



# **Crystal Lake Improvement Association Annual Meeting**

**May 9, 2017**



# Thank you



*For helping to improve the quality of our beautiful lake!*

**74% paid their \$50 annual CLIA membership dues**

**84% returned signed MN DNR algae permits**

# CLIA Mission

To improve the water quality, value and enjoyment of living on Crystal Lake by engaging the resources of our community and beyond in pursuit of responsible solutions to our members' stated concerns.



# Agenda

**Welcome – Lisa Fay**

**New Board candidate vote**

**City of Burnsville update - Daryl Jacobson, Steve McComas**

**Algae treatment update - Darin Ficenec, Chris Peterson**

**Weed management update – Pat Leitschuh**

**Aquatic Invasive Species (AIS) Grant - Mike Hughes**

**Treasurer's report - Rob Heimerman**

**Opportunities to get involved – Beth Breeden**

**Voting results – Lisa & Beth**

# Calling new Board candidates

- **Traits**

- Servant Leadership
- Work well with others in self organized project teams
- Respect and follow CLIA bylaws and lake rules

- **Responsibilities**

- Officers (President, Vice President, Treasurer, Secretary)
- Available on average 2-4 hours per month

- **Three open positions**

- Three year term ending May 2019 – No term limits

# VOTE for new Board candidates

- **Three open positions**
- **Introducing the candidates**
  - Kyle Bahr
  - Greg Cardinal
  - ?????
- **Vote for three on the ballot**
  - Write in names of new candidates

# Kyle Bahr

**Thank you for your considering me for a board position.**

**My wife Elisha and I have lived on Maple Island bay since November of 2014. We have three children (Skyler, Maddox, Lucie), and enjoy spending time on Crystal lake every chance we get.**

**We are very grateful for the neighbors and community. I'm excited for the chance to be more involved with the CLIA and gladly offer my time and effort in any way that is helpful to improve Crystal lake.**



# Greg Cardinal



**My wife Lisa and I have lived on Bluebill Bay since 2012.**

**Our children (Nate and Ellie) visit the lake as much as possible. We enjoy boating, skiing, swimming, and playing hockey.**

**I want to help address key issues such as weeds, muck, and algae. And protect the lake from outside influences like Zebra Mussels.**

**Overall, I hope to improve lake quality and the enjoyment of living on Crystal Lake.**



# City of Burnsville

**Thank you...**

- **Daryl Jacobson**
  - Natural Resources Manager
- **Steve McComas**
  - Blue Water Science

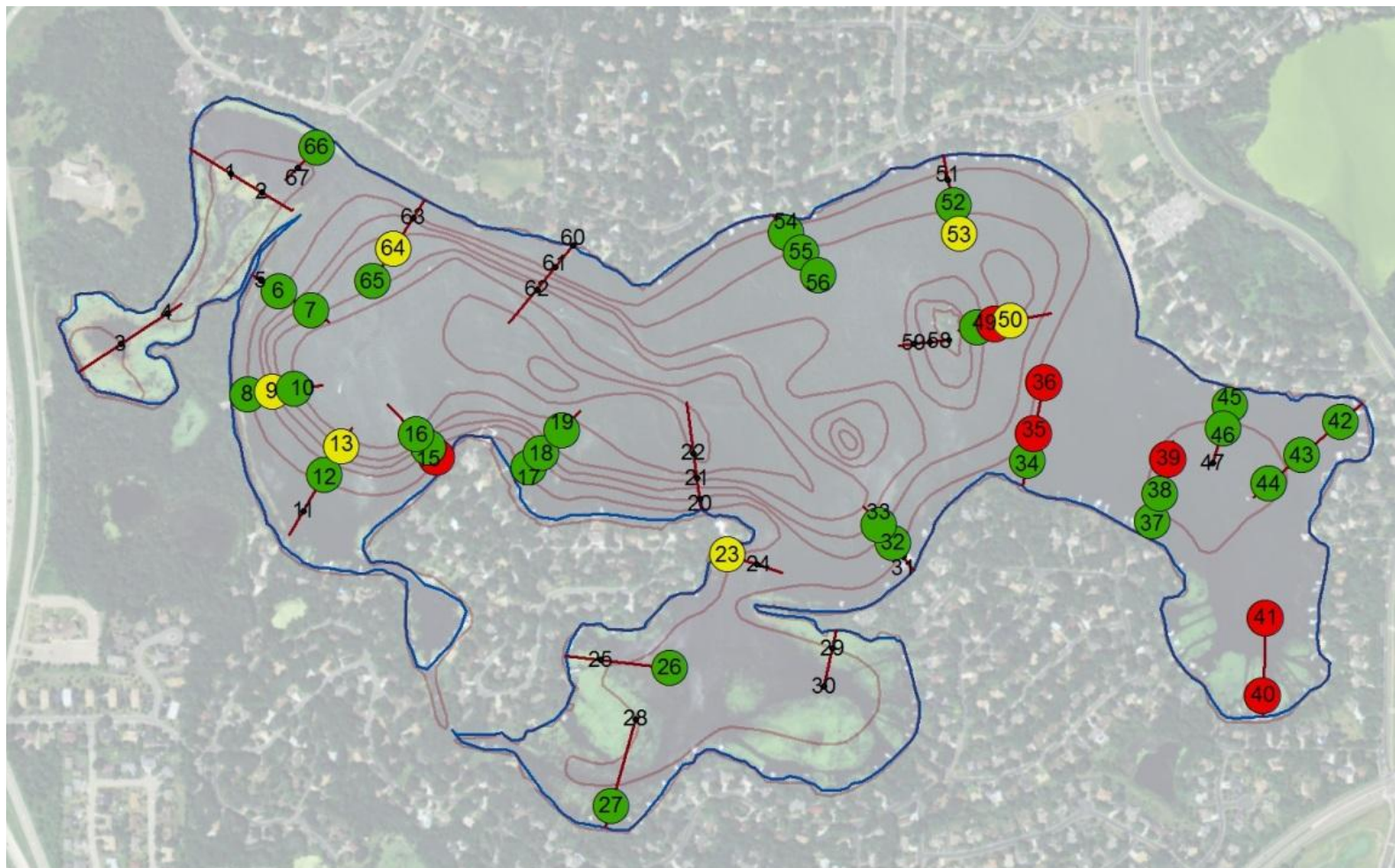


# Curlyleaf Management



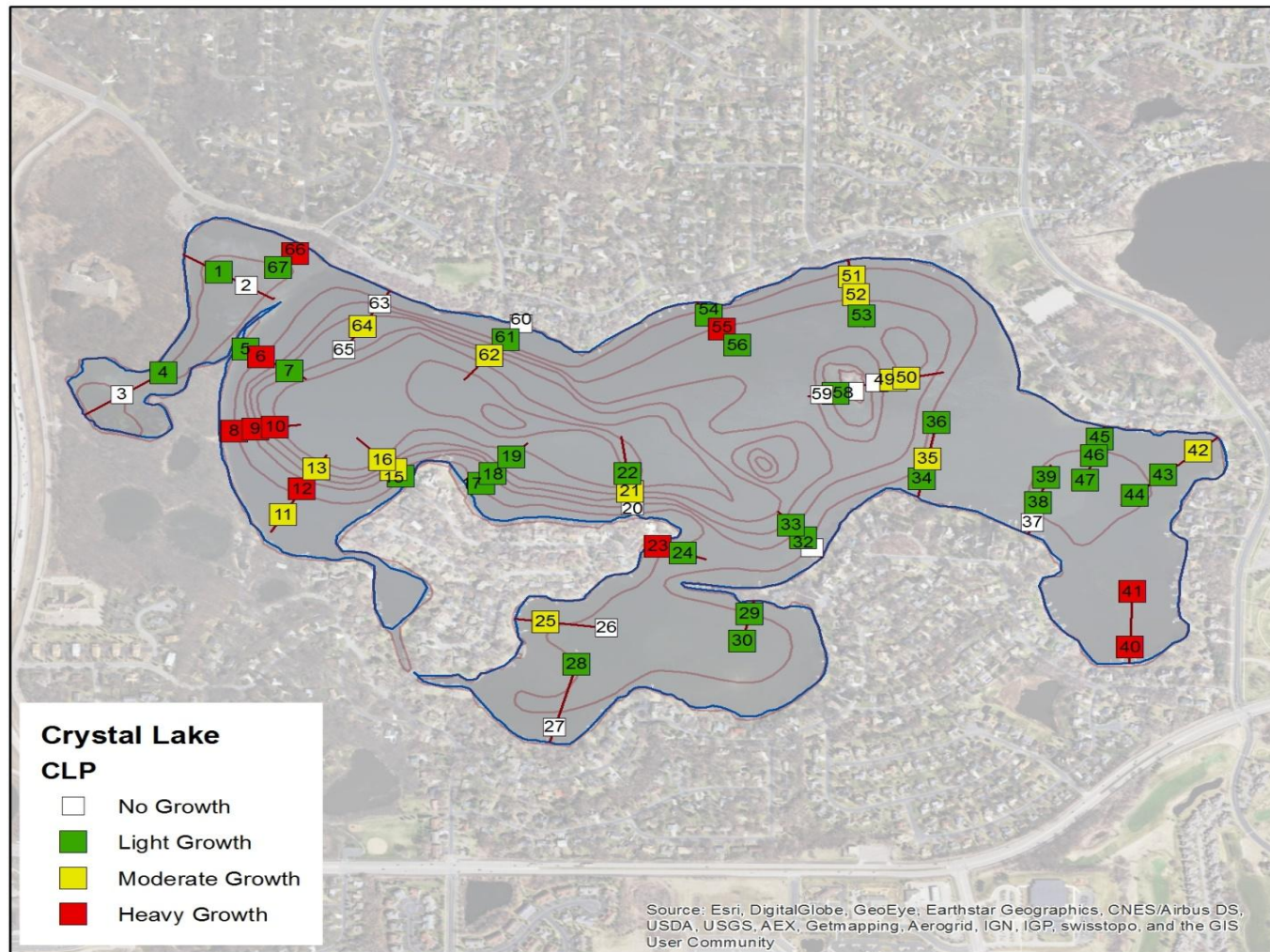


# Crystal Lake Curlyleaf Pondweed, May 18, 2015



CLP appears to demonstrate heavy growth in similar areas over the years.

# Crystal Lake Curlyleaf Pondweed, May 18, 2016



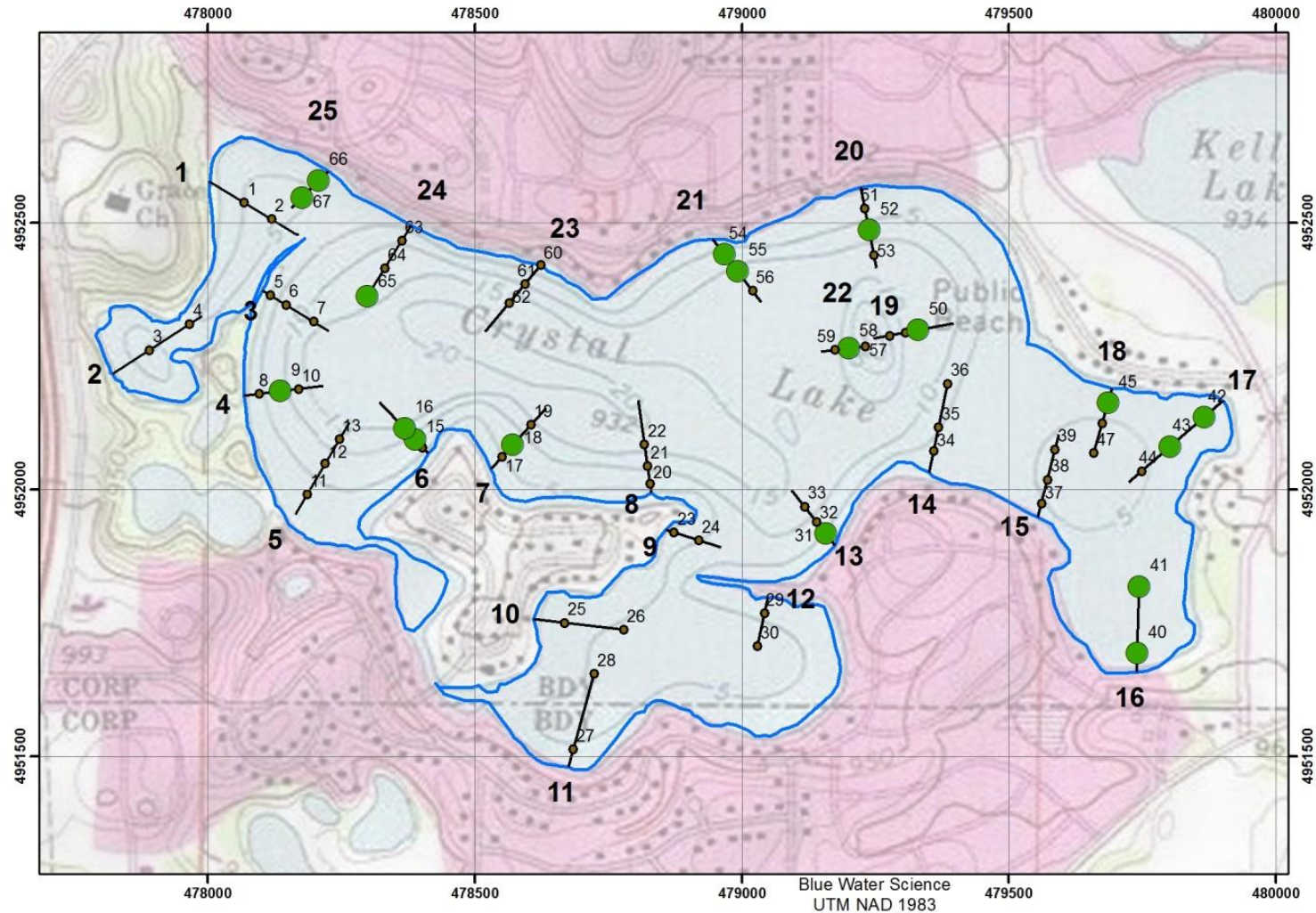
CLP appears to demonstrate heavy growth in similar areas over the years.





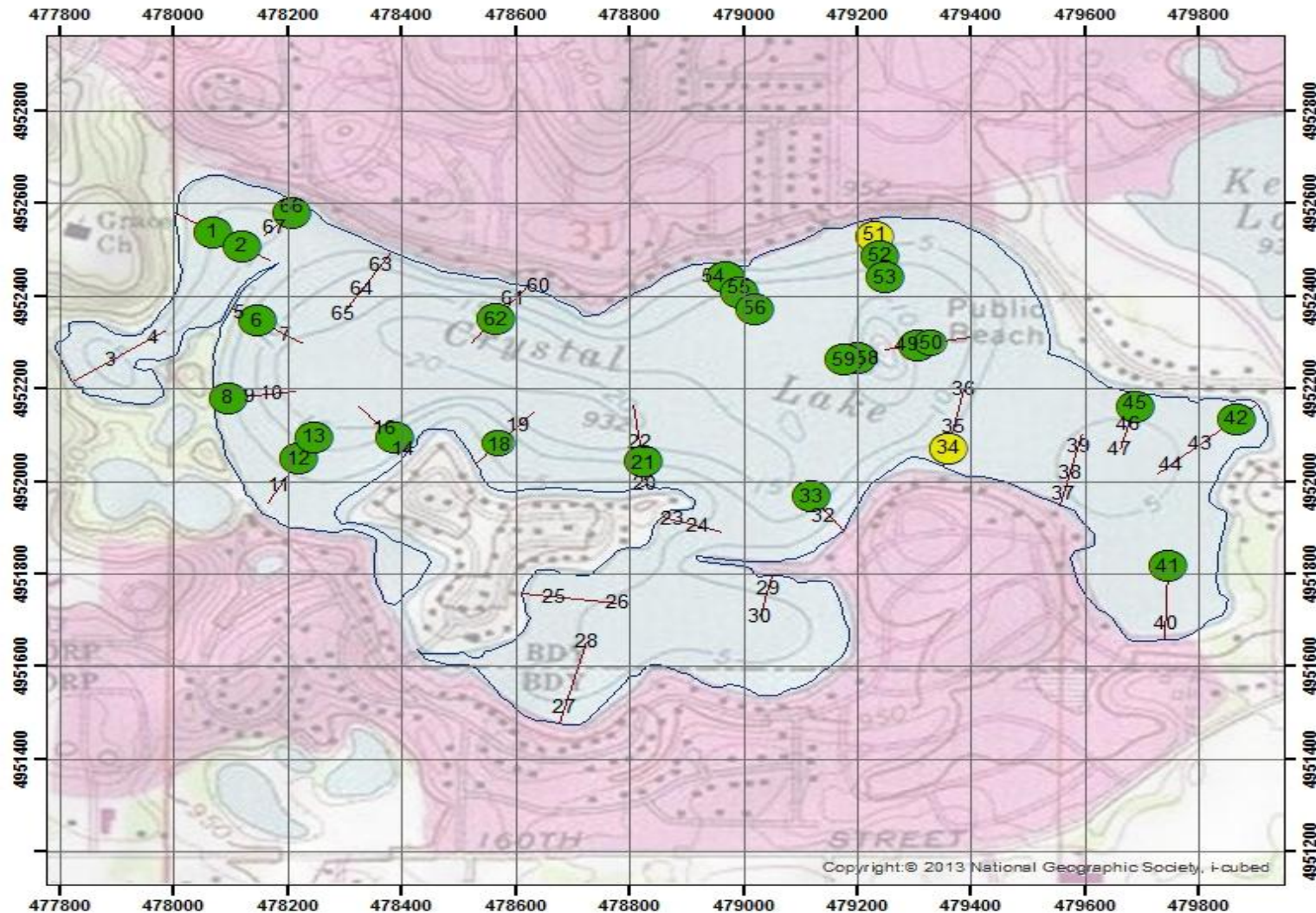


# Crystal Lake Eurasian Watermilfoil, July 31, 2012



**EWM sites: 18**

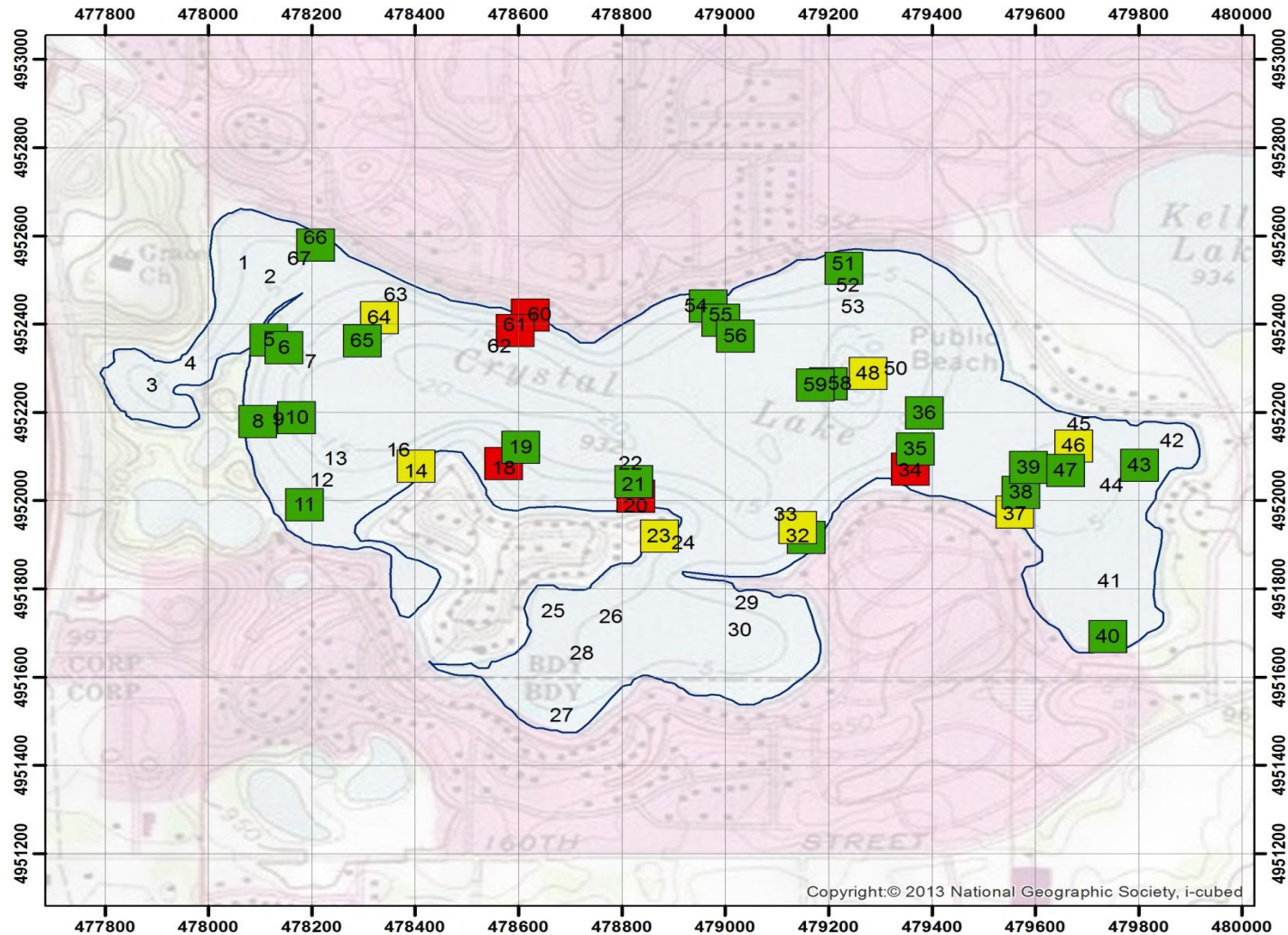
# Crystal Lake Eurasian Watermilfoil, July 26, 2013



EWM sites: 26



# Crystal Lake Eurasian Watermilfoil, August 13, 2014



EWM sites: 35

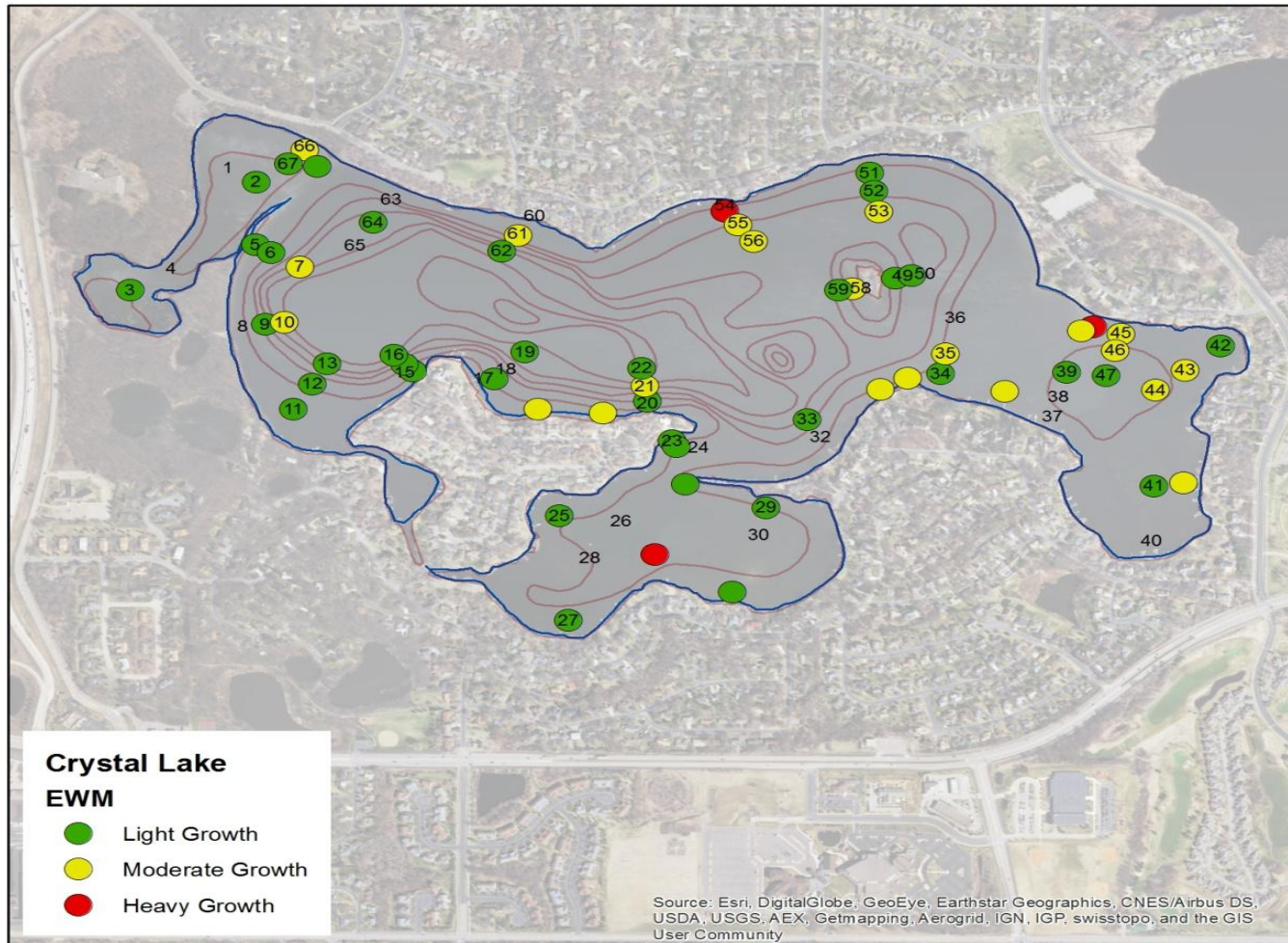


# Crystal Lake Eurasian Watermilfoil, August 5, 2015



**EWM sites: 51**

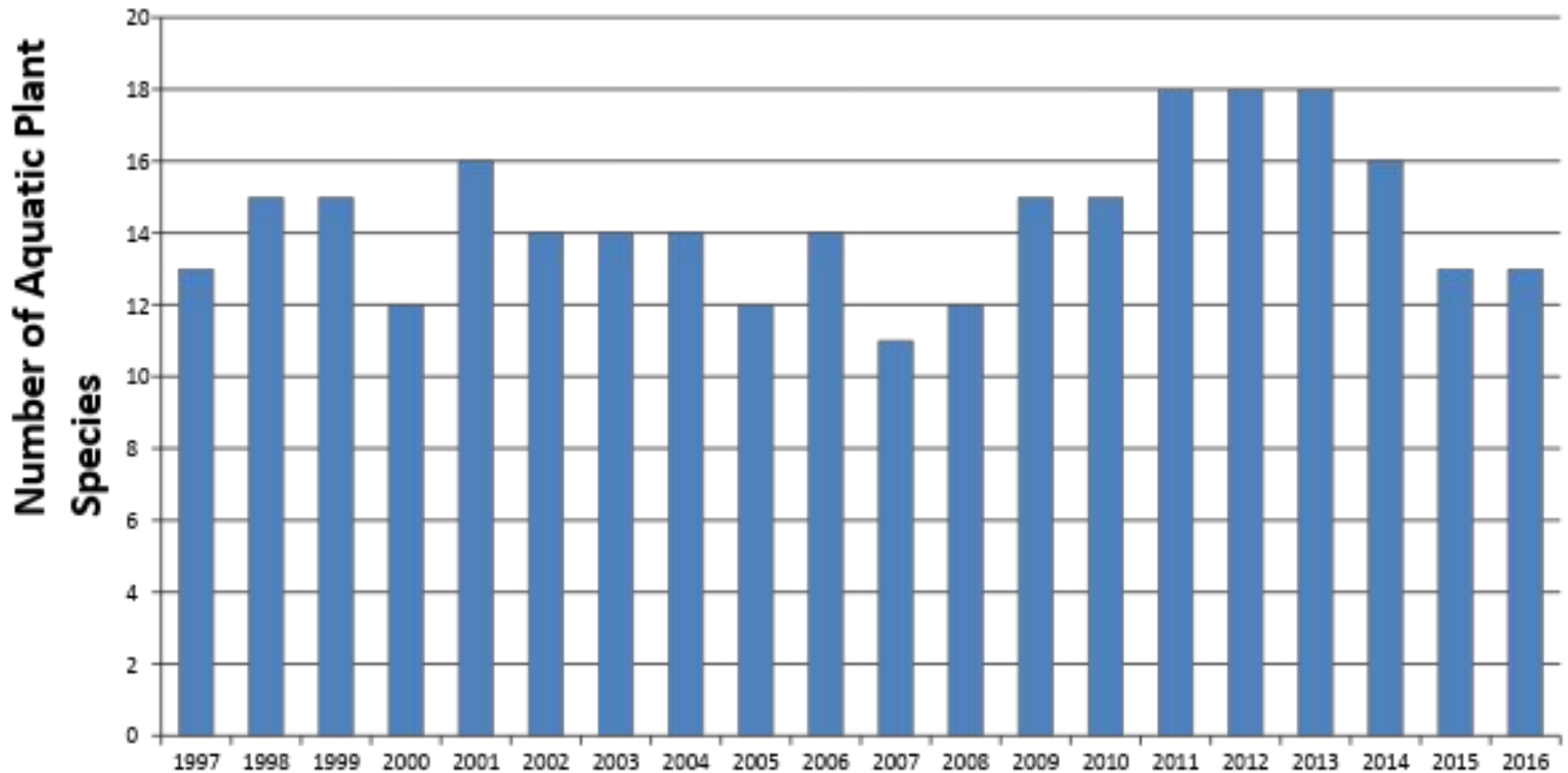
# Crystal Lake Eurasian Watermilfoil, July 6, 2016



EWM sites: 48

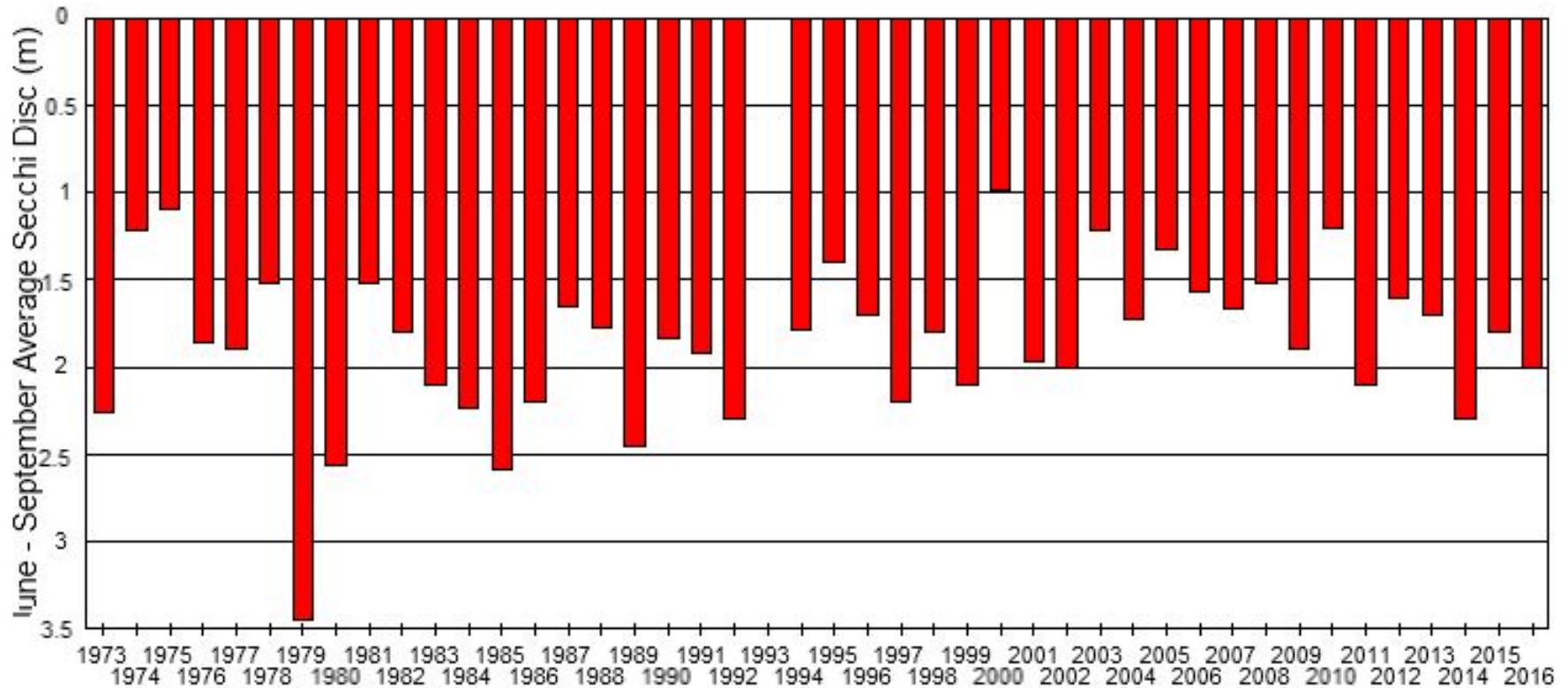
# Crystal Lake

## Number of Aquatic Plant Species



(Plant community diversity is good)

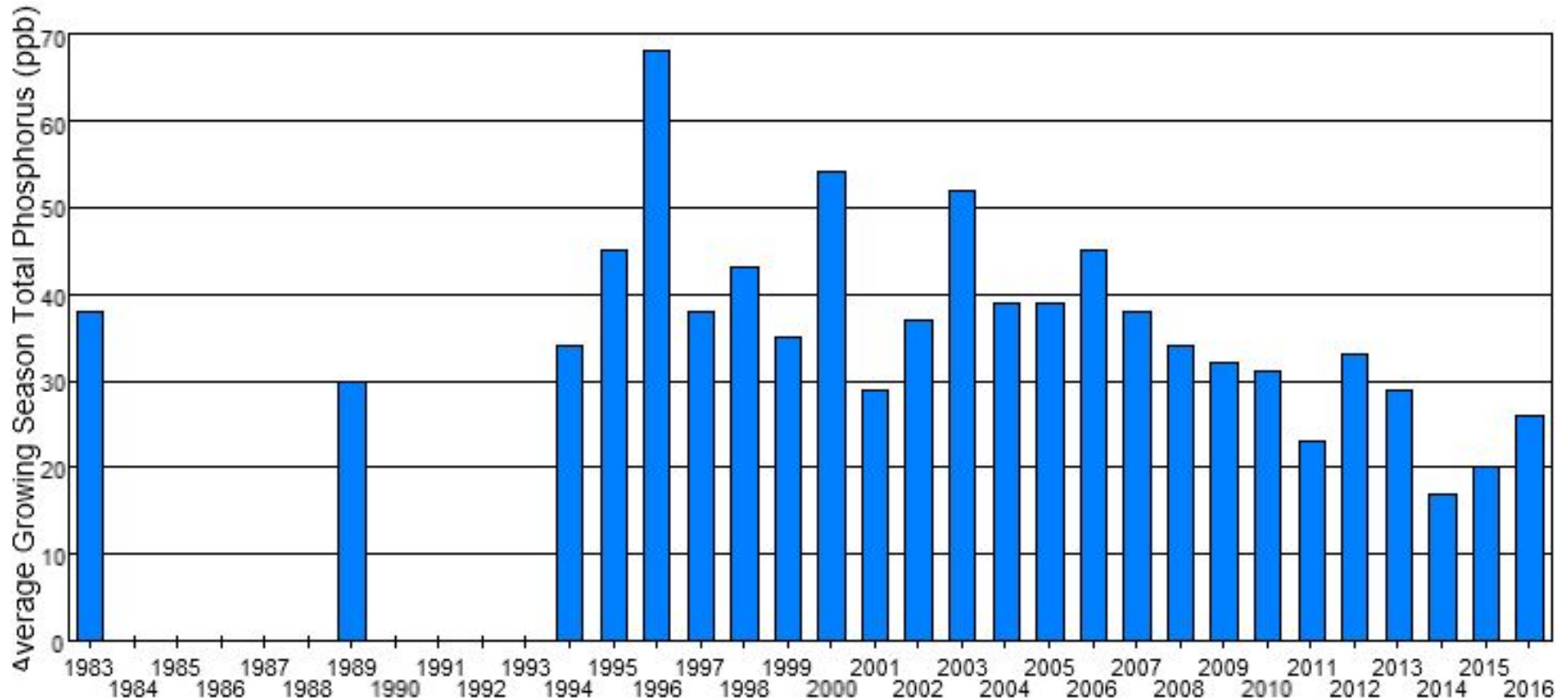
# Secchi Disc Transparency



**(Possible increasing trend in last 6 years)**



# Total Phosphorus Concentrations



**(Possible decreasing trend in the last few years)**

# **AIS Action Plan**

**Curlyleaf pondweed    Present**

**Eurasian watermilfoil    Present**

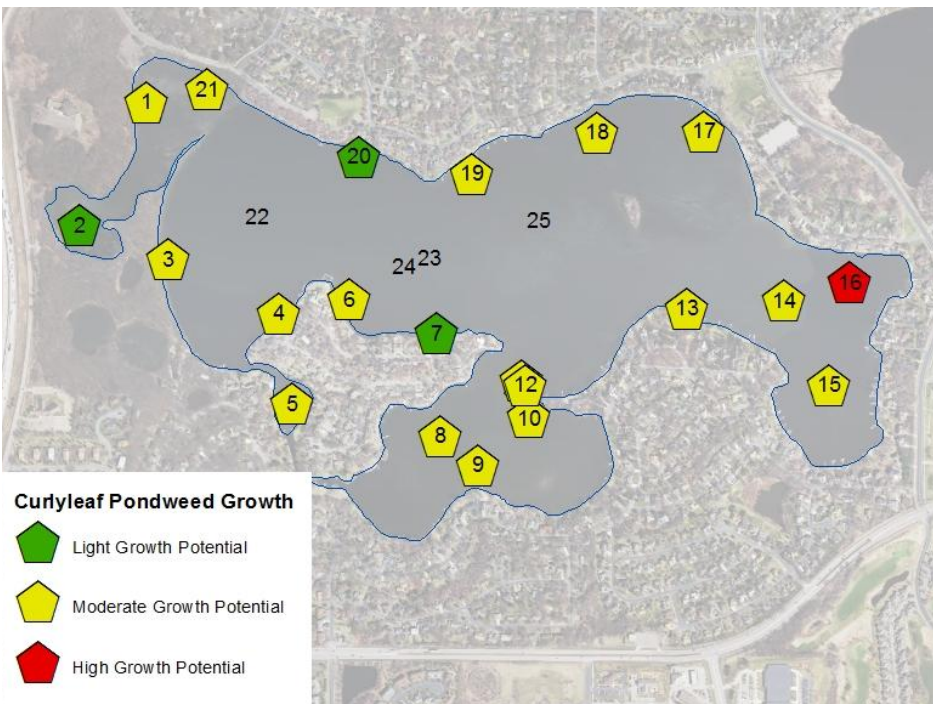
**Zebra mussels        Not observed**

**Carp                    Not observed**

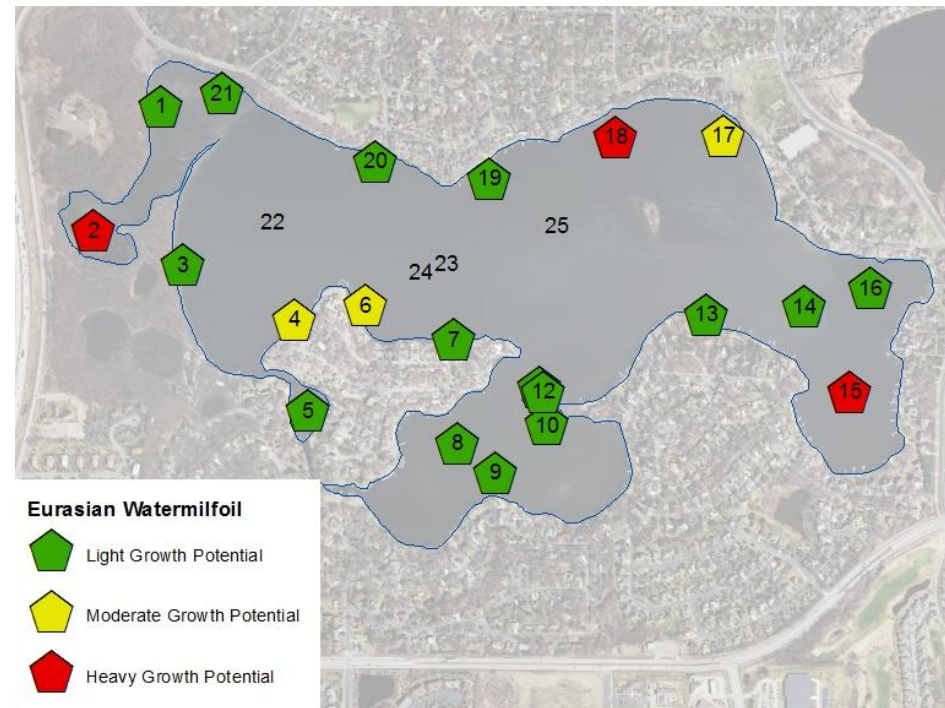
**Starry stonewort        Not observed**

# Suitability Growth Maps Based on Sediment Survey

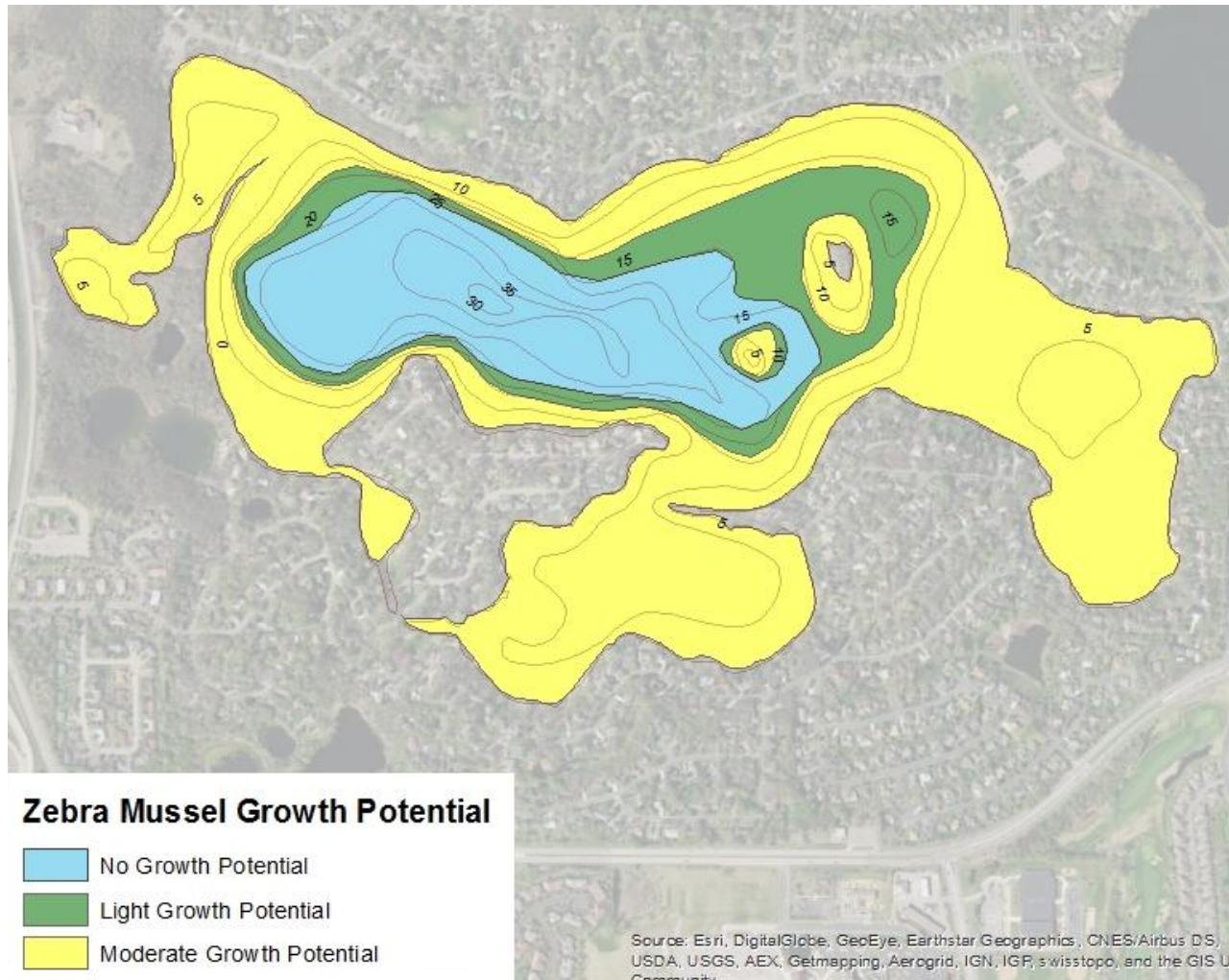
## Predicting CLP Based on Sediments



## Predicting EWM Based on Sediments



# Zebra Mussel Suitability





# **Crystal Lake**

**Plant surveys**

**Curlyleaf pondweed harvesting**

**AIS Action Plan**

**Watershed Projects**

# Crystal Beach Park Project



# Crystal Lake Topics

**Keller Lake alum treatment**

**City weed pick-up after harvesting**

**Fish management**

**Crystal Lake and the Impaired Waters List**

# Algae treatment update

**Thank you...**

- **Darin Ficenec**
- **Chris Peterson**

# Algae treatment update

**Filamentous**



**Planktonic**



- **Planning for up to 2 treatments this summer on Crystal Lake**
  - The 3 bays and the main lake where needed
- **Lake Management will use chelated copper to treat the algae**
  - Timing To Be Determined

# Weed management

**Thank you...**

- **Rick Bowles**
  - Secretary
- **Pat Leitschuh**
  - Vice President



# Our top weed issues



**Curly-Leaf Pondweed**



**Milfoil**



**Coontail**

# Weed management

- **Rebate program to support residential shoreline weed control and supplement city weed harvesting of public waters**
  - CLIA is reimbursing residents up to 50% of cost (\$100 maximum)
  - Reimbursed **29** homeowners **\$2,675**
  - Send proof of purchase receipts to Rick Bowles for reimbursement
- **Letters sent to residents this spring offering herbicide treatment of nuisance weeds (Lake Restoration and Lake Management) or harvesting of weeds (J & N Harvesting)**
  - Option provided to sign up for one or two herbicide treatments
  - Herbicide treatments are tentatively scheduled for late May/early June and mid-late July
  - Harvesting will occur in early June



# **Dakota County Grant: Aquatic Invasive Species (AIS)**

**Thank you...**

- **Mike Hughes**

# 2017 Dakota County Aquatic Invasive Species (AIS) Grant

- **Repeat Eurasian Water Milfoil Evaluation (EWM) in June 2017**
- **If increases continue we will treat with herbicide**
  - City of Burnsville will pay for treatment in Public areas (>150 feet from shoreline)
  - CLIA will pay for treatment in Non-public areas (<150 feet from shoreline)
- **Dakota County AIS grant pays 50% of CLIA costs for treatment**

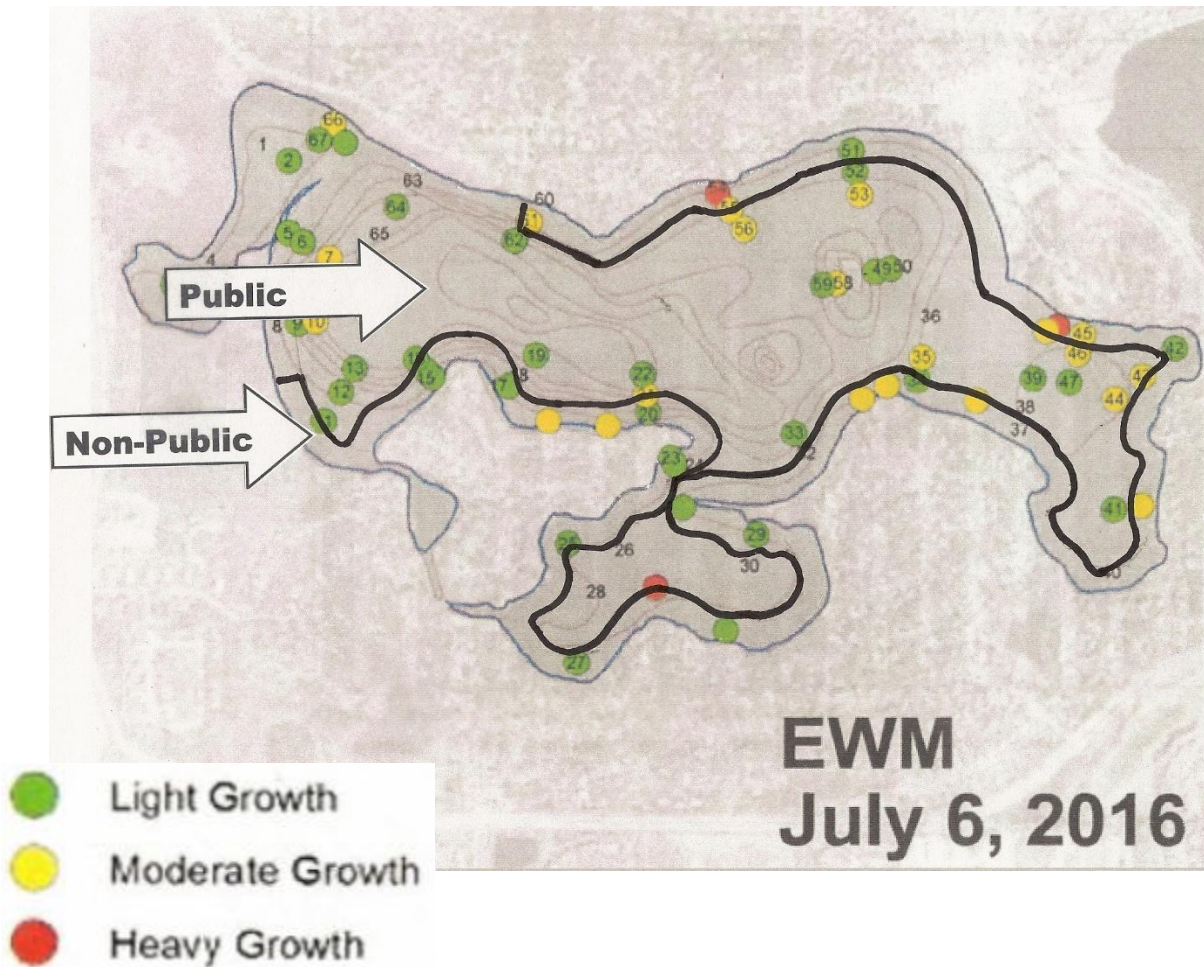


Eurasian watermilfoil typically has 12 to 21 pairs of leaflets. The native northern watermilfoil, with which it is often confused, usually has 5 to 9 pairs. Drawing courtesy Bell Museum of Natural History.



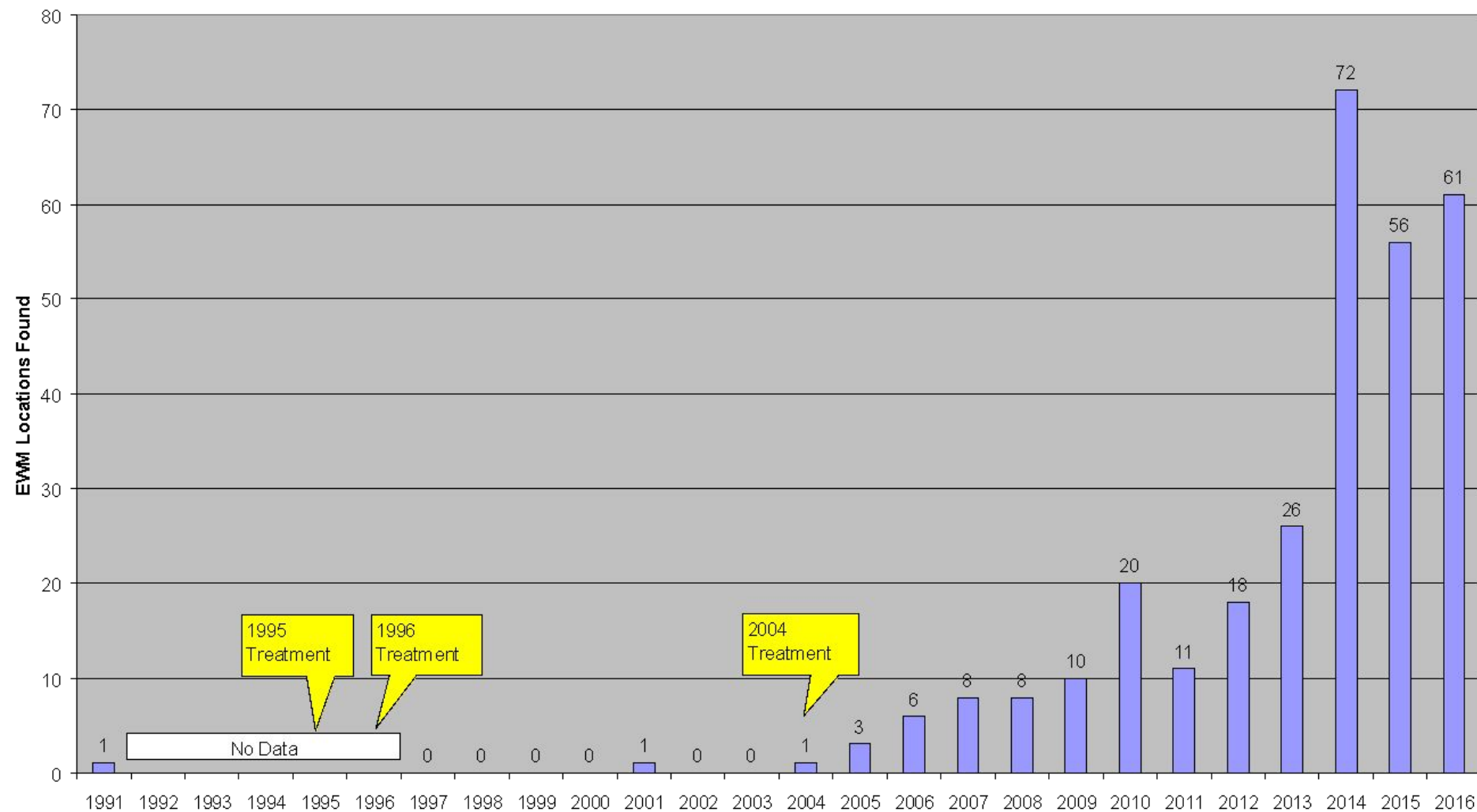
# Public areas treated by City of Burnsville

## Non-Public areas treated by CLIA



# EWM Evaluations of Crystal Lake

by Blue Water Science



# Treasurer's report

**Thank you...**

- **Rob Heimerman**
  - Officer – Crystal Lake Improvement Association

# 2015 – 2017 Review

		<u>2015 Actual</u>	<u>2016 Actual</u>	<u>YTD 2017</u>
<b><u>Deposits</u></b>				
Membership dues	\$	6,700	\$ 6,500	\$ 6,650
Interest income	\$	188	\$ 228	\$ 80
Bay algae treatment collections	\$	5,075	\$ 5,300	\$ -
Directory ad sales	\$	-	\$ 750	\$ -
<b>Total</b>	<b>\$</b>	<b>11,963</b>	<b>\$ 12,778</b>	<b>\$ 6,730</b>
<b><u>Expenses</u></b>				
Bay algae treatment	\$	5,049	\$ -	\$ -
DNR inspection	\$	400	\$ 300	\$ 360
Member reimbursements - weed control	\$	-	\$ -	\$ 2,675
Miscellaneous	\$	1,158	\$ 2,354	\$ 31
<b>Total Expenses</b>	<b>\$</b>	<b>6,607</b>	<b>\$ 2,654</b>	<b>\$ 3,066</b>
<b>Net Increase (Decrease)</b>	<b>\$</b>	<b>5,356</b>	<b>\$ 10,124</b>	<b>\$ 3,664</b>
<b>Ending Cash Balance</b>	<b>\$</b>	<b>48,665</b>	<b>\$ 58,789</b>	<b>\$ 62,453</b>
<b><u>Anticipated/Potential Additional Expenditures for Remainder of 2017:</u></b>				
CLIA portion - Dakota County AIS Grant (Eurasian Milfoil treatment):			\$	9,000
Filamentous algae treatments (± \$5,000/treatment x 2):			\$	10,000
Additional reimbursements to CLIA members for weed control:			\$	1,500
<b>Total</b>	<b>\$</b>		<b>\$</b>	<b>20,500</b>

# Opportunities to get involved

**Thank you...**

- **Beth Breeden**

# Opportunities to get involved

## Join a committee

- Algae treatment – Chris Peterson
- Weed management - Rick Bowles, Pat Leitschuh, Jon Vinovich
- Communications & member relations - Beth Breeden
- Finance & governance – **Open**
- Website & technology - Corey Marthaler
- External relations – Mike Hughes
- Fish management – Pat Leitschuh



## Attend our events

- **May 13 spring clean-up** and picnic 10am-12:30pm
- **July 4th** ice cream social and boat parade
- **Fall potluck picnic social** in late September





# Voting results

- **New Board Member Results**



# Hat's off to...

**Thank you for your leadership, support and dedication to CLIA.**



# Thank you for joining us tonight

