



Archibald Lake Association



www.archibaldlake.com

To:

Gary Hanson
Department of Natural Resources
2984 Shawano Ave
Green Bay WI 54313

8/29/13

From:

Steve Fleming
Archibald Lake Association
W292 N6973 Dorn Rd
Hartland, WI 53029

Dear Gary,

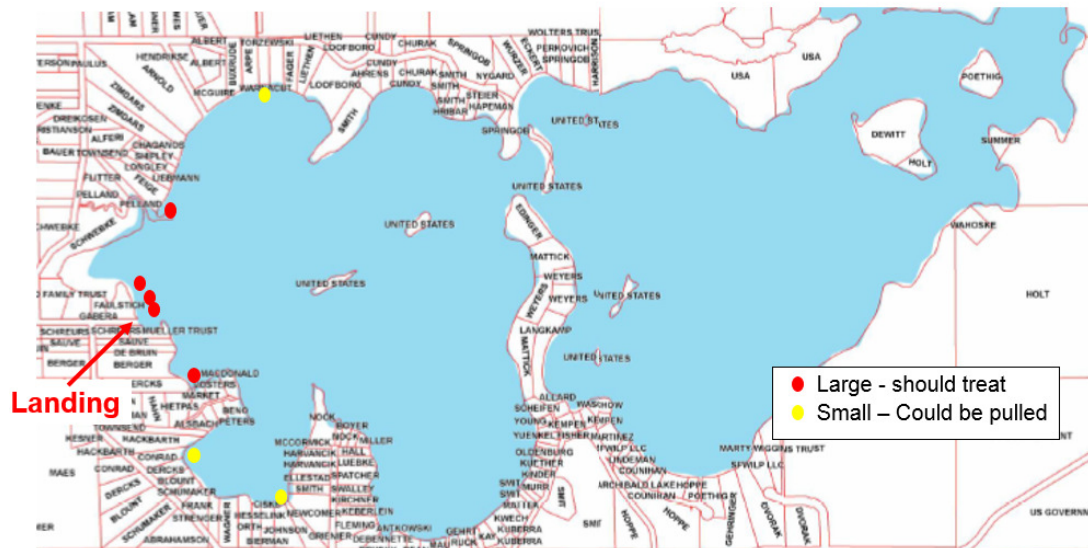
I believe the attached includes all the documentation that you have requested for the Rapid Response Eurasian Water Milfoil grant (AIRR-70). This summary includes expenses starting January 2013 and continuing through June of 2013. This submittal uses the final grant funds available on this grant. The donated labor portion is from labor that was donated in 2011/2012 and was not needed for the previous filing. We are getting a lot of membership participation.

This document contains the following over the cover letter:

- *Pages 1-2: WDNR Payment request form*
- *Page 3-4: WDNR Grant Payment Worksheet*
- *Page 5-6: Summary of a spreadsheet that I keep for Donated Labor – I have only included the donated labor needed to satisfy the grant to date. There are a few extra hours included just to make sure. We have more than we need.*
- *Pages 7-13: Contracts, invoices, and receipts from our expenses. I am only including the receipt for the survey and chemical treatment since that more than utilizes the remaining dollars*
- *Page 14 to the end I have included a final report of our experience as requested. I hope this satisfies your need. I tried to do it with respect to what we did and what we learned.*

Please let me know if you have any questions regarding this information or if you need anything in addition.

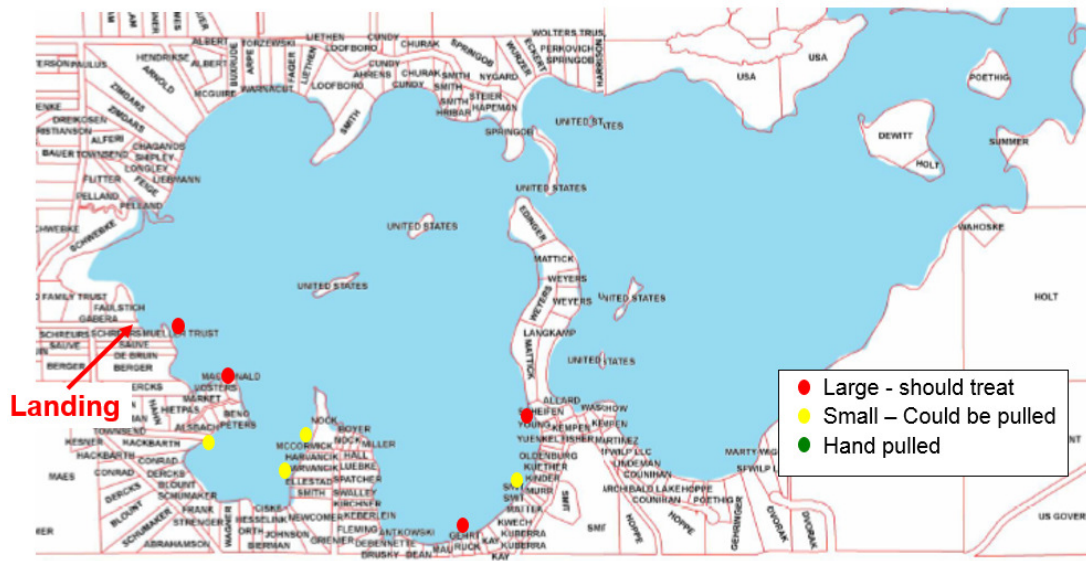
- **In August of 2009** we applied for a received a grant from the WDNR to chemically treat the 18 locations and that treatment was done in the fall of 2009 by Cason and Associates. We chose Cason based on their record and references from other lakes. All treatments in 2009 and subsequent years were done with granular 2,4-d.
- In parallel to this activity we began implementing our communications plan to the Association members regarding EWM and the proposed plan. Based on a special meeting held after EWM was found, the Association voted unanimously to go forward with the chemical treatment and grant application.
- **In May 2010**, Cason and Associates, with two Association members, completed a focused EWM plant survey of the lake to find new EWM infestations and document the affect of the previously completed chemical treatment. The map of the EWM infestations is attached. In summary, some of the 2009 treated areas were gone, some were sickly, a few remained healthy and we found a few new locations. Overall we made some improvement but we did not eliminate it.



- **2010 – After Fall/Spring 2,4-d Treatment**
- **Some Areas Gone...More Popping Up.**
- **While You Wait for Spring and Fall Treatment, Plants are Spreading!**

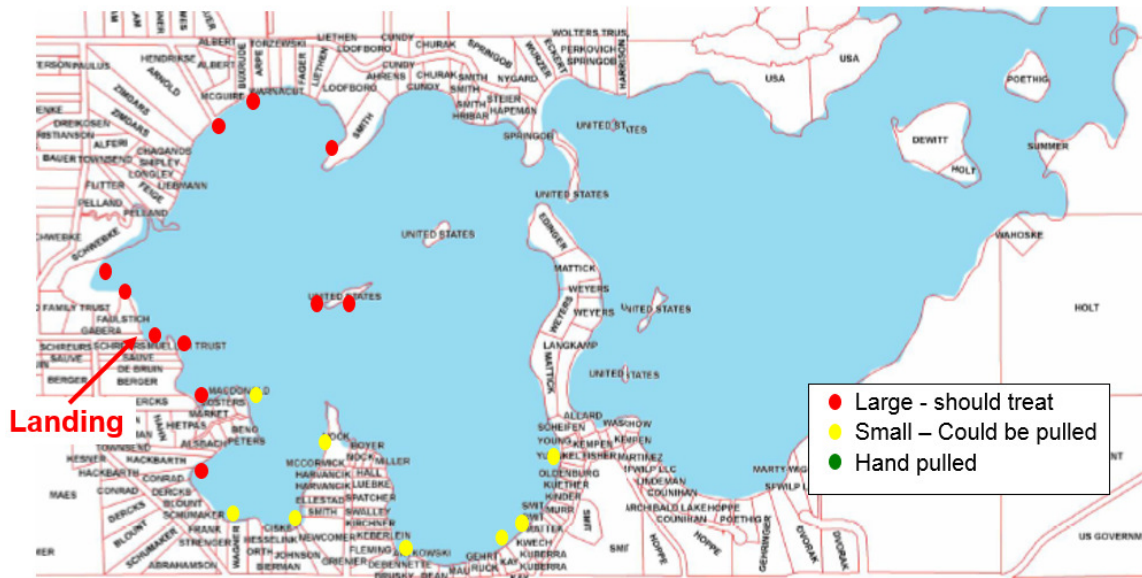
- We also started our association Adopt-A-Shoreline program which has as one of its goals to find EWM infestations before they become large. This program helped us identify the locations to chemically treat in the fall of 2010.
- July 2010, two association members did a full Point Intercept survey of the lake. This data was sent to the WDNR and entered into their database for future reference.
- **In May of 2011** another shoreline survey was completed by Cason and Associates and several Association members looking for EWM. The

completed survey provided the input for the spring chemical treatment. The map of the plants found is below. The areas were greatly reduced through the past years treatment with mostly just new infestations being found. As it turns out, shortly after the first treatment was completed, our Adopt-A-Shoreline program started locating additional large plant beds and a second treatment was done in June of 2011. It is unknown why the initial plant survey missed these plants.



- **2011 – After Fall/Spring 2,4-d treatment**
- **More Areas Eliminated. More New**
- **Started Some “Uneducated” Manual Removal**

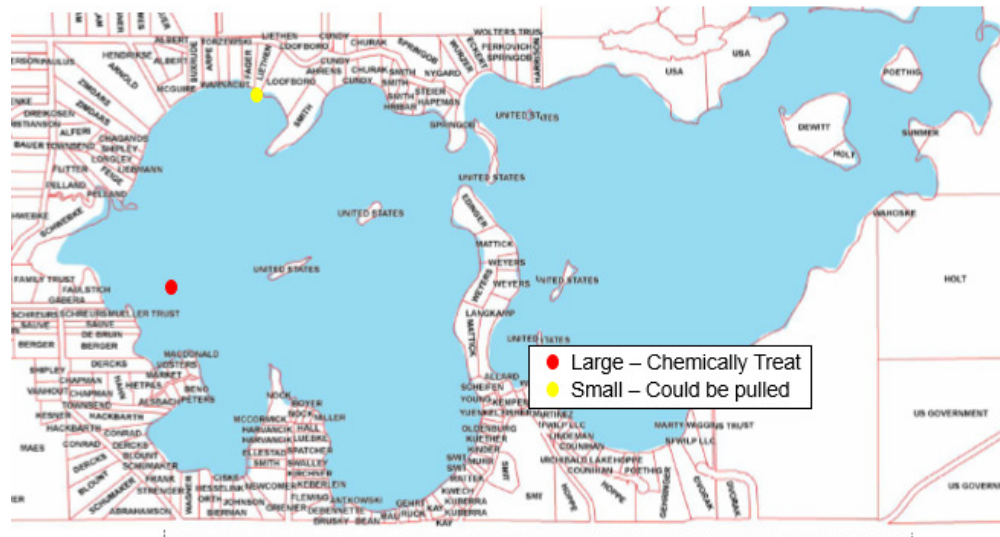
- **In May of 2012** we followed the same plan of doing surveys and treatment in the spring followed by Adopt-A-Shoreline surveys throughout the year. The 2012 map is shown below. As you can see, we are finding more plants that need treating.



• Spring, 2012 – After Fall/Spring 2,4-d Treatment
 • More Small Colonies Popping Up
 • Cannot Treat All The Small Areas...and They Spread

- In September, 2012, with the help of Brenda Nordin, we made the decision to not do a fall chemical treatment. We decided to wait until spring and do another survey and treatment when the probability of treatment success was better.
- We also developed a procedure for manual EWM removal and will be expanding our manual removal efforts in 2013 in order to keep in front of developing colonies. We piloted the procedure in one bay in 2012 with very positive results.
- In May of 2013 another survey and treatment was completed. Because of the plants identified through our Adopt-A-Shoreline surveys in the fall of 2012 we decided to do a modified point intercept survey looking specifically for EWM. This survey was completed by Cason and Associates along with two Association members. The map of the locations is below. As you can see by the map EWM has greatly expanded in the lake. This map was nearly identical to the map the Association produced in the fall identifying the EWM locations.

August 2013 EWM Location Map



Our plan moving forward into 2014.

We have learned a lot over the years. As a result we have determined that there are four critical components to being successful managing EWM.

- Communications and Association Support – Every year we get more people involved which means more people identifying plants early when manual removal can still be effective. We will continue to communicate our progress and actions at every possible time and solicit volunteers as appropriate.
- Adopt-A-Shoreline and Complete Surveys – We will continue to do our Adopt-A-Shoreline surveys. These provide an early warning system and feed the manual removal process. We will also continue to do consultant lead “targeted point intercept surveys” using the point intercept grind and rake dropping techniques to find colonies that may escape normal observation. We will also do full point intercept surveys in the summer to monitor the impact of chemical treatment on native plants.
- Manual Removal – The manual removal effort has been very successful. We have completely removed plants in several bays which has completely avoided chemical treatment in those locations. We currently have 6 teams working the manual removal process. Our goal is to find and remove plants early before chemical treatment is needed. Based on one year’s results that strategy is working.
- Aggressive Chemical Treatment – We have learned that being aggressive is critical for managing this invasive plant. The expanded treatment areas (buffers) used in 2013 have been very effective in eliminating the plants and we need to continue with this approach.

The following is a summary of our expenses and donated labor over the duration of the grant.

Archibald Lake - WDNR - EWM Grant Summary			
	Grant Expenses	Donated Labor \$'s	Donated Labor Hours
2009	<i>All 2009 Expenses rolled into 2010</i>		
2010	\$ 7,097.06	\$ 2,391.00	199.25
2011	\$ 4,572.93	\$ 1,530.00	127.50
2012	\$ 3,642.04	\$ 1,259.00	104.92
2013	\$ 4,687.97	\$ 1,568.49	130.71
Totals	\$ 20,000.00	\$ 6,748.49	562.37

Beyond this grant the Association incurred an additional \$11,415 of expenses in 2013 that were not covered by the grant. We also had an additional 250 hours of donated labor that was not applied to this grant. I believe that these two numbers show how committed the Association is to maintaining and improving this wonderful natural resource.

Overall, we believe the WDNR EWM grant provided SIGNIFICANT VALUE and we really want to thank the WDNR for the financial support and everyone involved, especially Brenda Nordin, for their willingness to share their time and knowledge as we worked our way through this process. We have learned a lot and believe we are in a very good position to move forward into 2014 and beyond.

If there are any questions please let me know.

Respectfully Submitted by:

Steve Fleming, Archibald Association Board of Directors (VP and APMP Committee Leader) Phone: 262.993.4228