



# **EWM Management in Echo Lake – A Brief History and Sounding of the Alarm**

**2014 Annual Meeting**

**May 25, 2014**

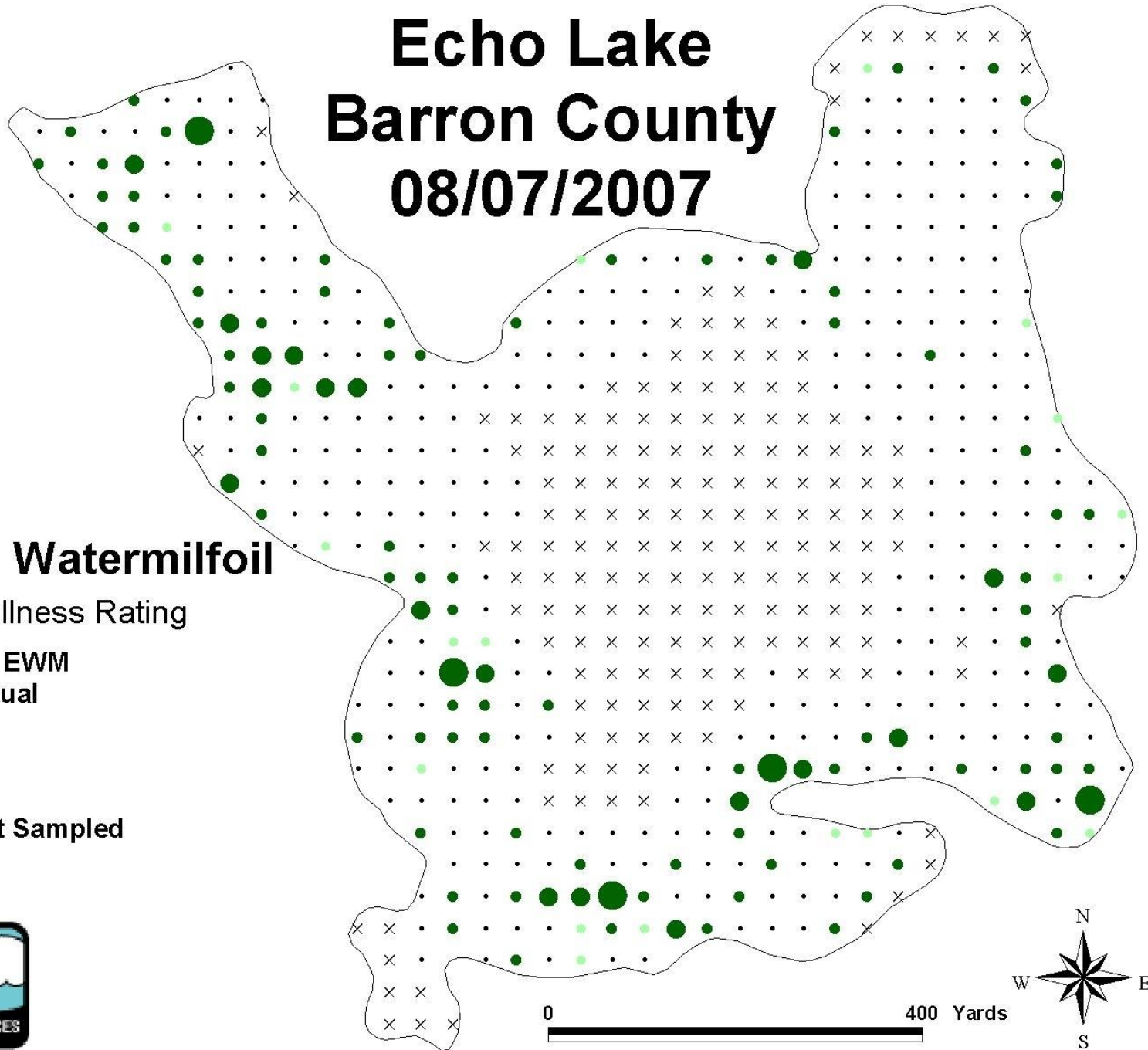
**Dave Blumer – Lake Education and Planning Services,  
LLC**

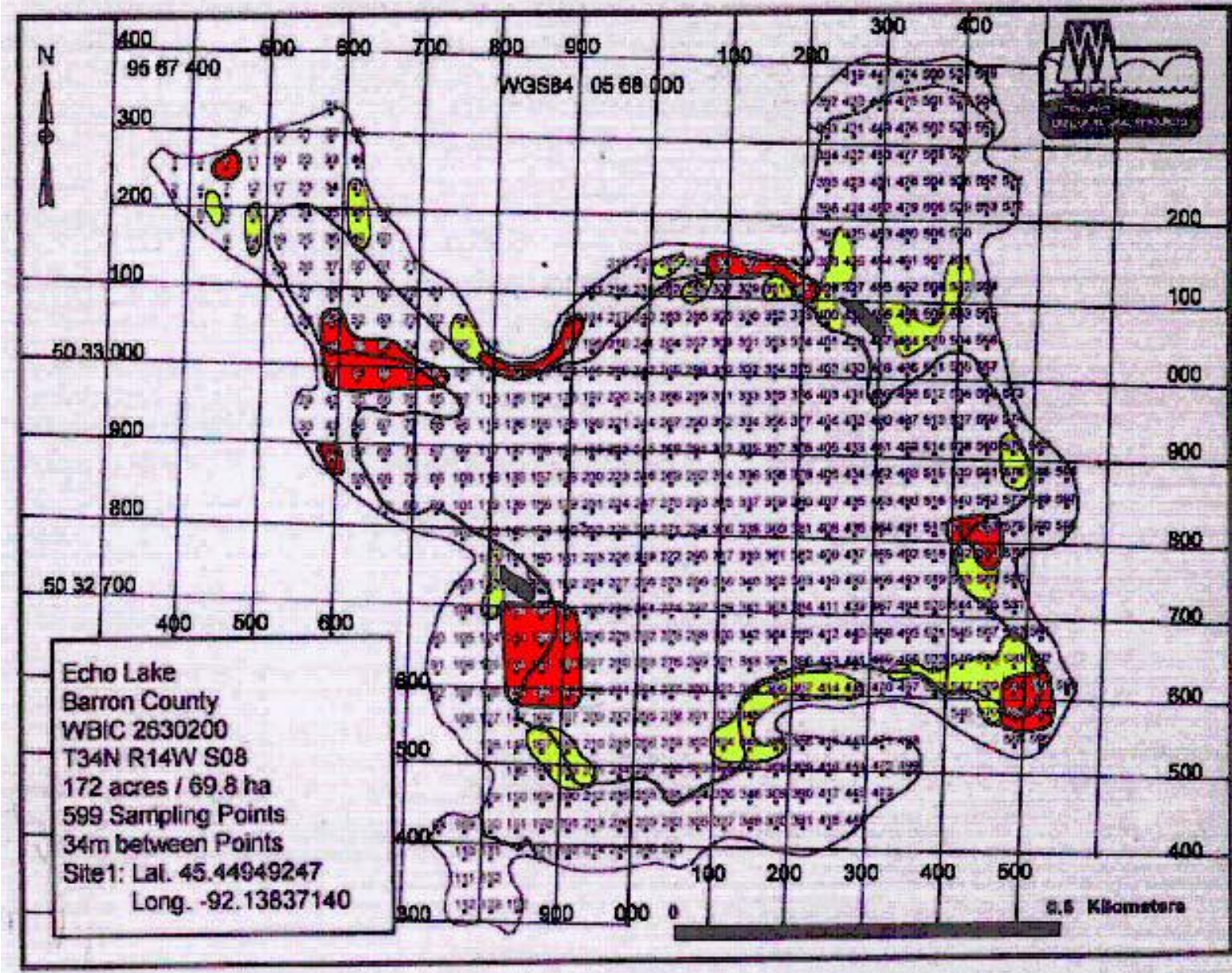
# Echo Lake Barron County 08/07/2007

## Eurasian Watermilfoil

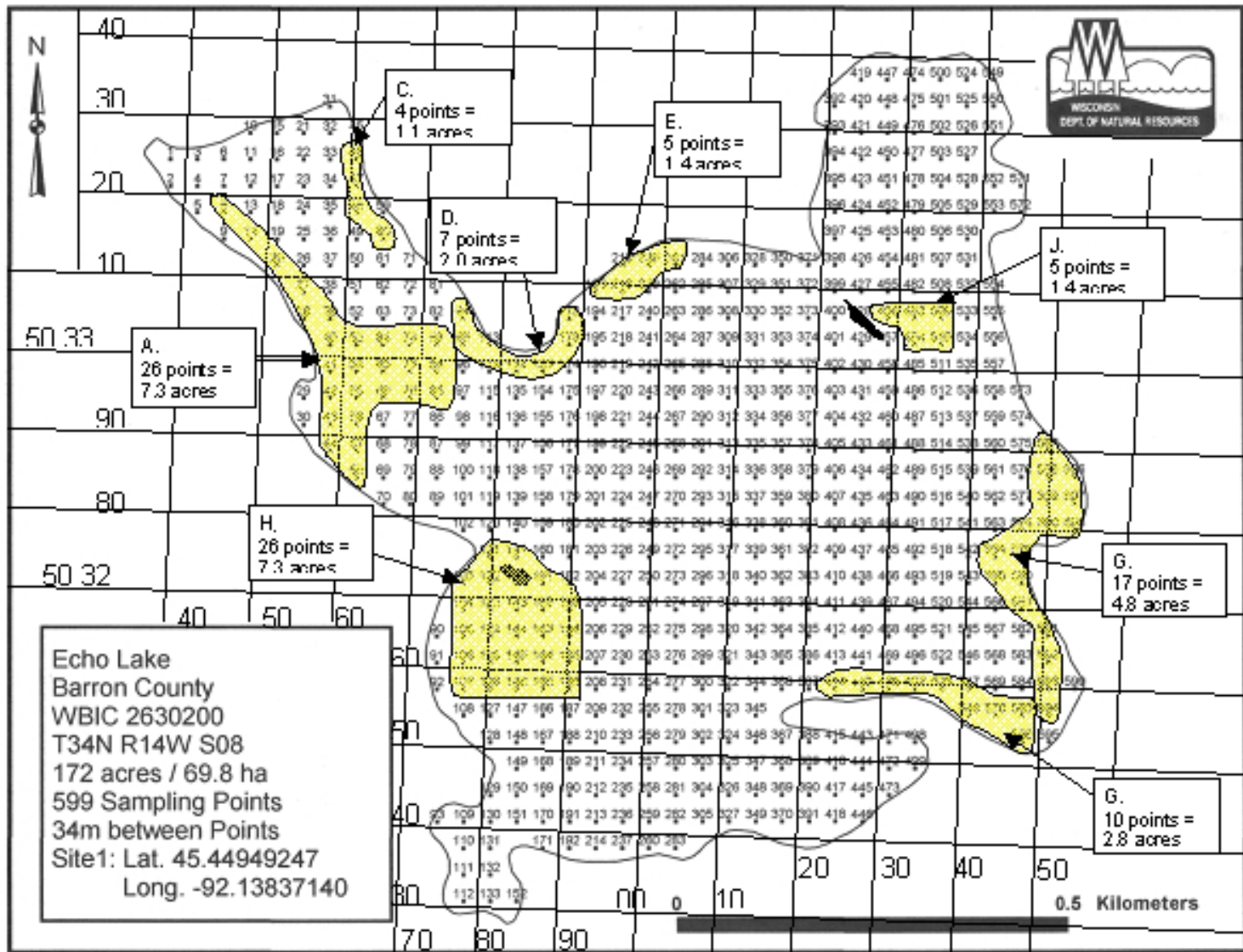
Rake Fullness Rating

- No EWM
- Visual
- 1
- 2
- 3
- × Not Sampled





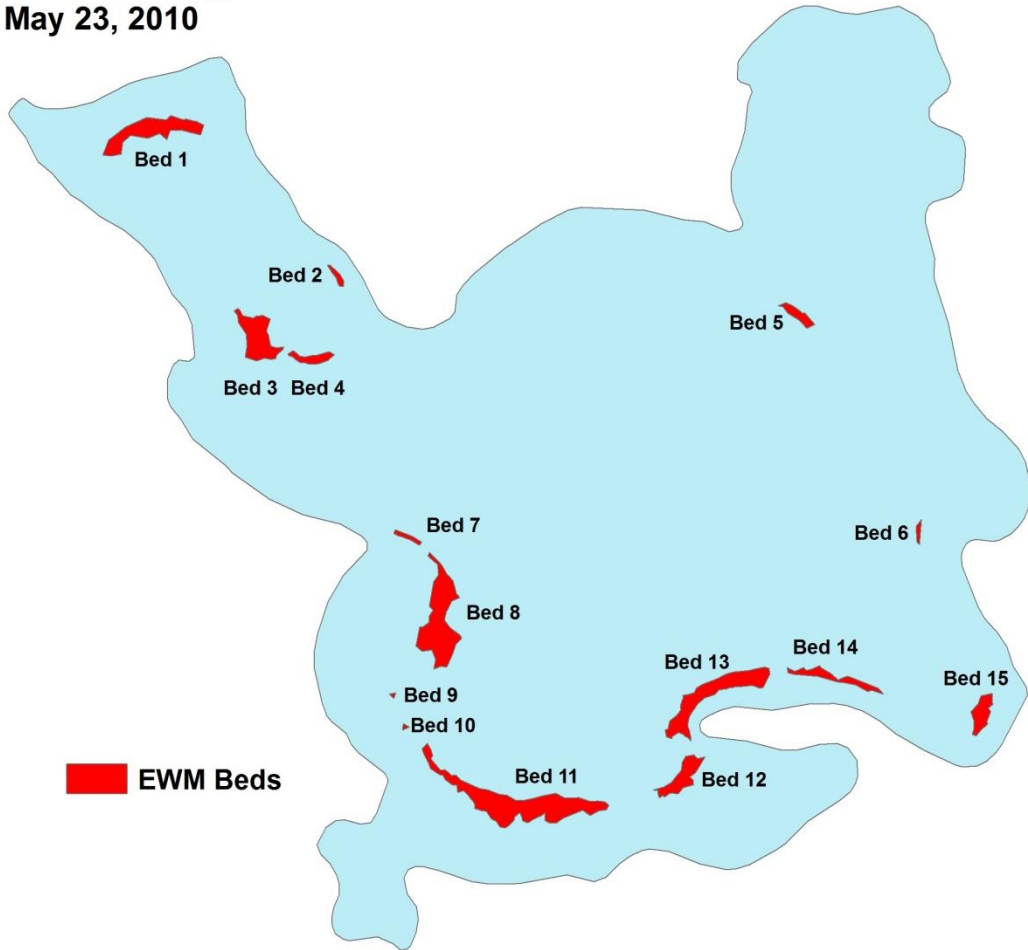
**2008 EWM Treatment Areas in Red (9.9 Acres) - Blue Water Science**



**2009 EWM Treatment Areas (28.1 acres) – Blue Water Science**

# Eurasian water milfoil (*Myriophyllum spicatum*)



Bed Mapping Survey  
Echo Lake  
Barron County, WI  
May 23, 2010

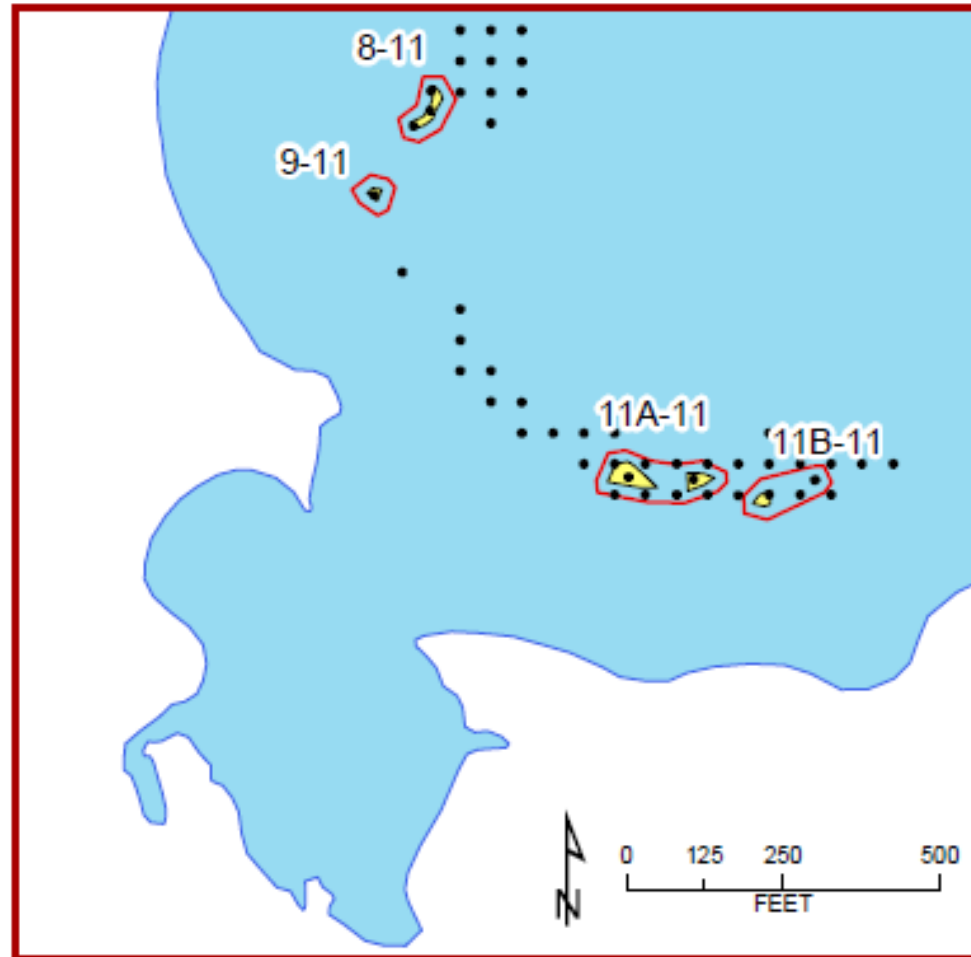


**2010 EWM Treatment  
(5.35 acres) – SEH and  
ERS**



**EXPLANATION**

- Pre/post survey point
-  EWM Bed, Fall 2010
-  EWM Treatment Area



**2011 Spring EWM Treatment (0.63 acres) SEH & ERS**

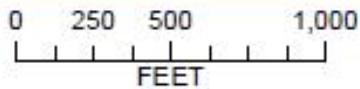


### EXPLANATION

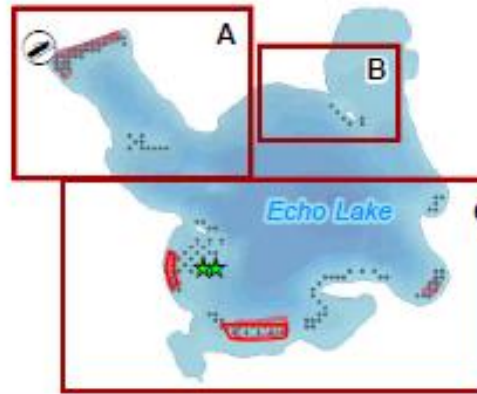
- EWM July 11, 2011
- 🔴 EWM Treatment Area



**2011 Summer EWM Treatment (1.03 acres) SEH and ERS**



Bathymetry: 5-FT interval  
 Source: 2007 P.I. (WDNR), M. Berg (2011).  
 Note: 2007 water-levels nearly same as fall 2011.



2012 EWM  
 Treatment (2.39  
 acres) SEH and ERS

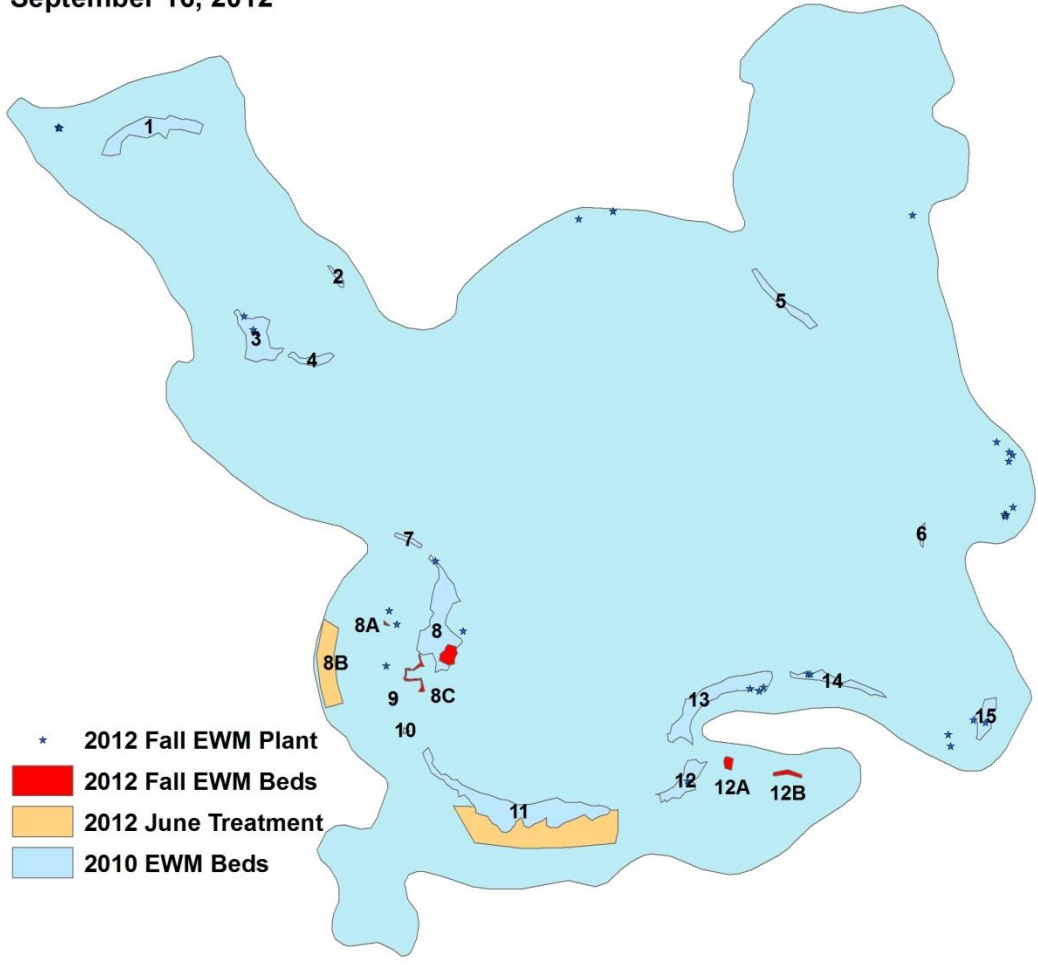
3.61 acres was  
 originally proposed  
 but EWM was  
 reduced after the  
 pre-treatment  
 survey



# Eurasian water milfoil (*Myriophyllum spicatum*)



Exotic species  
Fall Bed Mapping Survey  
Echo Lake  
Barron County, WI  
September 16, 2012



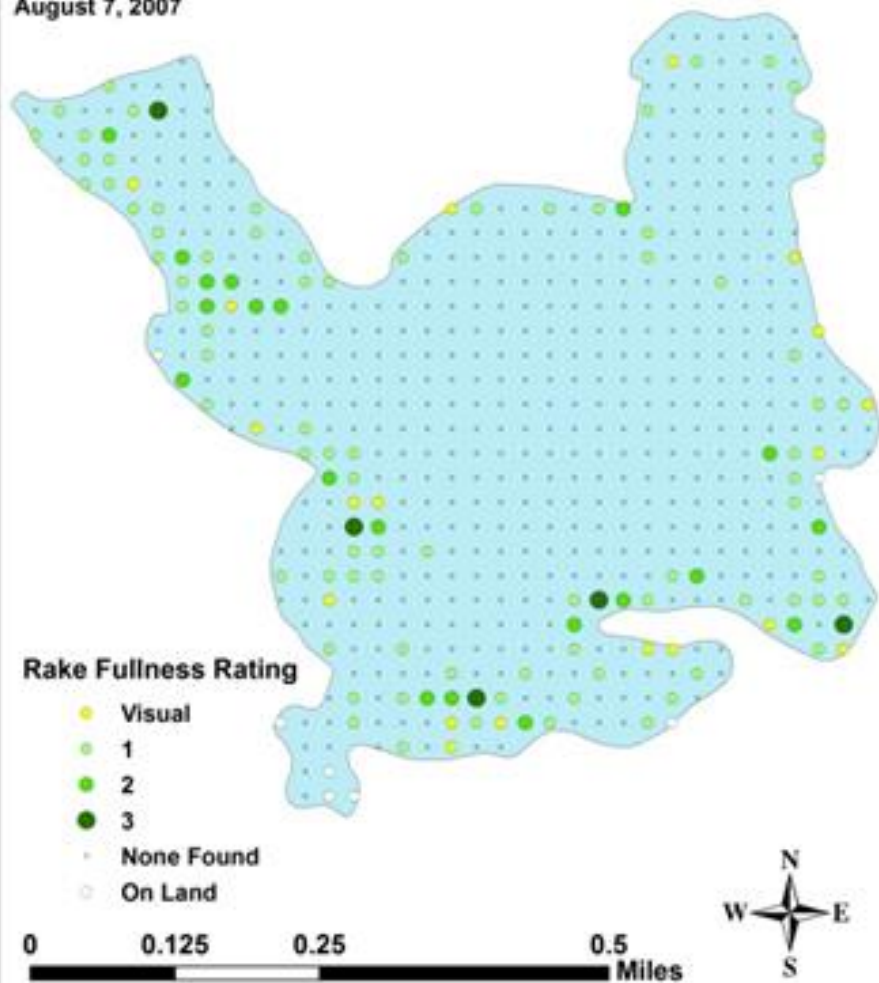
2012 Fall EWM Bed Mapping Survey (SEH and ERS)

A couple very small beds; and a few isolated plants that were physically removed at the time of the fall survey.



### Eurasian water milfoil (*Myriophyllum spicatum*)

Exotic Species  
WDNR Point Intercept Survey  
Echo Lake  
Barron County, WI  
August 7, 2007



### Eurasian water milfoil (*Myriophyllum spicatum*)

Exotic Species  
Point Intercept Survey  
Echo Lake  
Barron County, WI  
July 16, 19-20, 2012

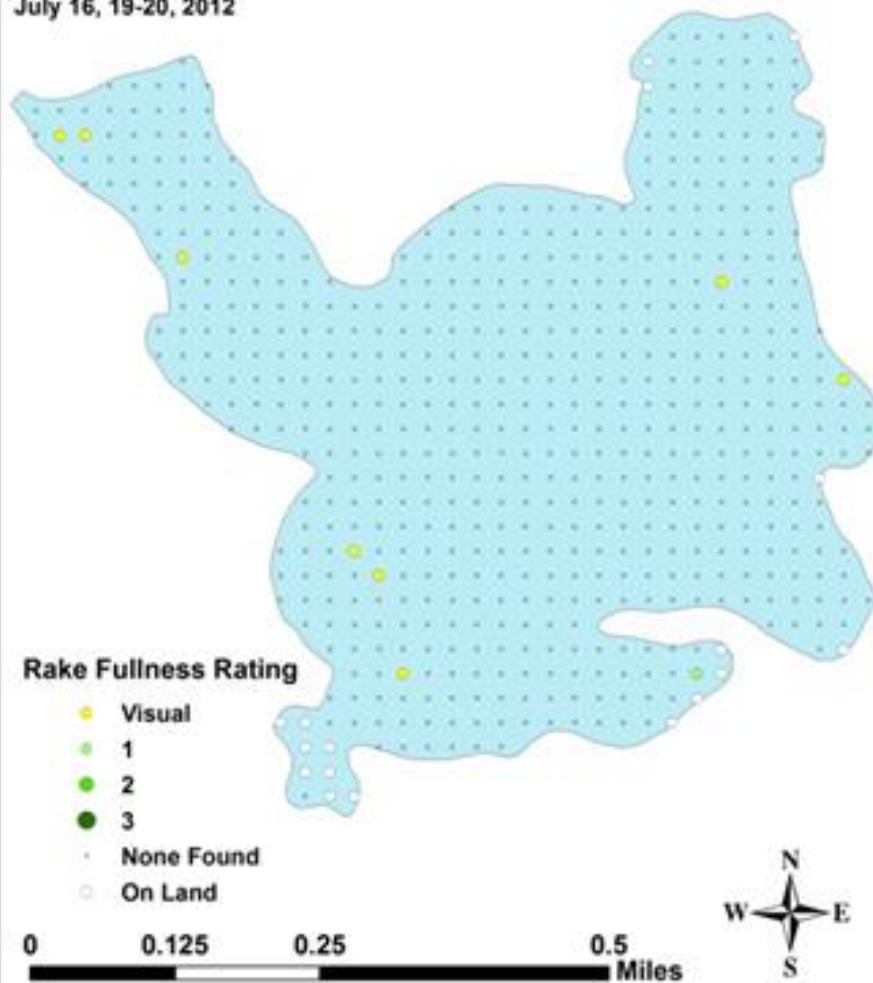
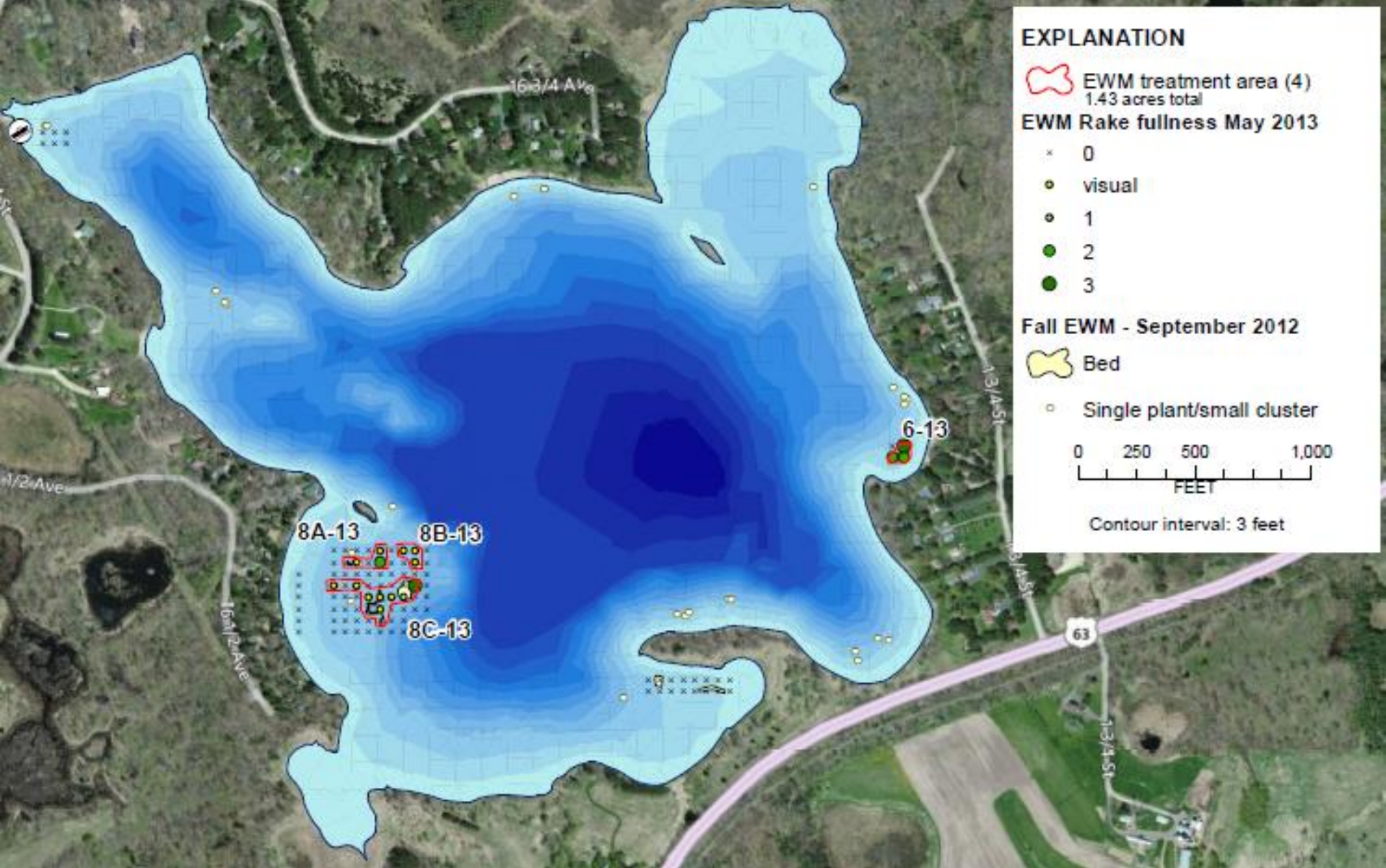


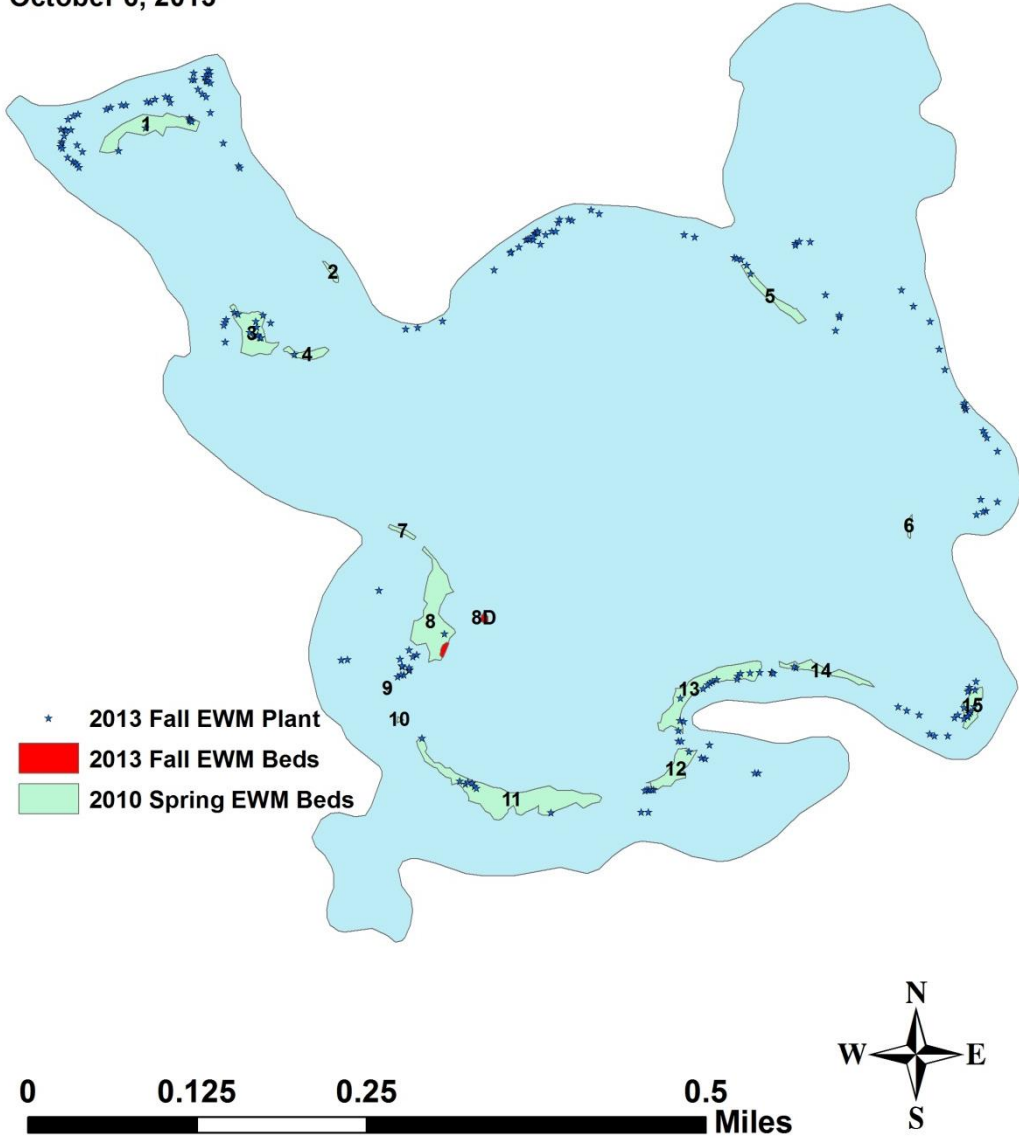
Figure 9: 2007 and 2012 EWM Density and Distribution



**2013 EWM Treatment (1.43 acres) SEH and ERS**

# Eurasian water milfoil (*Myriophyllum spicatum*)

Exotic species  
Fall Bed Mapping Survey  
Echo Lake  
Barron County, WI  
October 6, 2013



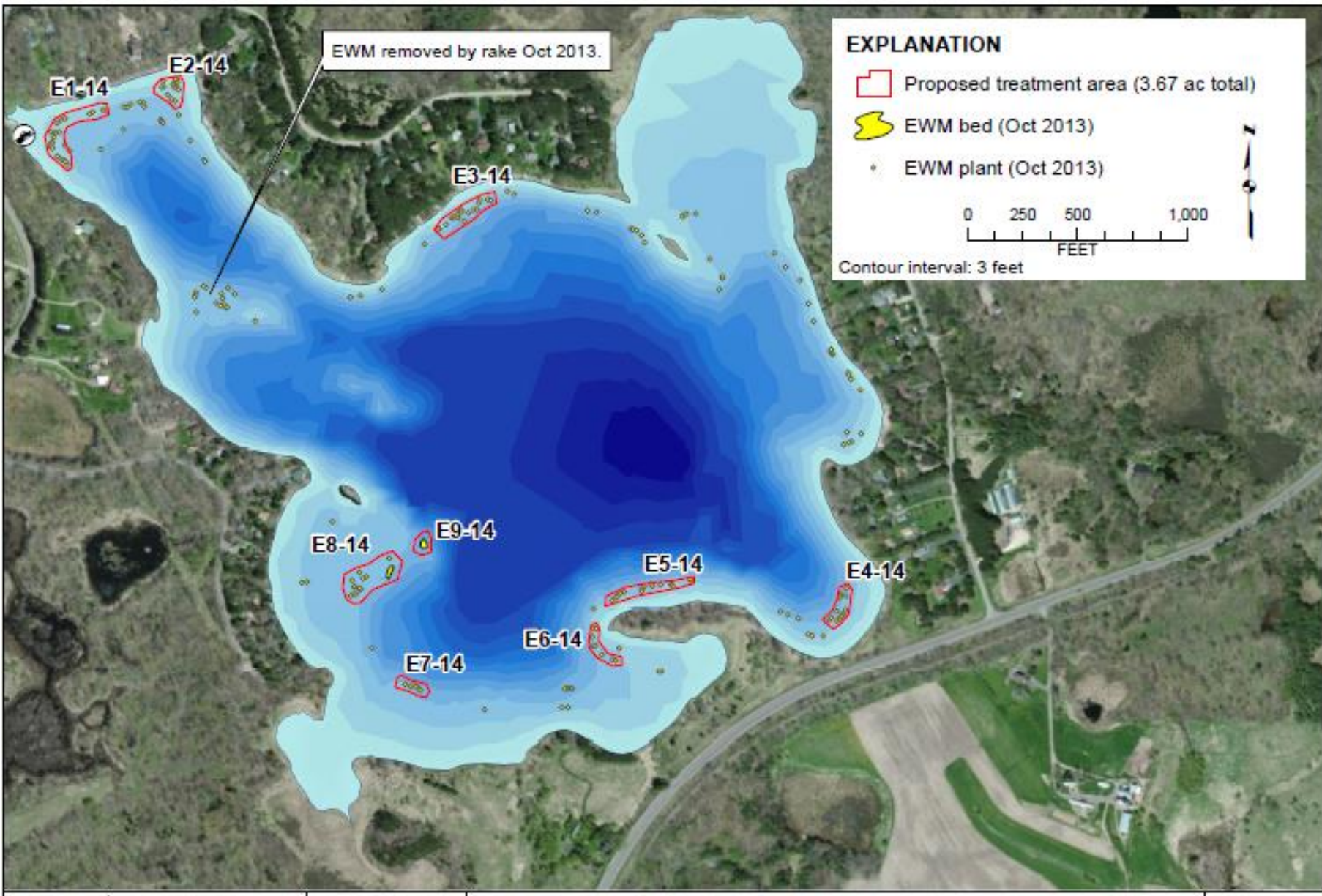
## 2013 Fall EWM Bed Mapping

Only 0.04 acres of EWM  
“beds”

209 isolated EWM plants all  
over the lake

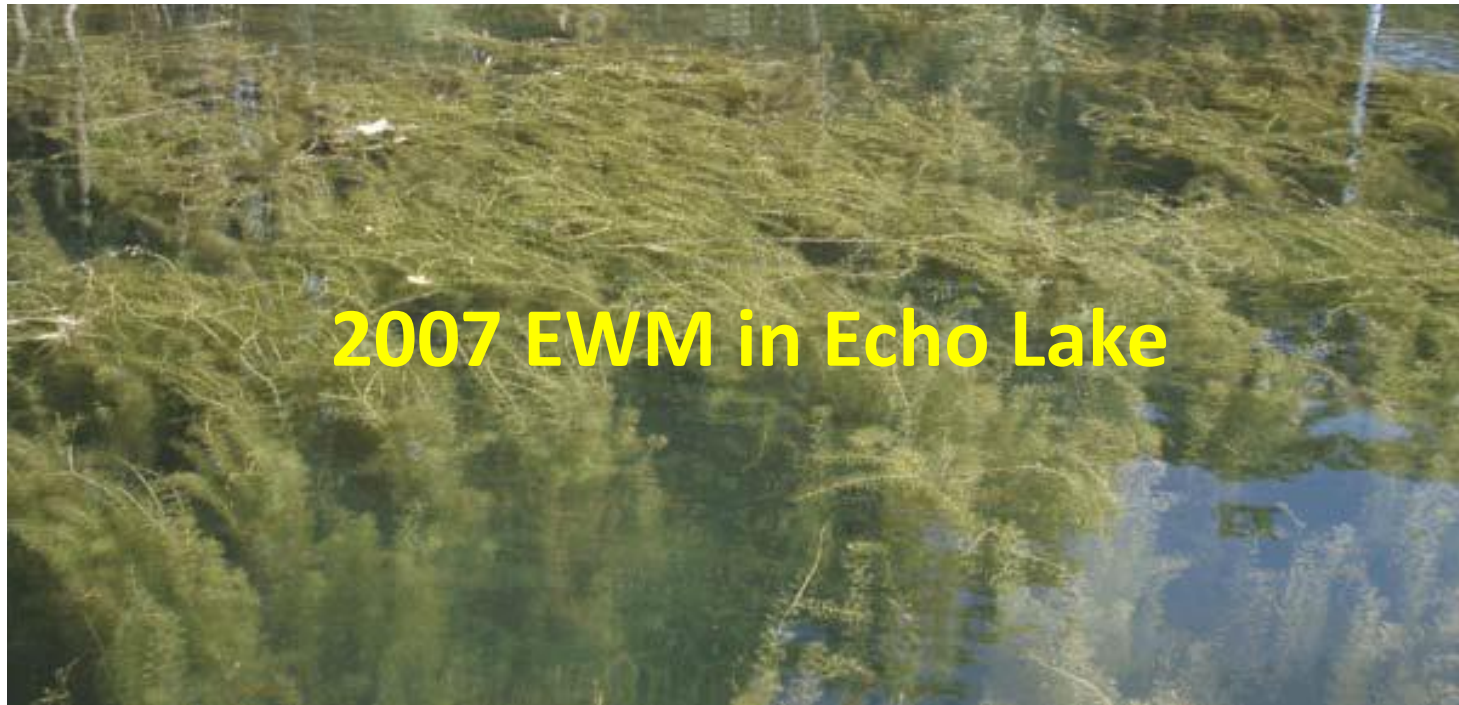
Only 35 isolated plants were  
found in the 2012 fall survey

Not all were physically  
removed during the fall  
survey, there was just too  
much!



**2014 Proposed EWM Treatment (3.67 acres) SEH and ERS**

# Take Home Message



2007 EWM in Echo Lake

- EWM is not entirely predictable
- Vigilance on the part of lake users is extremely important
- Physical removal by property owners and lake users has to be a part of EWM management every year
- The costs for herbicide application will go up if some active level of physical removal is not incorporated annually!

**The End**  
**Or is it only the**  
**beginning?**