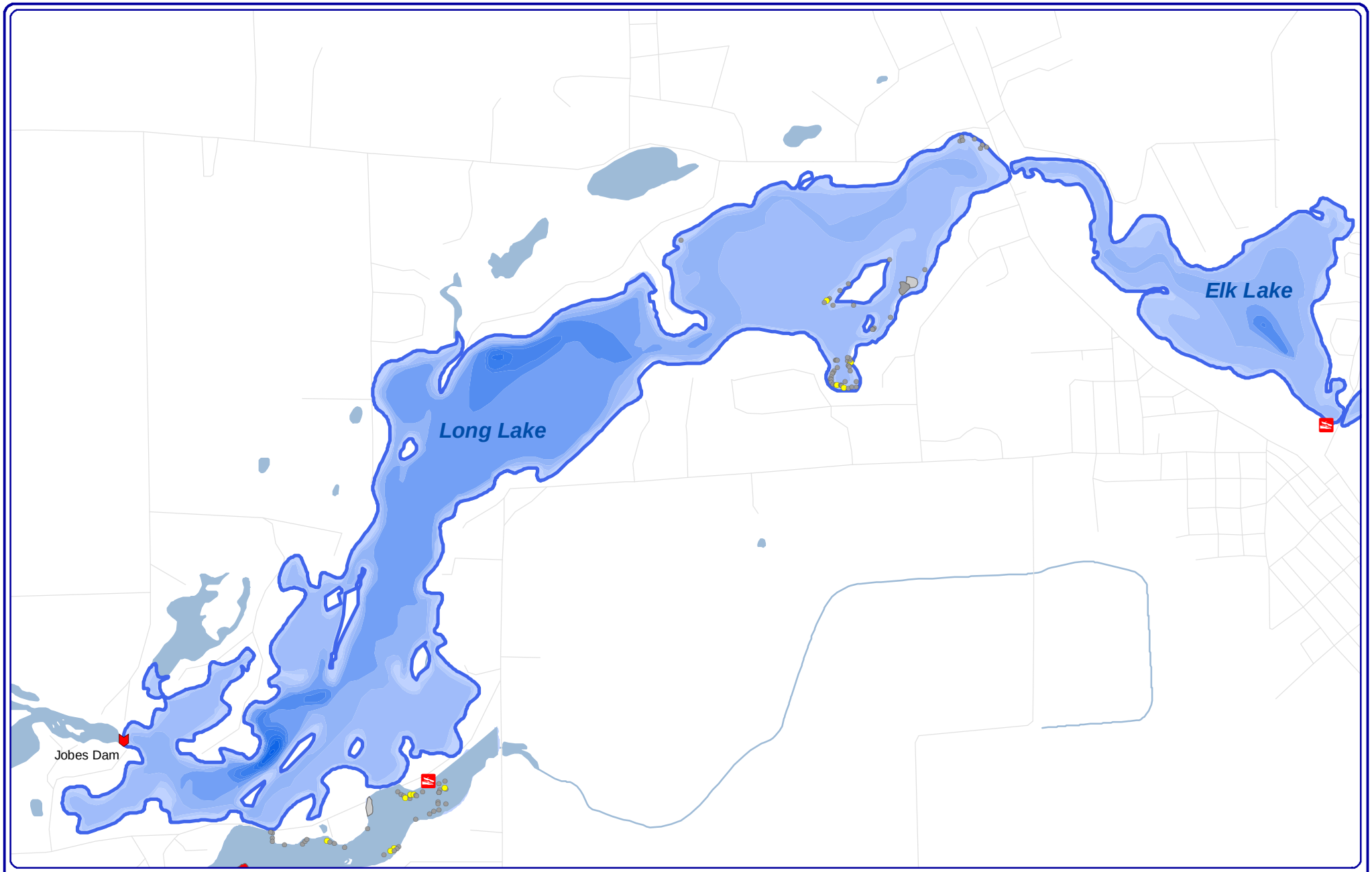
Legend

- Highly Scattered
- Scattered
- Dominant
- Highly Dominant
- Surface Matting
- Single or Few Plants
- Clump of Plants
- Small Plant Colony
- Spring 2013 Application Area *(2,4-D @ 4.0 ppm ae)*
- Sparse Rice
- Dense Rice
- Adjacent Wetland

Map 2

Duroy Lake
Price County, Wisconsin

2012 & 2013 EWM Survey Results



N
W E
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1,400
Feet

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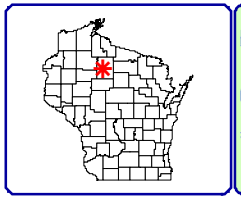
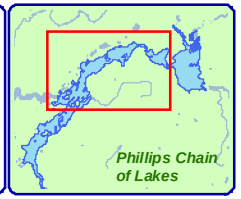
Sources:
Roads and Hydro: WDNR
Bathymetry: WDNR, digitized by Onterra
Aquatic Plants: Onterra, 2013
Map Date: January 10, 2014
Filename: Map3_Elk-Long_EWM_2013FB_PrelimT2014.mxd



Project Location in Wisconsin



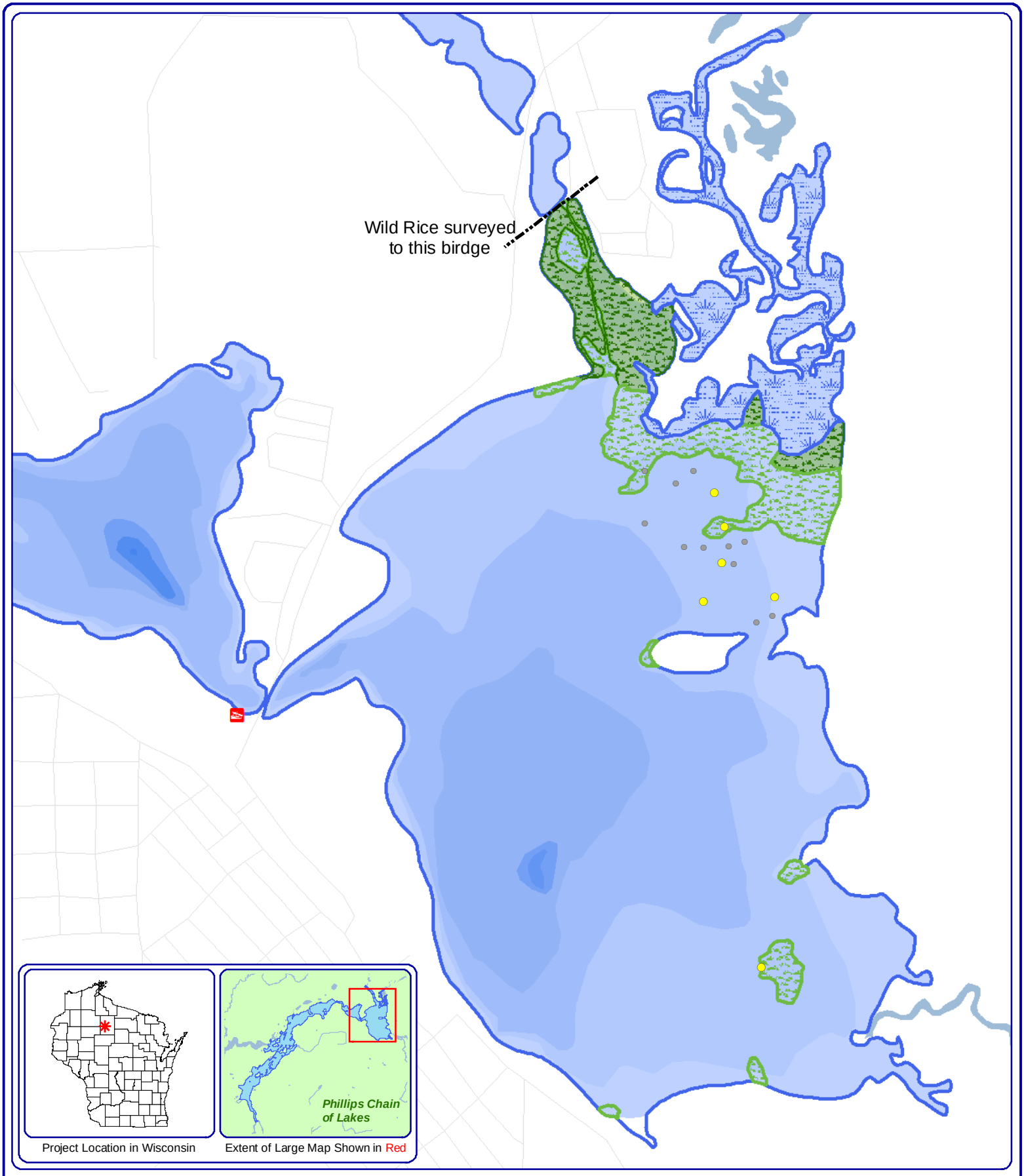
Extent of Large Map Shown in Red

Legend

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

Map 3
Elk & Long Lakes
Price County, Wisconsin

2013 EWM Survey Results



Project Location in Wisconsin

Extent of Large Map Shown in Red

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1,000

Feet

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Lake Management Planning
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920.338.8860
www.onterra-eco.com

Sources:
Roads and Hydro: WDNR
Bathymetry: WDNR, digitized by Onterra
Aquatic Plants: Onterra, 2013
Map Date: January 10, 2014
Filename: Map5_Duroy_CLP_Aug13.mxd

Legend

2013 CLP (August 2013)

- Highly Scattered
- Scattered
- Dominant
- Highly Dominant
- Surface Matting
- Single or Few Plants
- Clumps of Plants
- Small Plant Colony
- Sparse Wild Rice
- Dense Wild Rice
- Adjacent Wetland

Map 4

Duroy Lake

Price County, Wisocnsin

2013 CLP Locations