

Diamond Lake Guidebook



A look at the past, a view of the of the future.

Table of contents



Page 1

Page 2-4

Page 5

Page 6

Page 7

Page 8 & 9

Page 10

Page 11-14

Location Map

A look Back

Activities

Lake Rules

Contour Map

Aquatic Plants

Riparian Rights

How You Can Help

Diamond Lake Improvement Board

Randy Carson-Chairman/Lincoln Township Representative/Property Owner

Karen Dickinson-Vice Chairmen/Lincoln Township Representative

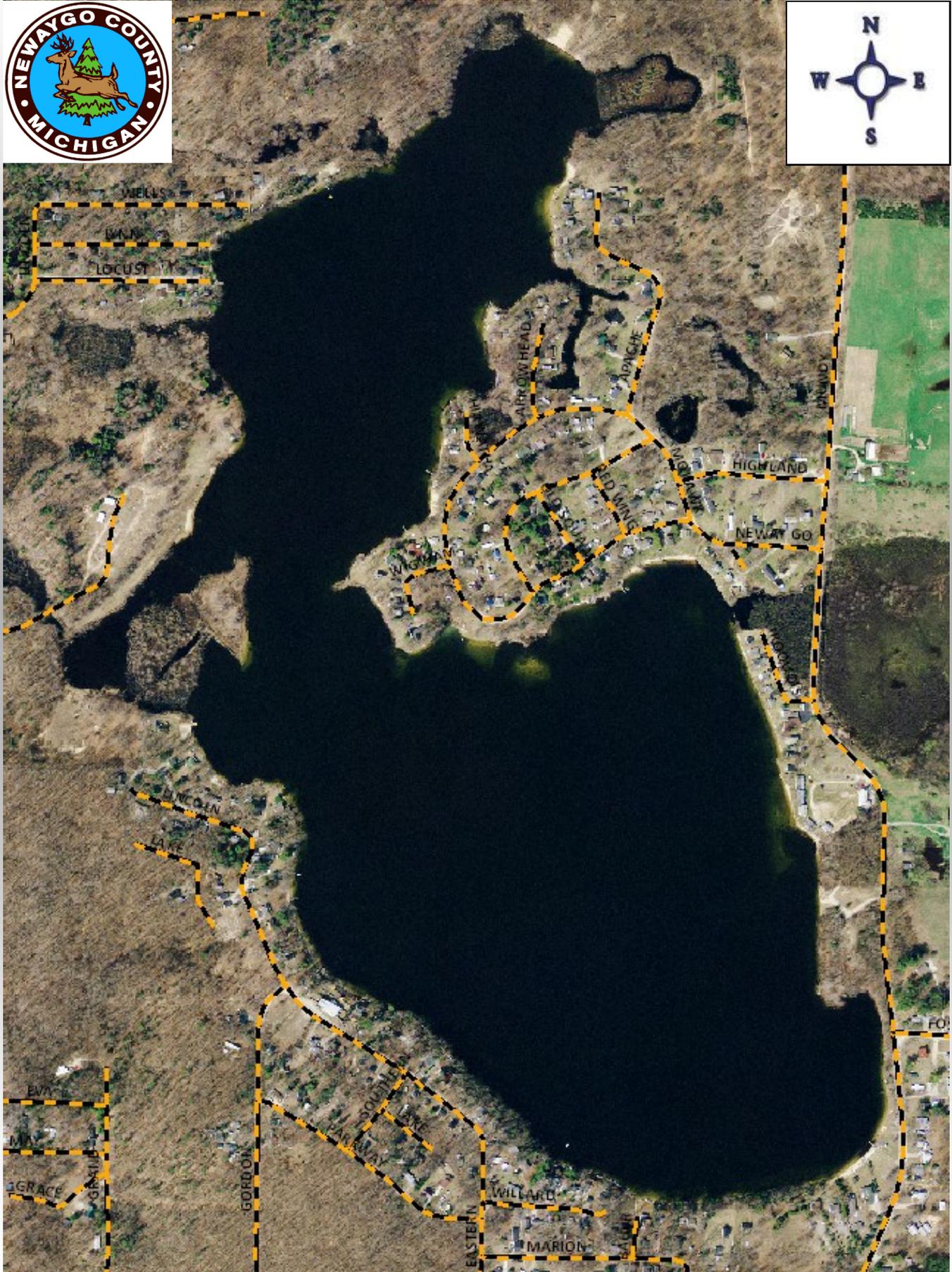
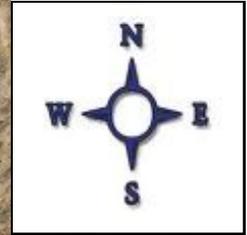
Duane Lowing-Diamond Lake Association Representative/Property Owner

Barb Geno- County Commissioner/By statute

Pat Baker-Drain Commissioner/By statute

Phone # 231-689-7213

Location



A look back

- 1880 West Michigan Lumber Company built a mill at the north end of Diamond Lake (Steelcase area), also largest of the three mills.
- 1890 The Diamond Lake mill reported cutting 121,193 feet of lumber with a circular saw in about 11 1/2 hours.
- 1892 Diamond Lake Ice Company of Grand Rapids rebuilt a large ice house on the south end of the lake capable of producing/storing 12,000 tons of ice.
- 1894 West Michigan Lumber Company ceased operations at the Diamond Lake Mill location.
- 1895 Post Office for the lake area discontinued.
- 1897 Diamond Lake Ice Company changed name to Consumers Ice Company.
- 1899 The Ice Company's building burned down.
- 1959 Diamond Lake Property Owners Association formed (originally known as Diamond Lake Association)
- 1964 Pulled from the lake bottom, four sets of narrow gage train wheels. (each set 400-500lbs.) Dated "1881"
- 1986 Diamond Lake Improvement Board formed.

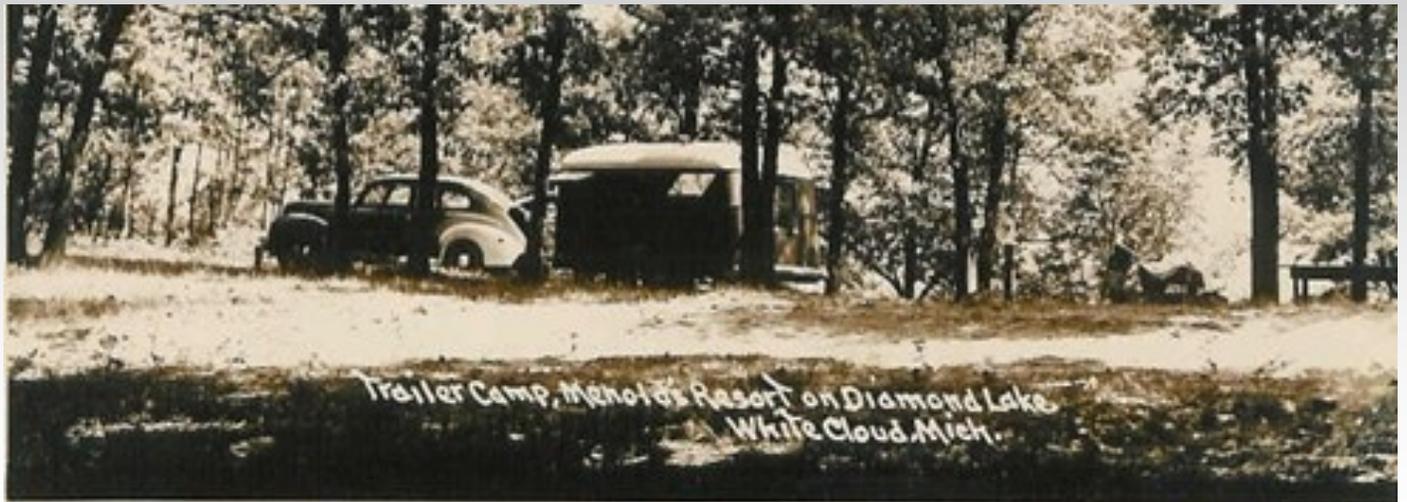
The ice company chose Diamond Lake for it's exceptionally clear water, which it still enjoys today!



West Michigan Lumber Co. mill built in 1880-81, ended operations in 1894. It was the largest of the three mills of this company.

West Michigan Lumber Co. mill at Diamond lake, shows the south-east tip of the lake and was taken from a point a short way up the hill.





Activities at or near the lake

Diamond Lake Association Meeting



4th of July Boat Parade



Lake Wide Rummage Sale



Adult & youth Fishing Contests



Free Dump Day/Township Cleanup



Hiking Trails



Swimming



Camping at Diamond Lake County Park



Diamond Lake Association Picnic

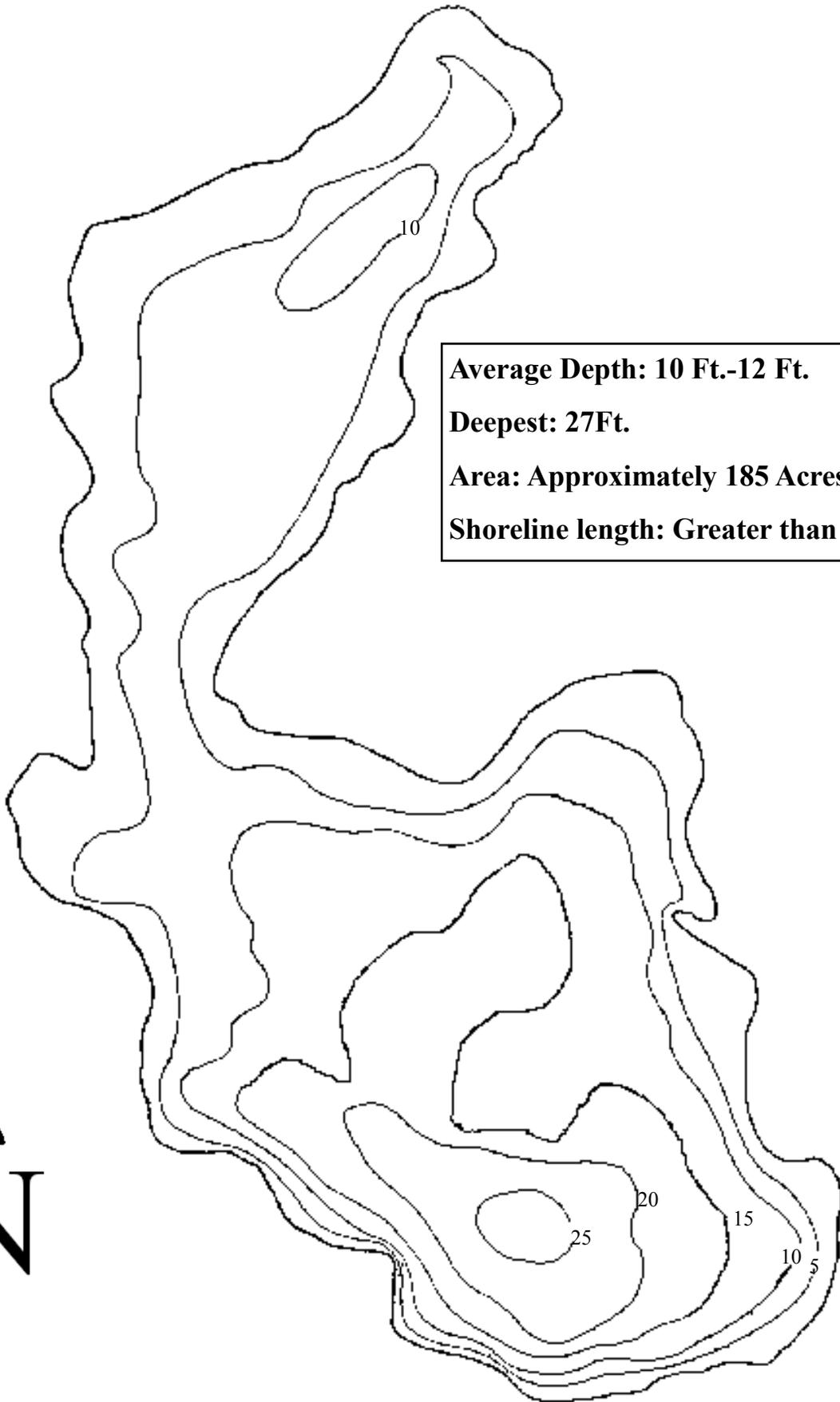


Lake Rules

1. "No Wake" is from 7:30 pm till 11:00 am (State Law)
2. All boats must travel "counterclockwise" around the lake.
3. Do not throw debris or trash into the lake.
4. "No Wake" within 100 feet of shore.
5. Everyone operating, riding, or being towed must wear an approved life Jacket.
6. All watercraft must be registered with numbers properly displayed on the hull.
7. Navigation lights must be used at night or during reduced visibility.
8. No boats allowed in the swimming area at any time.
9. No unattended boats or vehicles at the boat launch dock.
10. **Please be Careful, Courteous, & have FUN!**



Contour Map



Average Depth: 10 Ft.-12 Ft.

Deepest: 27Ft.

Area: Approximately 185 Acres

Shoreline length: Greater than 4 Miles

Aquatic Plants

Emergent- Found in the shallow water and has a large portion of stems and leaves growing above the water surface.

- ⇒ Interlocking roots anchor sediment and reduce erosion
- ⇒ Provide great nesting material



Floating- Have leaves that float on top of the water

- >Can be rooted (connected to the bottom) or free floating (not attached to the bottom)
- >Leaf shape and texture that resists tearing

Submersed- Grow underwater

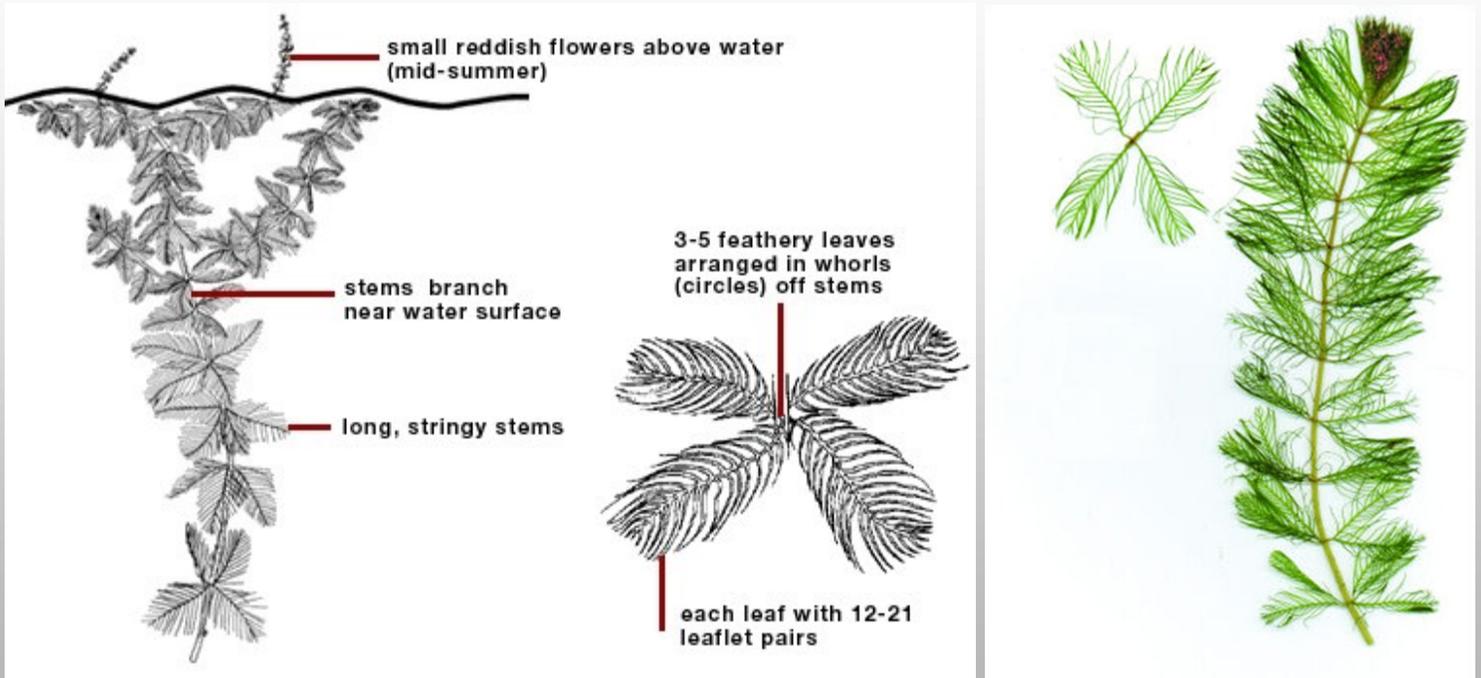
- ▶ Limp out of water
- ▶ Little or no cuticle facilitates gas exchange between plant and water
- ▶ Submerged leaves often dissected



What are the benefits of Aquatic Plants?

- *Provide habitat for fish, bird, insects
- *Photosynthesize which oxygenates the water
- *Stabilize sediments
- *Absorb nutrients
- *Slow down water
- *Can be aesthetically pleasing

Aquatic Plants



Eurasian Milfoil is an invasive aquatic plant. It was first found in the United States in the 1940's. Although it is non-native it is widespread in the state of Michigan. Eurasian Milfoil can cause many problems with the lake, it can choke out native desirable plant species, destroy fish habitat, and make water nearly impassable by boat. Eurasian Milfoil can grow in deeper water than most native plants and spread rapidly just from pieces broken or chopped off by boats or other water activities.

10 of the most common weeds in Diamond Lake in 2009. (per Clarke Aquatic survey)

Richardsons Pondweed	Illinois Pondweed
Large Leaf Pondweed	Wild Celery
Nymphaea (Lily Pad)	Nuphar
Cattails	Swamp Loosesrife
Chara (algae)	Watershield

The chemicals used to treat aquatic weeds and algae are approved by the EPA (Environmental Protection Agency), and the MDEQ (Michigan Department of Environmental Quality). Strict-detailed permits are obtained from the MDEQ on an annual basis.

A treatment **NOTICE** is mailed out to all residents on the lake every spring. The **NOTICE** includes any and all restrictions for each chemical that may be used. Before a treatment begins, signs are posted along the shoreline which indicate the chemical(s) to be used along with any restrictions.

Riparian Rights

Riparian rights are property rights which run with the land. Only land which abuts a natural body of water has riparian rights. A riparian property owner has the following property rights:

1. Access to water.
2. Install a dock anchored to his bottomland.
3. Anchor a boat on his bottomland or secure it to his dock.
4. Use water from the lake or stream for domestic purposes.
5. Controls any temporarily or periodically exposed bottomland from the water's edge to the high water mark against trespass



A PERMIT FROM THE DEPARTMENT OF ENVIRONMENT QUALITY IS REQUIRED FOR ANY OF THE FOLLOWING:

1. Dedicate any portion of the surface of a lake or stream for commercial use, such as a marina.
2. Build a seawall closer to the water's edge than the high-water mark.
3. Dredge or place fill in a lake or stream.
4. Increase or decrease the size of a lake or stream.
5. Dig a channel to connect a pond to a lake or stream.



A RIPARIAN MAY NOT:

1. Permanently anchor a raft or moor a boat on bottomland that belongs to another riparian property owner.
2. Install a pier an unreasonable length out into a lake or stream.
3. Cannot transfer his riparian rights to another person.
4. Cannot unreasonably restrict the use of the surface of a lake or stream by members of the public.



More information can be found online @ www.mlswa.org or www.mwai.org

How You Can Help

Shorelands Management

What lakefront property owners should know and do

By Progressive AE

Proper shoreland management is vital to protect both water quality and fisheries. During pre-settlement days, much of the shoreland around lakes was forested, wetlands, or grassland. Natural habitat was abundant. Over time, as shorelands were developed, much changed. Shoreland vegetation was removed, and natural areas that allowed rain waters to infiltrate were replaced by rooftops, roads, driveways, and other hard surfaces. Now, rather than infiltrating, storm water runs off these hard surfaces, often carrying fertilizer, oil, and other pollutants to the lake. Problems associated with excessive shoreland development include increased aquatic plant growth, diminished fisheries, and poor water quality. How we manage our shorelands can have a direct and profound impact on the quality of our lakes. Protecting shorelands is straightforward: Maintain or restore as much natural shoreland as possible. That is not to say that you can't—or shouldn't—have an area to swim, moor boats, fish or lounge by the shore. However, manicured lawn to the water's edge and boundless seawalls are not conducive to healthy lakes, nor is large-scale removal of aquatic vegetation. In addition to protecting or restoring natural shoreland, you should also be careful about the application of lawn fertilizers, especially fertilizers containing phosphorus. Phosphorus is the nutrient that most often stimulates excessive growth of aquatic plants and causes premature lake aging. Fertilizers should only be used sparingly near lakes, if at all. If you must use fertilizer, only use a phosphorus-free fertilizer. Once in the lake, a pound of phosphorus can generate hundreds of pounds of aquatic vegetation. This vegetation is most evident in the near-shore areas of the lake where we swim and recreate. Take a look at the following illustrations. Then take a look at your shoreland and see what you can do to help preserve the natural features of your lake.



Caring for Your Shoreland

Your shoreland can be maintained to provide beach and boat access for you while maintaining habitat for fish and wildlife.

Don't dump into storm drains; pollutants may be piped directly to the lake.

Most lakeside soils have more than enough phosphorus to grow lawns, trees, and shrubs. Adding phosphorus fertilizer is usually not necessary, and can cause excessive growth of aquatic plants.

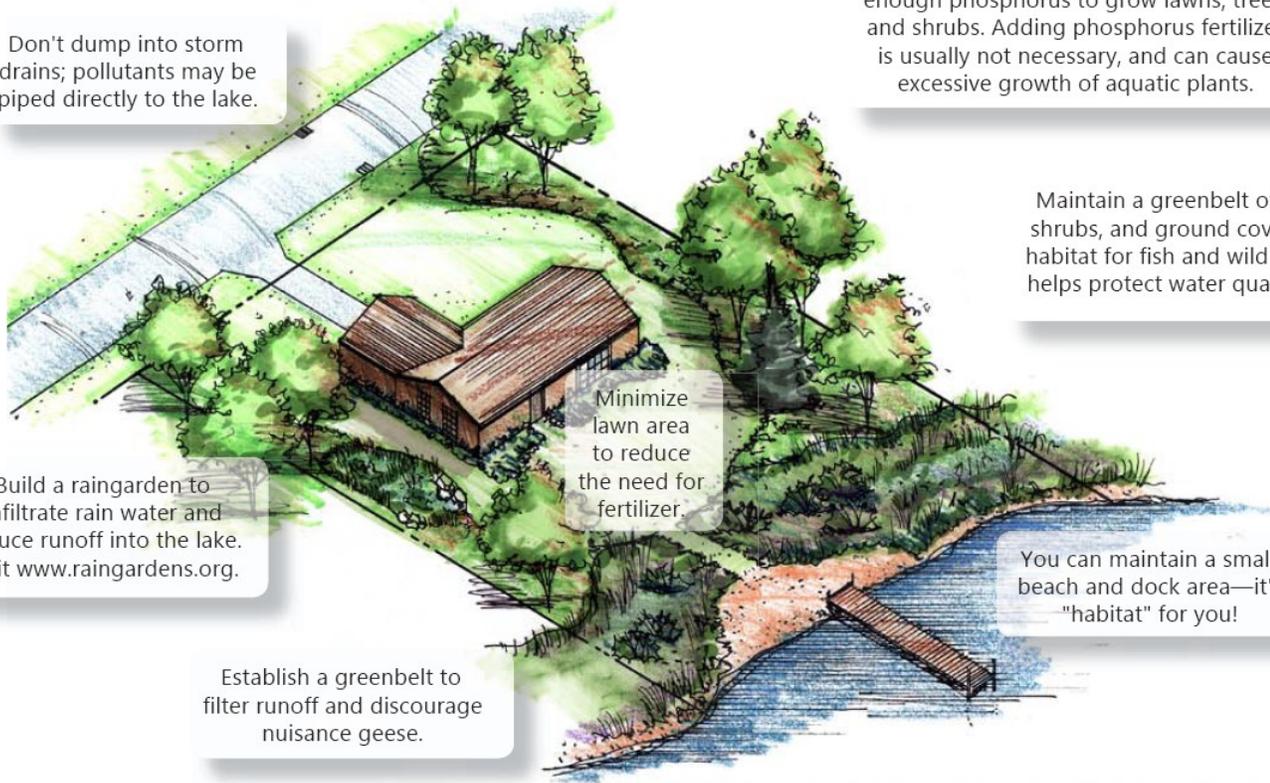
Maintain a greenbelt of trees, shrubs, and ground cover—it's habitat for fish and wildlife, and helps protect water quality too.

Build a raingarden to infiltrate rain water and reduce runoff into the lake. Visit www.raingardens.org.

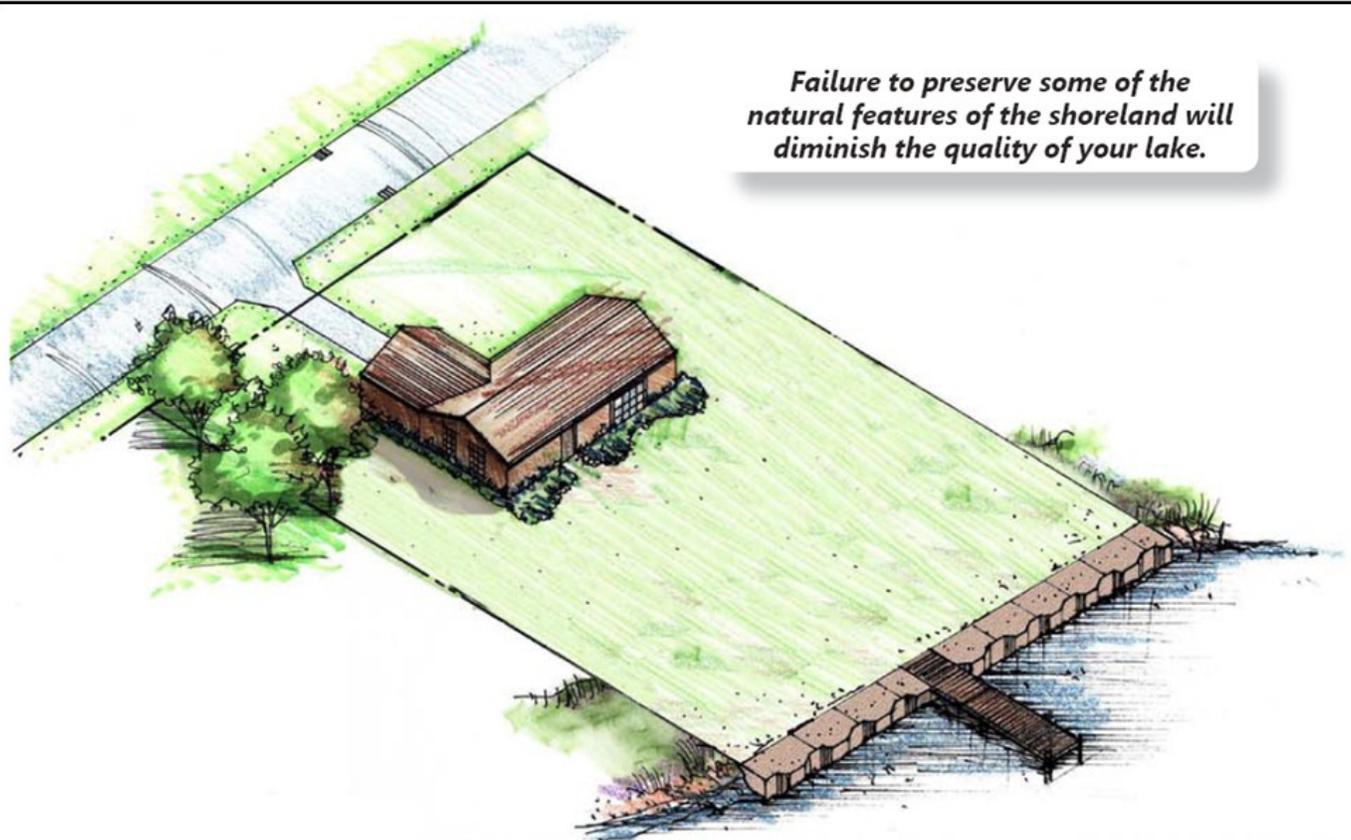
Minimize lawn area to reduce the need for fertilizer.

You can maintain a small beach and dock area—it's "habitat" for you!

Establish a greenbelt to filter runoff and discourage nuisance geese.



Failure to preserve some of the natural features of the shoreland will diminish the quality of your lake.



Aquatic plants are part of a healthy lake. They produce oxygen, provide food and habitat for fish, and help to stabilize shoreline and bottom sediments.

Insects and other invertebrates live on or near aquatic plants, and become food for fish, birds, amphibians and other wildlife.

Plants and algae are the base of the food chain. Lakes with a healthy fishery have a moderate density of aquatic plants.

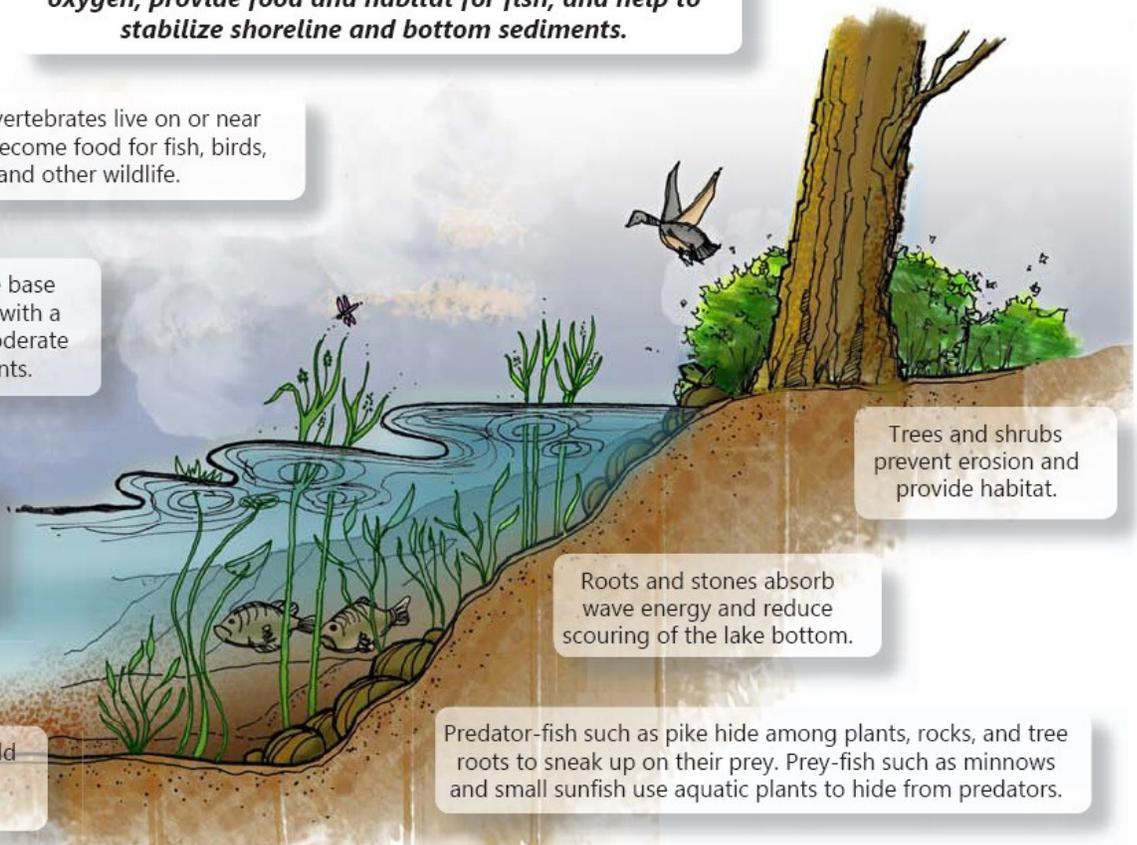
Aquatic plants provide habitat for fish and other aquatic life.

Aquatic plants help to hold sediments in place and improve water clarity.

Roots and stones absorb wave energy and reduce scouring of the lake bottom.

Trees and shrubs prevent erosion and provide habitat.

Predator-fish such as pike hide among plants, rocks, and tree roots to sneak up on their prey. Prey-fish such as minnows and small sunfish use aquatic plants to hide from predators.



Seawalls deflect waves and cause scouring of the lake bottom.

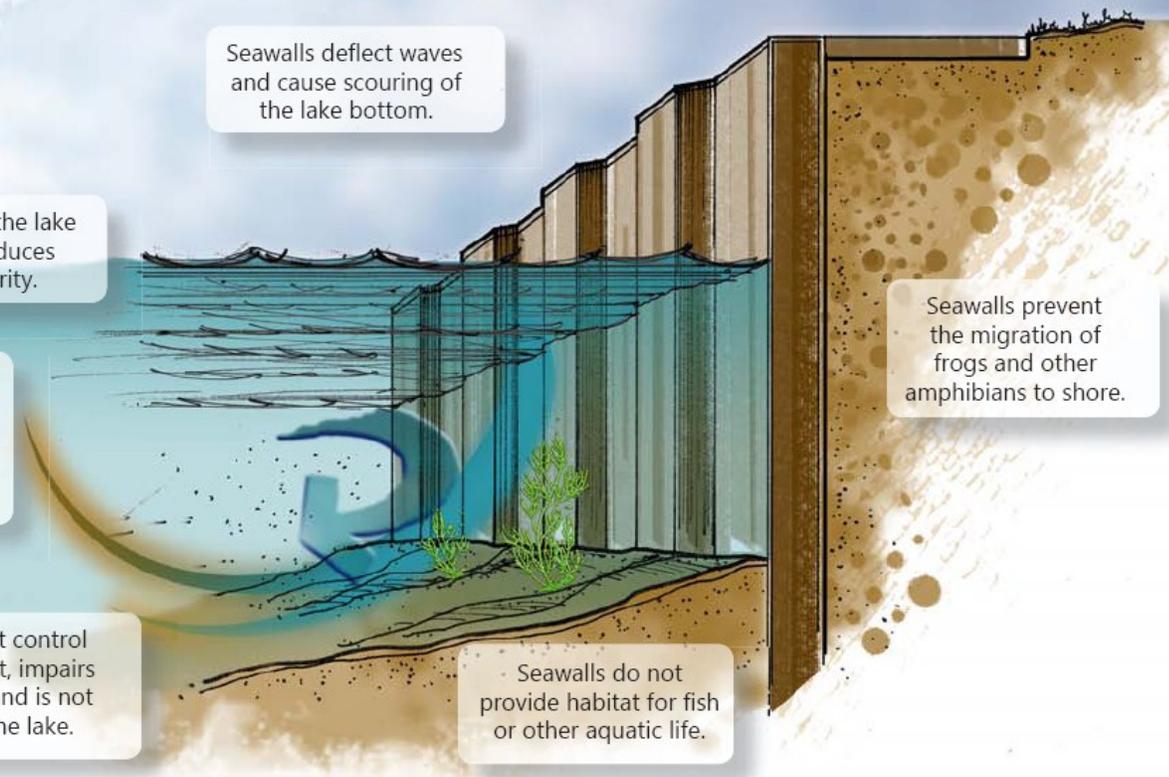
Scouring of the lake bottom reduces water clarity.

The nuisance exotic plant Eurasian milfoil often invades disturbed lake bottoms, such as areas along seawalls.

Excessive plant control reduces habitat, impairs water quality and is not healthy for the lake.

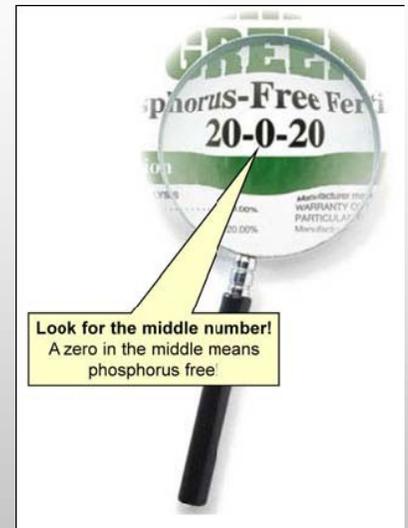
Seawalls do not provide habitat for fish or other aquatic life.

Seawalls prevent the migration of frogs and other amphibians to shore.



10 Ways to Protect Your Lake

1. **DO NOT** use fertilizer that contains phosphorous.
2. Use the **minimum amount** of fertilizer recommended on the label.
3. Water the lawn sparingly to avoid washing nutrients and sediments into the lake.



4. **DO NOT** feed ducks and geese near the lake. Waterfowl droppings are high in nutrients and may cause swimmers itch.
5. **DO NOT** burn leaves and grass clippings near the shoreline. The highly nutrient ash can easily wash into the lake.
6. **DO NOT** mow to the water's edge. Instead leave or plant a strip of natural vegetation, this will trap pollutants and sediments, and absorb nutrients.



7. **DO NOT** dump anything in wetland areas. Wetlands are natural purifiers.



8. If you have a septic system get your tank Pumped every 2-3 years.
9. If you trailer your boat from lake to lake, wash your boat before launching it back into the lake.



10. DON'T be complacent! Our actions can make or break the lake!