Chippewa Lake

April 26, 2018 6:30pm

BreAnne Grabill, Environmental Scientist- Northern Regional Manager
PLM Lake & Land Management Corp.
breg@plmcorp.net; 800-382-4434 ext.2200

PLM Lake & Land Management Corp.

- Northern Regional Manager, with PLM 17 years
- Michigan State University (GO GREEN), Environmental Scientist
  - Focus in Limnology (study of freshwater/lakes)
  - Watershed management and Env't Economics
- PLM is a full service Lake Management Company serving Michigan for 40 years
  - Consulting, Lake Management Planning, Education, Implementation, Special Assessment Districts
  - Surveying, Mapping, Water Quality, Fishery Assessments
  - Herbicide Applications, Harvesting, Fountains/Aeration, Biological Control etc.

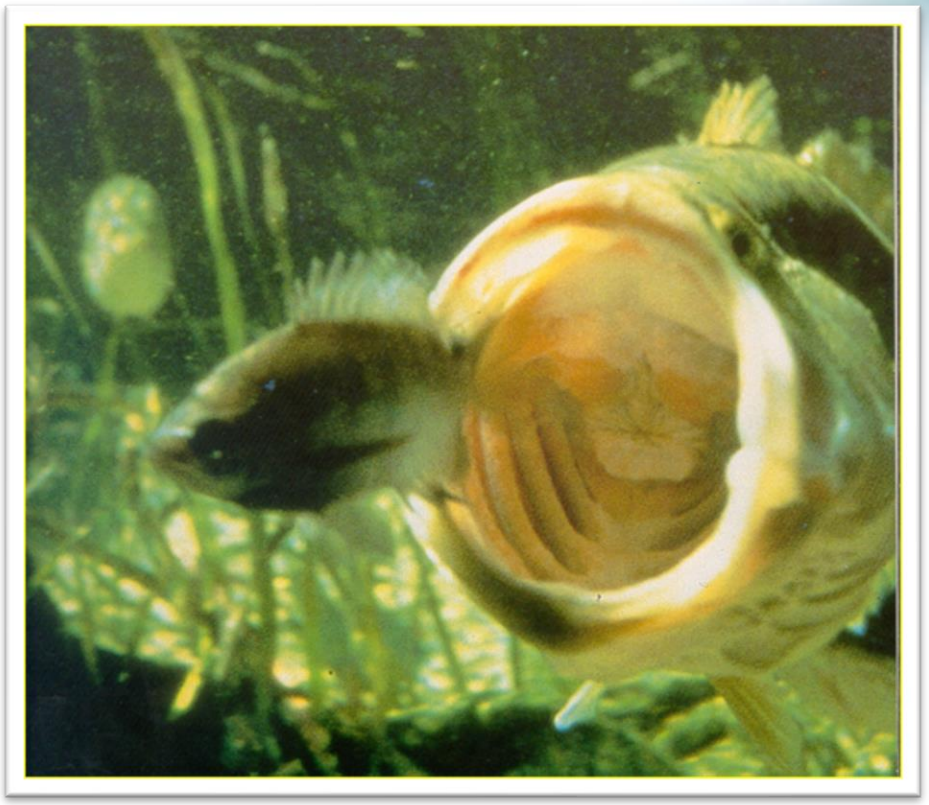
Review of Aquatic Plant Management

- Goals of APM
- Benefits of Native Plant Diversity
- Impacts of Exotic, Invasive Aquatic Plants
  - Eurasian watermilfoil, Curlyleaf pondweed, Starry stonewort
- Chippewa Lake Management Plan
  - Survey, Mapping, treatments
- Lake Management Tools
- Prevention

Goals of Aquatic Plant Management

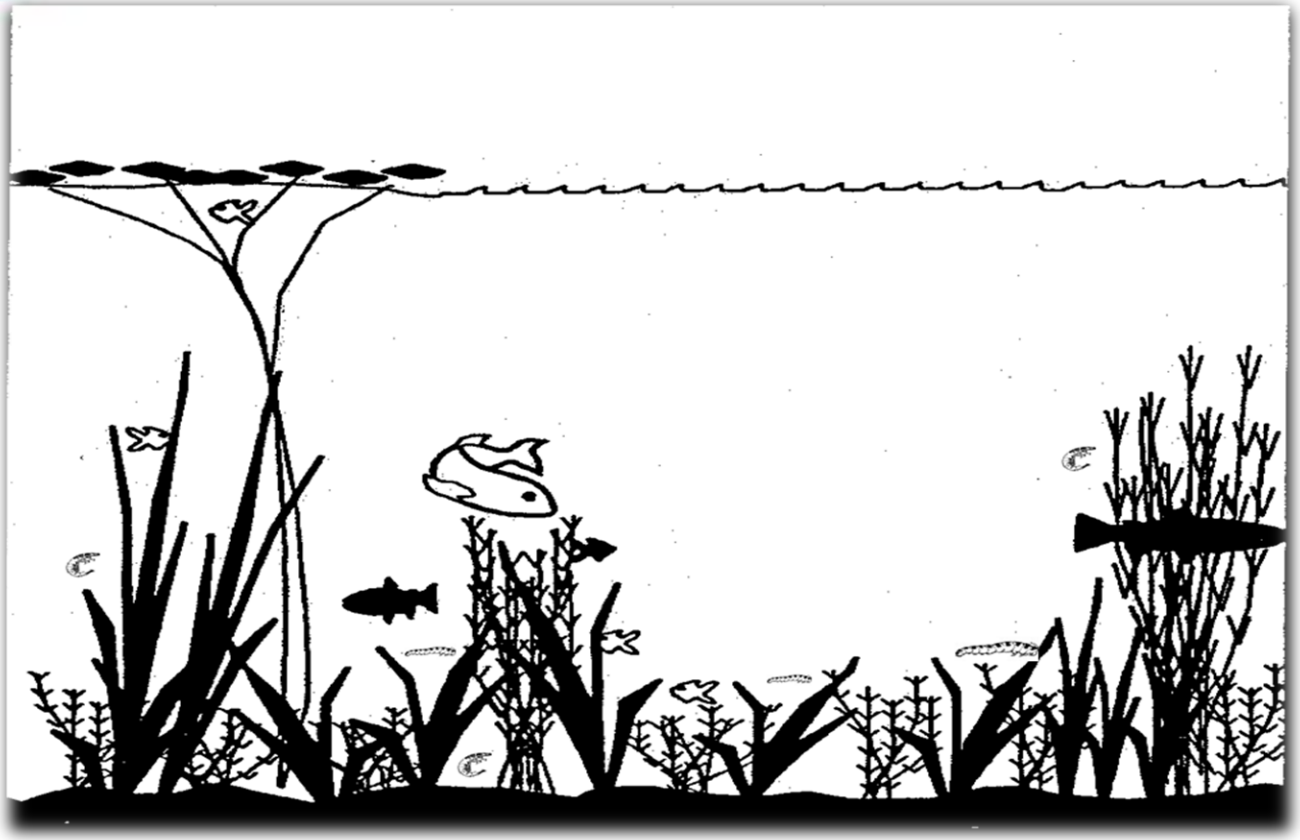
- Control Exotic Species
  - Promote a Balanced and Diverse Native Plant Community
  - Improve Fisheries
  - Maintain Property and Recreational Values

Native Plants



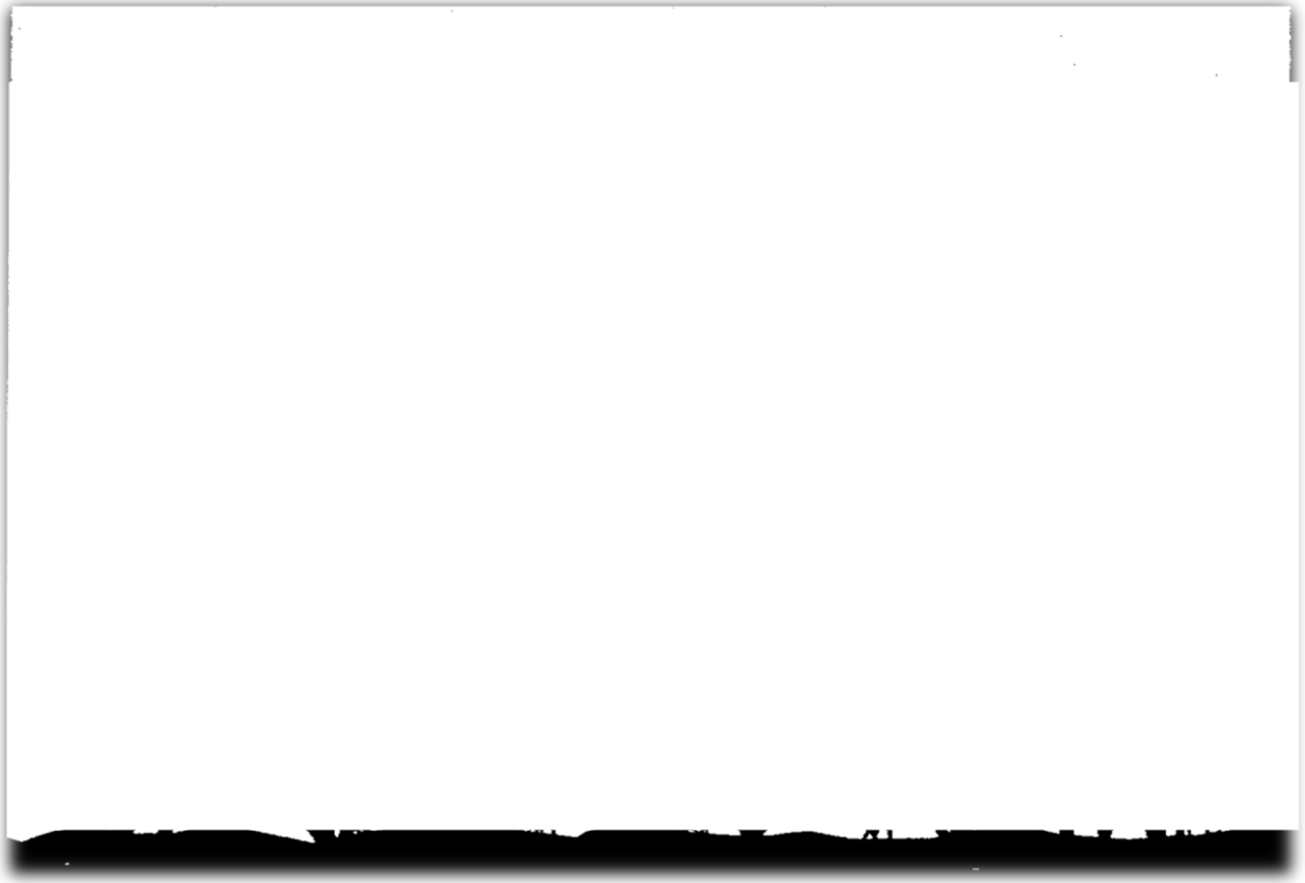
- **"Typically"** do not cause recreational problems
- Fundamental component of aquatic ecosystems
- Perform important functions
  - Stabilizing sediments
  - Support aquatic insects
  - Maintaining Oxygen
  - Provide forage and refuge areas for fish
- When control is needed, harvesting or use of contact herbicides are best management options.

Diverse, Native Plant Community



The goal of Aquatic Plant Control: A healthy & diverse plant community.

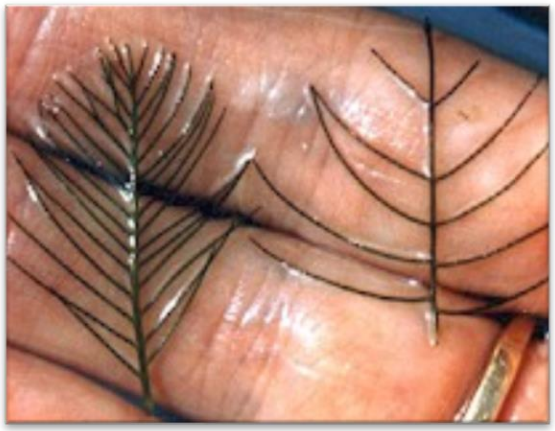
This is NOT the goal!



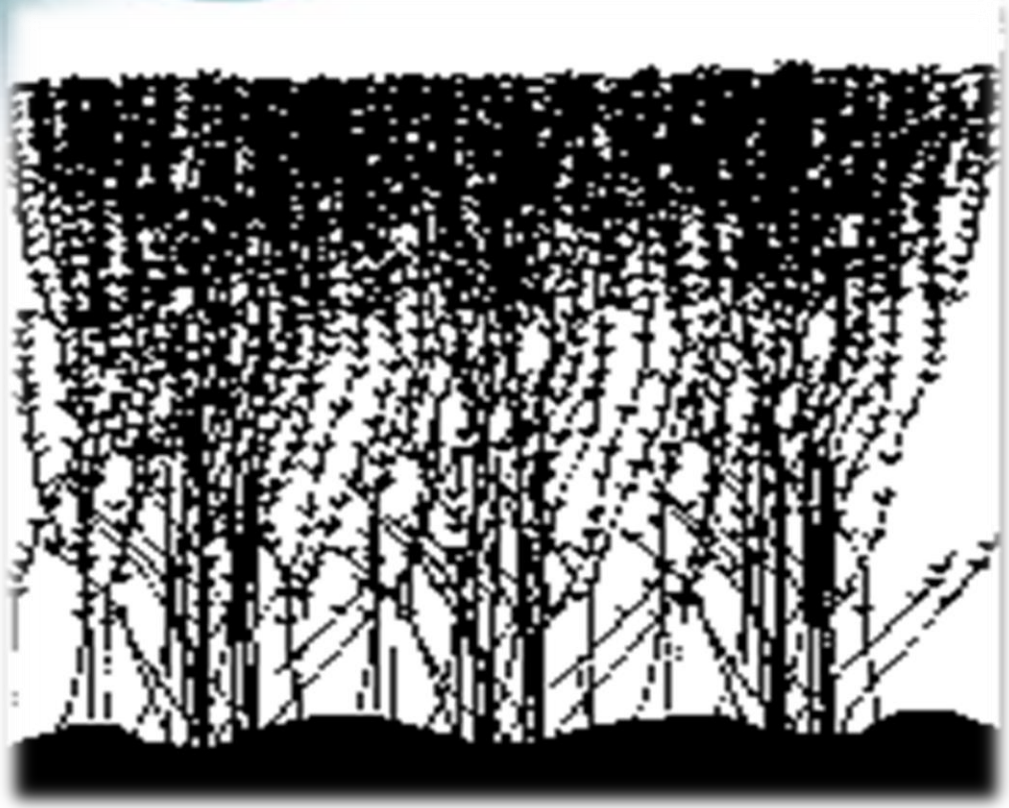
Impacts of Exotic Species

Eurasian Watermilfoil (EWM)

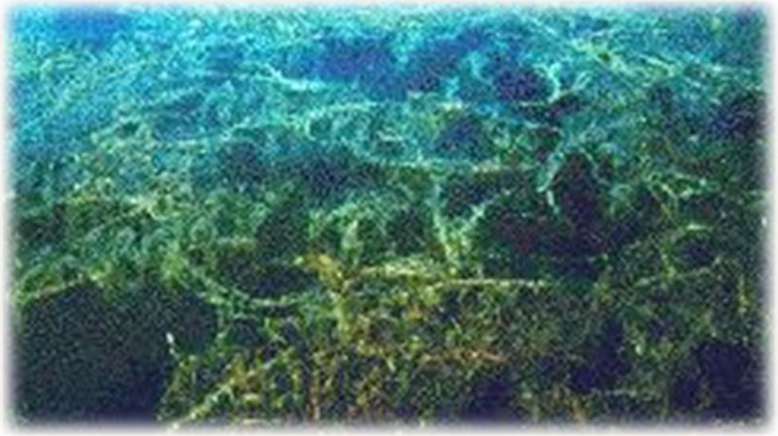
- Not native to North America
- Highly invasive, forms a canopy & monoculture
- Spreads from root system, seed, and **fragmentation** (cutting, raking increases spread)
- Over winters (lives under the ice).
- Outcompetes other native plants
- Negatively impacts fisheries
- A single plant can produce millions new plants in a single year!



EWM



CANOPY



Hybrid milfoil

- Genetic research has found that Eurasian watermilfoil has bred with Northern watermilfoil and has produced different genetic plants—referred to as hybrid milfoil.
- Hybrid milfoil species have likely been around for decades, we are just learning more about them now!
- Hybrid milfoil plants can spread from lake to lake the same as EWM. It doesn't take having both parents in the lake for a lake to have hybrid plants.
- Identification of hybrid over EWM is VERY difficult- typically requires lab analysis.
- Millions of dollars is being spent to learn more about hybrids and control strategies.
- Growing characteristics generally take after aggressive EWM but with the hardier growth ability of Northern (cold water, resistance to herbicides)
- For management purposes, EWM and hybrids are generally classified as non-native milfoil for control/management purposes
- Management recommendations can vary.

Curly leaf pondweed

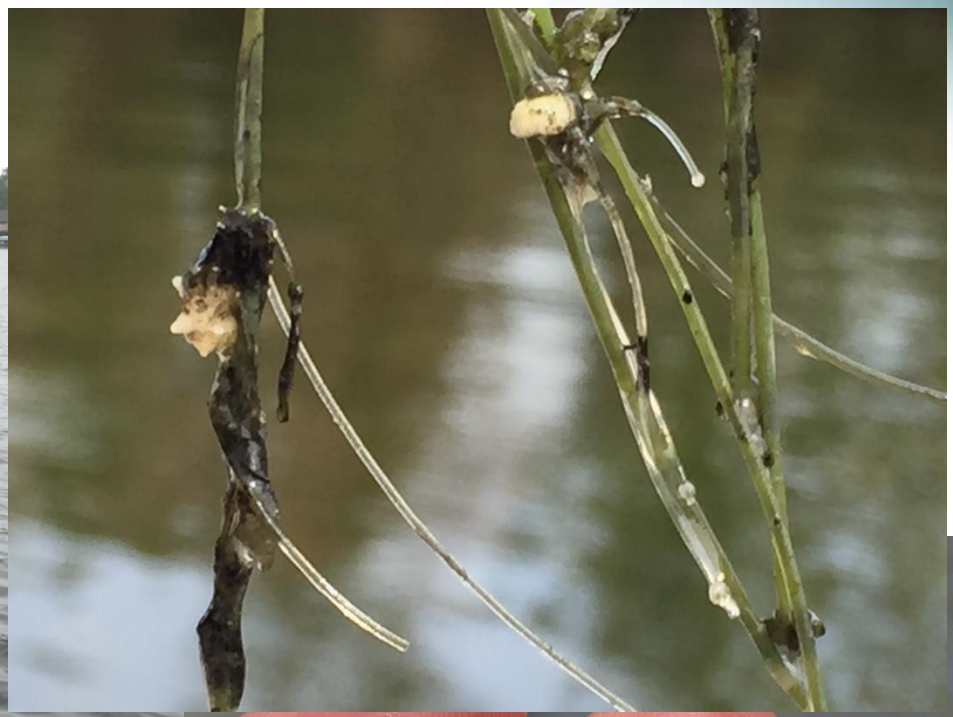
- Introduced to North America in 19th century
- Emerges early each spring, flowers and sets seed in the late spring and early summer, and then collapses by the first week in July.
  - There are, however, exceptions to this pattern regarding juvenile plants, part of this re-growth community can occasionally be found in the late summer or early autumn.
- Capable of over-wintering below ice cover
- Curly Leaf can be a severe nuisance during the early part of the peak recreational use season
- Early control of this species is recommended so that the plant is not allowed to produce large quantities of biomass that die naturally and decompose in early July when water temperatures and the potential for oxygen stress are high
- Serrated edge


Potamogeton crispus
curly pondweed growing in
Rose Lake, Wisconsin
Photo by Frank Koshere

Starry stonewort

- Rooted macro algae
  - Takes all nutrients from water column, not roots
- Originated in Europe
- First found in St. Clair River/ Detroit Area
- Can grow in 20’ of water
- Preferred by Zebra Mussels
- Forms a dense mat
- Rated as one of the more detrimental species to infest our waterways

Starry stonewort



- Photo credit: Bre Grabill, PLM

Algae

- **Filamentous, Planktonic, Macroalgae**
- An over abundance of algae is an indicator that there is an excess amount of nutrients within the water column/lake, causing the waterbody to become overly productive.
- Algae are very beneficial in a lake ecosystem and can be thought of as the base of the food chain. Therefore, some algae is required.
- However, when an algae reaches the point of hindering the use of the lake, control measures are available.
  - Actions should be taken within the watershed to promote a healthy lake ecosystem and decrease nutrient loading, etc. However, no immediate change will be seen with these actions.
  - Therefore, many lakes opt to include limited algae control within their management program.
- **Microalgae** includes three types, chara, starry stonewort and nitella.
  - Chara grows like carpet, water filter and is excellent for fish bedding

Algae

- **Planktonic algae**
  - Microscopic, often referred to as "water bloom". Typically Blue-green algae species
  - In large number, the algae can cause water to appear green, brown, yellow, or even red.
  - Can form toxins (not always)
  - Dealing with the source is often preferred over treatment. DEQ and lake limitations
- **Filamentous algae**, commonly called "pond scum"
  - Typically green algae or diatoms
  - Form raft-like masses over the water surface.
  - Vulnerable to winds and currents
  - Filamentous algae can grow attached to the lake bottom, weeds and docks. Frequently detach from the lake bottom and form floating mats.

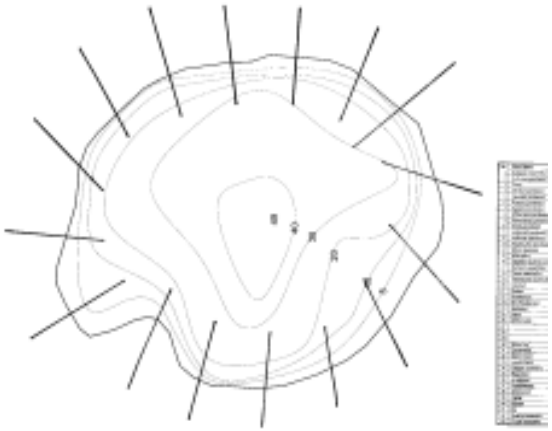
Lake Management Tools: An IPM approach using BMPs

- Aquatic Herbicides
  - Multiple Options
- Physical & Mechanical Tools
  - Raking
  - Harvesting
  - Aeration
- Biological Controls
  - Bacteria & Enzymes

PLM is Full Service!

Surveys

- AVAS Survey
  - DEQ approved survey technique, Document growth within every 300’ shoreline
- Pre/post treatment surveys



Cover Code	Approximate Cover Range
a	1-2%
b	3-20%
c	21-60%
d	61-100%

No	Plant Name
1	Eurasian watermilfoil
2	Curly leaf pondweed
3	Chara
4	Thinleaf pondweed
5	Flatstem pondweed
6	Robbins pondweed
7	Variable pondweed
8	White stem pondweed
9	Richardsons pondweed
10	Illinois pondweed
11	Large leaf pondweed
12	American pondweed
13	Floating leaf pondweed
14	Water stargrass
15	Wild celery
16	Sagittaria (submersed)
17	Northern watermilfoil
18	Green watermilfoil
19	Two-leaved watermilfoil
20	Coontail
21	Elodea
22	Bladderwort
23	Mini Bladderwort
24	Buttercup
25	Naiad
26	Brittle naiad
27	Sago Pondweed
30	Water Chippewa
31	Spatterdock
32	Water shield
33	Lemna minor
34	Greater duckweed
35	Watermeal
36	Arrowhead
37	Pickerelweed
38	Arrow arum
39	Cattail
40	Bulrush
41	Iris
42	Swamp loosestrife

No	Plant Name	Chippewa Lake Sept 2018
1	Eurasian watermilfoil	2.11
2	Curly leaf pondweed	0.99
3	Chara	29.86
4	Thinleaf pondweed	12.25
5	Flatstem pondweed	19.44
6	Robbins pondweed	12.82
7	Variable pondweed	15.63
9	Richardsons pondweed	0.70
10	Illinois pondweed	13.94
11	Large leaf pondweed	7.61
15	Wild celery	45.07
20	Coontail	15.77
21	Elodea	5.49
22	Bladderwort	1.69
25	Naiad	13.10
27	Sago Pondweed	3.66
30	Water Lily	17.75
31	Spatterdock	2.54
34	Greater duckweed	9.44
35	Watermeal	3.38
36	Arrowhead	0.42
37	Pickerelweed	6.34
39	Cattail	5.93
40	Bulrush	5.63
42	Swamp loosestrife	1.13
43	Purple loosestrife	0.72
	Total cumulative cover	253.41

Utilizing GPS in Aquatics

The use of GPS can greatly improve communication and accuracy of treatments

- Pre-treatment surveys downloaded directly to applicator hand held/boat GPS unit.
- Applicator tracking of application.
- Post-treatment surveys to ensuring treatment target area has been controlled.

Systemic Herbicides

- Two types of herbicides
  - Contact herbicides
    - Diquat, Aquathol K
    - Kill plants on contact, less selective, broad spectrum, shorter control period
    - Curly leaf pondweed
  - Systemic herbicides
    - Renovate OTF (Triclopyr) , Sculpin G (2,4d)
    - Slowly kill plants from the inside out, absorbed/translocated into the roots to provide longer control. Very selective on specific plant types.
    - Milfoil
  - New Product: ProcellaCOR

Treatment Information

- A majority of the products used in aquatics carry no swimming restriction on the label
  - DEQ requires a one day swimming regardless (safety of boats in beaches, some products work better when ground sediments are no disturbed).
- Required to post maximum restriction on label, although we rarely use maximum rates
- Herbicides attack the chlorophyll in plants and stop them from growing
- No fishing restriction
- Irrigation restrictions
  - Vary pending what product is used, can be a few days to a few weeks usually.
  - Again, we have to post maximum restriction which is often over what we would recommend for a given lake based on scope of treatment.
  - Feel free to call our office and we can pinpoint your location and updated restrictions for you!

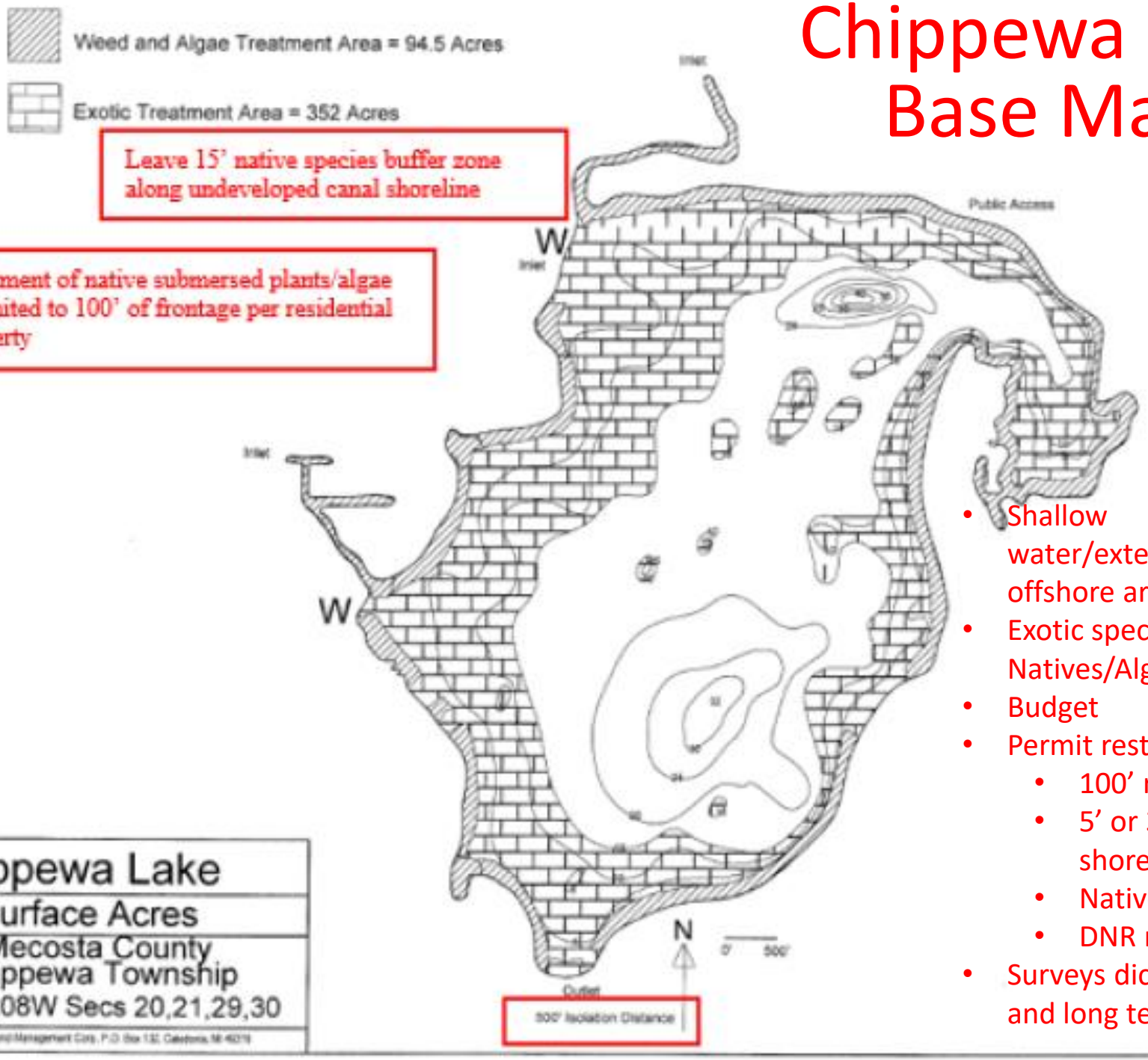
The Dose Makes the Poison

- Prescription drugs (antibiotics) are therapeutic if taken in small doses, but can be dangerous if abused or taken in overdose proportions.
- Pesticides, like antibiotics are effective when used in the right circumstances, but can become a threat to the environment or even human health if improperly used.

The Label is the Law

Less Toxic	LDC/50 mg/kg
Fluridone	10,000
Glyphosate	5,600
Table Salt	3,000
Triclopyr	2,574
Aspirin	1,000
2,4-D	300 – 1,000
Copper Sulfate	300
Diquat	230
Caffeine	192
Nicotine	53
Sodium Cyanide	6.4
Most Toxic	

Chippewa Lake Base Map



- Shallow water/extensive offshore area
- Exotic species/ Natives/Algae
- Budget
- Permit restrictions
  - 100' rule
  - 5' or 300' from shore
  - Native vs. exotic
  - DNR notification
- Surveys dictate short and long term decisions

Chippewa Lake News

Newsletter Produced by PLM Lake & Land Management Corp. Spring 2019

Chippewa Lake Manager
Bre Grabill
PLM Lake & Land Management Corp.
P.O. Box 424, Evart, MI 49631 (800)382-4434
www.plmcorp.net ; breg@plmcorp.net

NOTICE Chippewa Lake 2019 Treatment Program

The property owners in this area are planning to have the waters chemically treated to control lake weeds and/or algae. This notice is being circulated in accordance with Department of Environmental Quality (DEQ) procedures. Due to the uncertainty of weather, the treatment schedule is approximate. Please watch your shoreline for the posting of the 8.5 x 11 inch, yellow or green signs. The signs will indicate the date of the treatment, the products used, and any restrictions on the use of treated water for swimming, watering lawns, etc. One or more treatments involving water restrictive products may be applied. Please be aware that only products approved by the State of Michigan and the Federal government are being used. We have experienced no adverse effects on people, fish, wildlife or domestic pets since applying these products. We anticipate using one or more of the products listed. Please read the restrictions. Again, the restrictions that apply to the products actually used in a particular treatment will be found on the signs posted on the day of treatment.

2019 Tentative Treatment Schedule

Treatments will be occurring throughout the summer months. Please watch your shoreline for posting signs with specific restrictions. Please also note that you will see PLM on your lake many times this summer. We will not always be treating the lake, but performing many surveys, water quality testing, etc. Thank you for your understanding as we work to preserve and protect Chippewa Lake. *The following weeks of have been tentatively set but may be adjusted as the season progresses due to many factors (permit restrictions, growth, weather, etc. Always watch for posting signs.*

April 22: Spring Water Quality
May 20: Survey, optional Algae Treatment
June 3: Weed & Algae Treatment
June 24, Survey, Optional Treatment, Water Quality
July 15: Survey, Optional Weed & Algae Treatment
August 12: Survey, Optional Weed & Algae Treatment, August 26: Optional Algae Treatment September 9: AVAS Survey, Water Quality

WATER USE RESTRICTIONS

Navigate /2,4-D: Swimming or bathing: 1 day. Household use, irrigation, lawns and turf: 0 Days. Growing crops and non-crops "gardens": Indefinite unless assay indicates 100 ppb or less. Potable water: Indefinite unless assay indicates less than 70 ppb. Fish consumption: No restrictions.

Sculpin G/2,4-d amine: Swimming or bathing: 1 day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: assay of less than 100ppb. Livestock watering: See product label. Fish consumption: No restrictions.

Renovate/Triclopyr: Swimming or bathing: 1 day. Irrigation of Established lawns and turf: 0 Days. Household use & irrigation excluding grasses: 120 days or once assay determines product to be non-detectable. Fish consumption: No restrictions.

Diquat dibromide: Swimming or bathing: 1day. Animal consumption of treated water: 1 day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 days.

Florpyrauxifen-Benzyl/ProcellaCOR: Swimming or bathing: 1 day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: until assay indicates 1ppb or less. Livestock watering: N/A.

Stingray: Swimming or bathing: 1day. Animal consumption of treated water: 1 day. Domestic water use and irrigation of turf & ornamentals: 14days. Crop irrigation: 14 days.

Hydrothol 191/Dimethylalkylamine salt of Endothall Aquathol K/Dipotassium salt of Endothall

Aquastrike salt of Endothall : Swimming or bathing: 1 day. Household uses, irrigation, livestock watering: 2 weeks.

Flumioxazin (Clipper/Schooner/Propeller): Swimming /bathing: 1day. Domestic water use and irrigation of turf & ornamentals: 2 days. Crop irrigation: 5 days.

Nautique/copper carbonate, Komeen/copper as elemental: Swimming or bathing: 1 day.

PLM Blue, Cygnet Select: water dye (tracer), Copper Sulfate: copper sulfate, Cutrine Plus-Ultra, Captain-XTR, SeClear and SeClear G: chelated copper, Cygnet Plus, PolyAm: Adjuvant, AquaSticker, M.D. pellets: gram negative, naturally occurring bacteria. PLM Enzyme: enzymes, NO RESTRICTIONS!!

Certified Applicators: Salvatore Adams, Randall Brazelton, Jason Broekstra, James Connor, Bill D'Amico, Jeff Fischer, Christopher Garner, BreAnne Grabill, Dustin Grabill, Steve Hanson, Kris Heath, Jake Hunt, Jacob Irons, Adam Kehr, Michael Krueger, James Lee, Anna Lindquist, Blake Mallory, Casey Mohr, Michael Pichla, Carlr Pieri, Eric Reed, Colton Risner, Cameron Robinson, James Scherer, Allison Schermerhorn, Ben Schermerhorn, Casey Shoaff, Lucas Slagel, Keith terHorst, Jeff Tolan, Andr Tomaszewski, Dennis Vangessel, Andrew Weinberg

New Boating Law to Prevent the Introduction and Spread of Invasive Species

Michigan's Natural Resources and Environmental Protection Act (Act 451 of 1994) Part 413 has been amended with changes for boaters and anglers that take effect March 21, 2019. The changes are intended to strengthen protection for Michigan waterways against the introduction and spread of aquatic invasive species. Article and picture curiosity of Michigan.gov

What boaters need to know: stop aquatic hitchhikers—Prior to the amendment, the law only required that a person not place watercraft or trailers in the waters of Michigan if an aquatic plant is attached. In addition to this requirement, the new changes require all of the following prior to transporting any watercraft over land:

Removing all drain plugs from bilges, ballast tanks, and live wells.
Draining all water from any live wells and bilges.
Ensuring that the watercraft, trailer, and any conveyance used to transport the watercraft or trailer are free of aquatic organisms, including plants.
This means that after trailering boats, and before getting on the road, boaters must pull plugs, drain water and remove plants and debris.
Violation of the law is a state civil infraction and violators may be subject to fines up to $100.
What you should do: To comply with the law and prevent the introduction and spread of aquatic invasive species, boaters should:
CLEAN boats, trailers and equipment.
DRAIN live wells, bilges and all water - pull all drain plugs.
DRY boats and equipment.
DISPOSE of unwanted bait in the trash.

Aquatic Plant Management Q&A

Q. *Can we swim after a weed treatment?*

A. NO. There is a 24 hour swimming restriction within 100 feet of any treatment area of the lake. Actually, almost all of the herbicides that we use do not have a swimming restriction on the product label. However, the DEQ does not want you in the water during treatment for your safety and ours. If you see a boat spraying, please exit the lake, we come in close to shore!

Q. *Will my dog get sick if he drinks the treated water?*

A. NO. A dog would have to drink several thousand gallons of treated water to observe any noticeable effect. However, we do not want your dog in the water during or right after a treatment. Some of the herbicides we use become inactive if the sediment is stirred up in the water column. Therefore, keep the pets out of the lake for 24 hours!

Q. *Are the fish still safe to eat?*

A. YES! There are no fishing restrictions with any of our herbicide treatments. The herbicides used do not accumulate in the fish. They are safe to eat.

What Does the Color of the Treatment Sign Mean?

Green signs/notices indicate NO RESTRICTIONS on any type of water use.

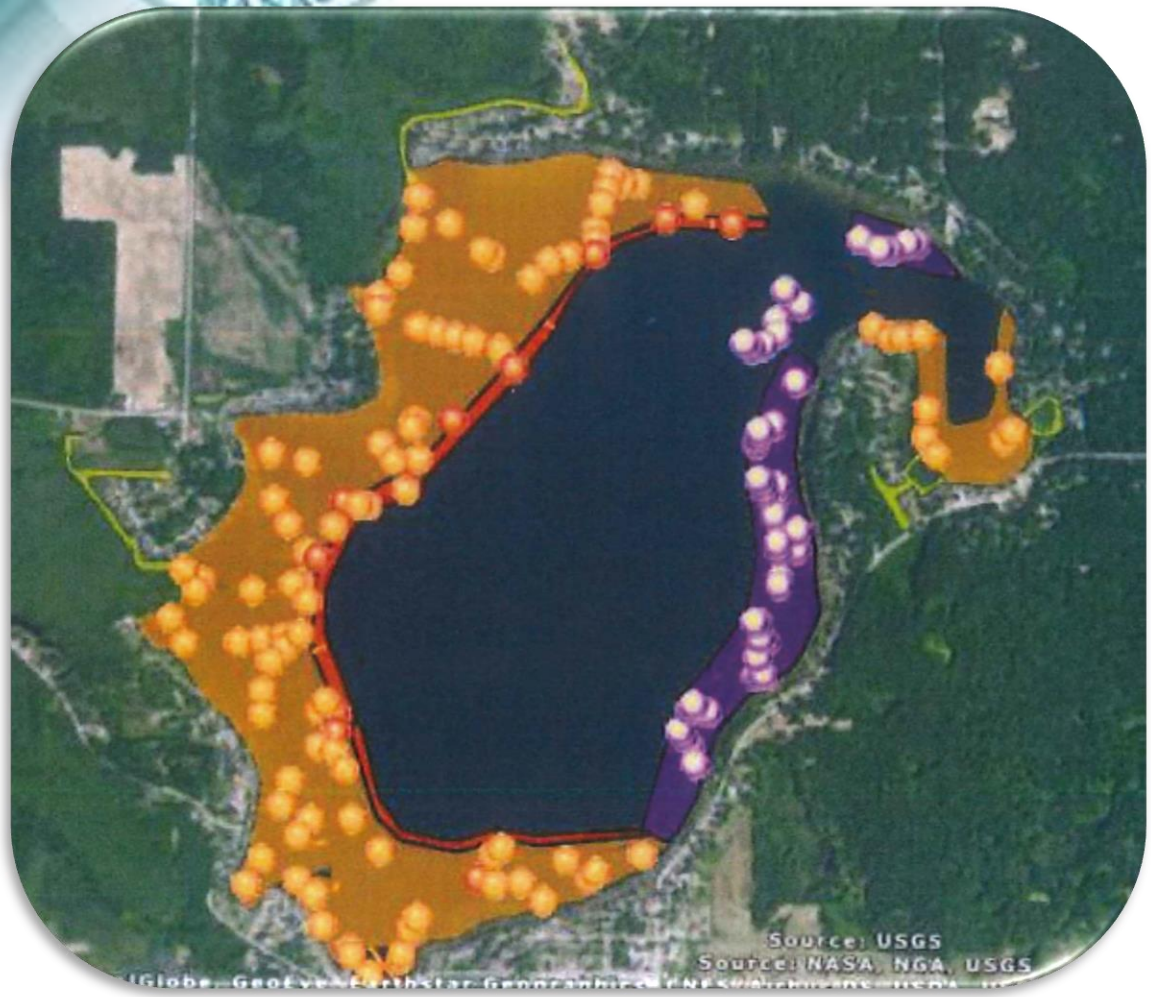
Yellow signs/notices means one or more of the following restrictions may apply:

- Maximum 1 day swimming restriction within the treatment areas. This restriction is in place to maximize treatment effectiveness; wildlife and pets will not be harmed by entering/drinking water.
- Established grass/turf irrigation is not restricted with most herbicides. Read posted notice for further clarification.
- Flower and garden irrigation may be restricted depending on herbicide used. Read posted notice for further clarification.

Starry Stonewort— Exotic Plant WATCHLIST

Starry stonewort has been quickly spreading throughout Northern Michigan. Starry stonewort (Nitellopsis obtusa) looks like a rooted plant but it is actually an alga. The plant is native to Europe and Asia and was first discovered in the St. Lawrence River in 1978. In 1983, it was found in the Detroit River and has since infested many Michigan lakes. Starry stonewort resembles the native aquatic plant Chara. Unlike Chara, which is generally considered to be a beneficial plant, starry stonewort has a tendency to inhabit deeper portions of the lake and can form dense blankets several feet thick. These mats can severely impede navigation and limit growth of more beneficial plants. Starry stonewort anchors to the sediments through rhizoids (primitive root structures) which can also absorb nutrients. Like Chara, starry stonewort also absorbs nutrients from the water through its cell walls. Starry stonewort has tiny, star-shaped, tan colored reproductive structures called bulbils that are firm to the touch when compared to its soft branches. These reproductive bulbils have been shown to stay viable for several years in lake sediments. It is unclear what effects starry stonewort may have on a lake's fishery. However, the encroachment of starry stonewort into fish spawning beds may be a cause for concern. Both algaecides and mechanical harvesting appear to be somewhat effective in controlling starry stonewort. However, given its propensity to produce massive amounts of growth, efforts to keep this invasive alga at bay will be difficult and potentially expensive. We are constantly on the lookout for new infestations of SSW for quick action. Please keep your eyes on the look out!

2017 Treatment Map



- 20 acres of CLP
- Over 353 acres of EWM
- Treatment very effective
- Spring 2018 survey found very little EWM!

2018 Treatments

- 5/31 Algae, CLP (some low density EWM mixed in) 27 acres
- 6/20 Algae, EWM/mixed beds 19.75 acres
- 7/18 Algae
- 7/26 EWM 67.5 acres
- 8/16 Algae

Treatment Costs

- 2017: $130,052.18
- 2018: $84,162.00
  - Substantial reduction from using systemic herbicides.
- 2019 Reality: likely between 2017-2018.

The Michigan Aquatic Managers Association (MAMA) was working hard this past winter to help YOU. PLM's Vice President Jason Broekstra who is also VP of MAMA, worked closely with members and our legislators to pass Senate Bill 1136 or Public Act 671 of 2018. This bill requires the DEQ to establish an Aquatic Invasive Species (AIS) funding program for lakes that currently have a special assessment district or statutory lake board and public access site with a valid DEQ ANC permit. Although the program is still in the implementation phase, an appropriation of $1,000,000 to help cover costs associated with invasive aquatic plant control is being initiated. For the 2019 season, we anticipate a portion of these funds being awarded for reimbursement of ANC permit application fees. YES, you may receive funds back from the State of Michigan for your permit fees!! MAMA and PLM will be working with the DEQ through the implementation process and will keep our clients updated on this new grant program.

2019 Tentative Treatment Schedule

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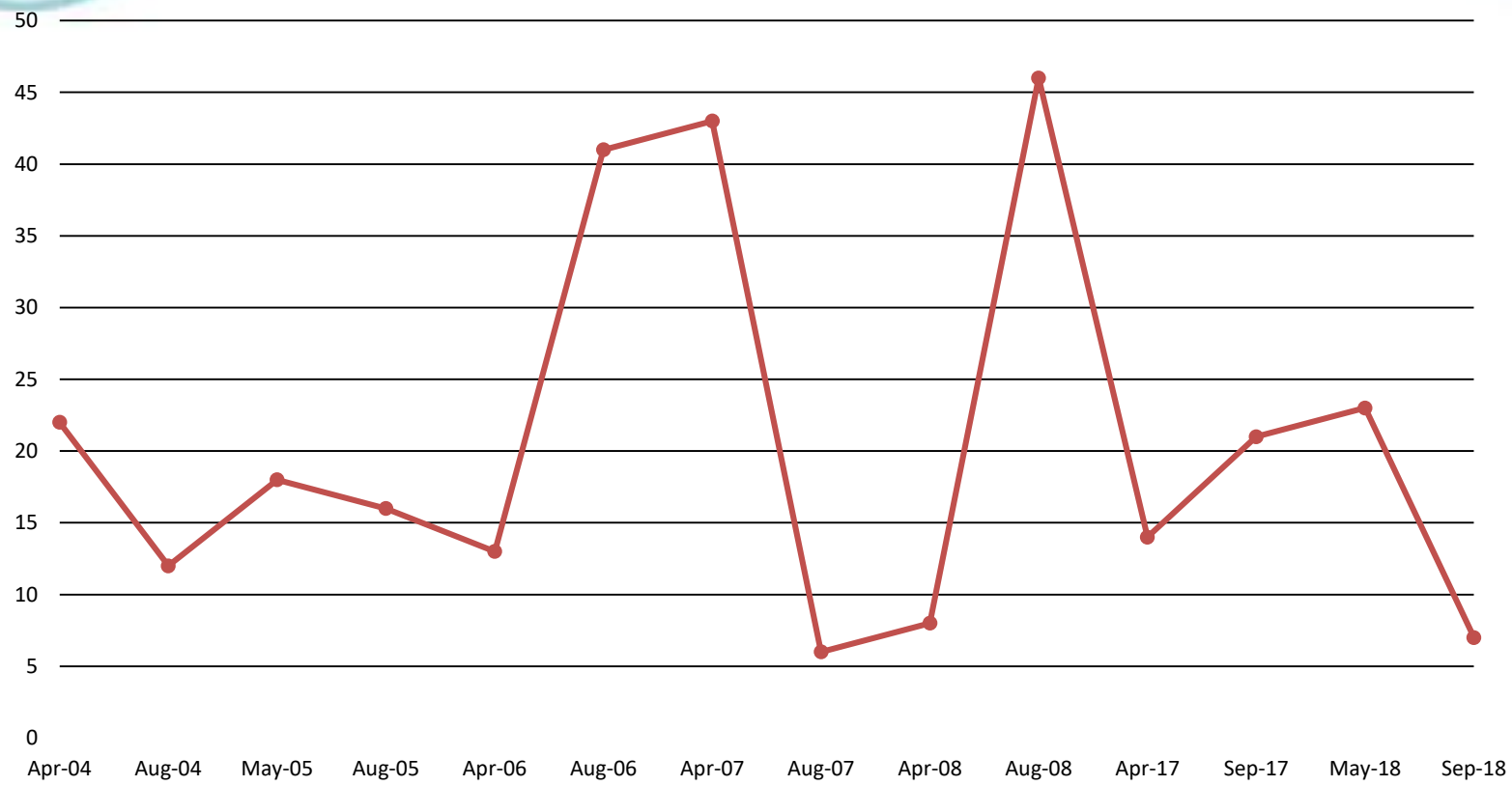
Water Quality Program

- Lake is tested 3 times a summer
- Spring
  - Nutrients (surface), DO, Temp, ALK, pH, TDS, Clarity, Conductivity
- Summer
  - Ecoli
- Late summer/Fall
  - Nutrients (surface), DO, Temp, ALK, pH, TDS, Clarity, Conductivity
- Important in making management decisions and understanding the impacts of human interaction on the lake (watershed) and why and how the lake is changing.

Total Phosphorus



This graph shows how Total Phosphorus can fluctuate depending on year. Lowering nutrient levels is an excellent sign in the overall health of the lake ecosystem. Continuing to monitor Chippewa Lake is very important to determine long term trends in the nutrient levels.

Eutrophication

- Lakes naturally progress from oligotrophic to eutrophic, a process called eutrophication.
- Human activities dramatically speed this process by increasing input of nutrients (phosphorus and nitrogen) and sediment
- Prevention is far easier and less expensive than restoring lakes already damaged
  - Monitor phosphorus and nitrogen concentrations
  - Encourage BMP – Phosphorus free fertilizer, buffers, soil erosion, leaves, debris out of lake
  - Evaluate sources entering lake (Watershed study)

Trophic Status

- Trophic status is a measure of nutrient richness and productivity. Lakes with different trophic categories also differ n a variety of characteristics important to lake users. Common categories include: Oligotrophic, Mesotrophic, Eutrophic and Hypereurotrophic
- Chippewa Lake is mesostrophic

Characteristics Typical of Different Trophic States

	Oligotrophic	Mesotrophic	Eutrophic	Hypereutrophic
Water Clarity	excellent	Good	fair-poor	very poor
Nutrients	low	Moderate	high	very high
Algae	few	Moderate	blooms likely	severe blooms probable
Plants	few	Moderate	abundant	few, in shallows
Fishery	cold water possible	cold water possible	warm water only	rough fish often dominate

If you live on a lake, you must own a rake!

- Regardless of management efforts it is the riparian's responsibility to clean shoreline of floating leaves and debris!
  - Reduces muck and improves the quality of your shoreline.
- Knowing the species is important.
  - Fragmentation!
  - New introductions!

Spotlight Lake: Chippewa Lake, Mecosta County - Comeback Champion

Chippewa Lake is a beautiful 790-acre lake, located in Chippewa Township, Mecosta County. With a large littoral zone, the lake has a few deep holes ranging from approximately 30'-40' deep, leaving a large area capable of growing aquatic plants. Like most lakes, it has a few channels, an outlet that flows most of the time and an excellent fishery. Almost two decades ago, Chippewa Lake began a management program for the exotic, invasive species, Eurasian watermilfoil (EWM) and Curlyleaf pondweed (CLP). Many lakes in the area have infestations with both species; however, the EWM population in Chippewa Lake is quite extensive. Fortunately, Chippewa Lake has a diverse native plant community that has fluctuated with the increasing EWM infestation, but has recovered after control measures were taken. PLM was fortunate to get back out on Chippewa Lake in 2017, after renewing their SAD and not treating milfoil in 2016. The survey found over 350 acres, approximately 44% of the lake, had high density EWM canopied at the surface. Upon discussion of the management options with the township, it was determined that the lake would receive a systemic herbicide treatment, using Triclopyr (Renovate). The treatment took place on June 26, 2017 and was highly effective in controlling the milfoil lake wide. End of summer surveys found only 6 locations in the lake with sparse EWM growth and the spring 2018 survey showed very little EWM lakewide. The goal of treatment was to provide seasonal control in 2017, with residual control in 2018. This goal was met and the treatment results exceeded expectations. With the hot, dry weather that the summer of 2018 brought, it was expected that EWM would resurge. In mid-July 2018, EWM was found and 60 acres were treated in July, an approximately 83% reduction from the previous year. Chippewa Lake will continue to fight a strong EWM population lake wide, but new management tools and technologies will continue to help Chippewa Lake fight exotic plants into the future. After a year of no treatment, Chippewa Lake came back through various management techniques to become one of most successful comeback treatments over an EWM infestation. This success makes it our Spotlight Lake this year!

Area of EWM Growth Prior to Treatment

STOP AQUATIC HITCHHIKERS!

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net

THANK YOU, QUESTIONS!!!

- Know your environment, what is around you
- Ask questions
- Communicate
- Prevention is key
- Early detection, rapid response
- We can all do our part!
- Let's work together to protect your Lake!

Bre Grabill
breg@plmcorp.net
800-382-4434
ext.2200