WELCOME TO PINE LAKE

Pine Lake Property Owners Association, Inc. (PLPOA)

Our Lake Association

2017

www.plpoa.net

~ Pine Lake: Yours and Ours to Protect ~

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IMPORTANT NUMBERS:

WEST BLOOMFIELD POLICE	Dial	- 911
Lake Violations on Pine Lake	can be report	ed to the Oakland
County Sheriff's Department,	Marine Divis	ion - 248.858.7831
Oakland County Sheriff Dispa	tch Number	- 248.858. 4950
Oakland County Sheriff Gene	ral Number	- 248.858. 5000
WEST BLOOMFIELD CODE EN	FORCMENT	- 248-451-4800

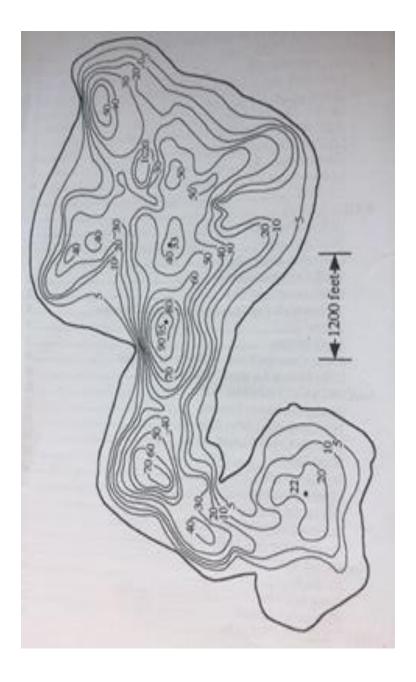
WEST BLOOMFIELD THEFT REPORTS - 248-682-9200

Welcome to Pine Lake, our 395-acre lake. Pine Lake is **NOT** spring fed; it is a kettle lake fed by water that runs downhill into the lake from the properties around it, according to Dr. Jude, our lake limnologist. To maintain Pine Lake's excellent water quality, we need to stop more nutrients and soil erosion from entering the lake. The water in the lake already has lots of phosphorus and nitrogen in it. So, to avoid adding more nutrients to the lake, please advise your lawn fertilizer company to use *weed killer* ONLY and not fertilizer.



Facts about Pine Lake:

Size: 395 Acres - Kettle lake <u>not</u> spring fed —all water is from homes/land around lake Maximum depth: 90 feet; Mean depth: 18.9 feet Drainage basin: Clinton River System Elevation: 931.5 feet above sea level



History of the Pine Lake Property Owners Association (PLPOA)

In the fall of 1960, the PLPOA was established. The purpose for creating the association, which is open to residents and owners of property on Pine Lake, was to:

- 1. Maintain high property values and limit expansion of commercial enterprises by maintaining the present zoning laws and restrictions.
- 2. Oversee that undeveloped acreage contiguous with Pine Lake complies with present zoning laws restricting them to private residential use.
- 3. Develop ample fire and police protection for the protection of Pine Lake residents.
- 4. Work with West Bloomfield and Oakland County government agencies to control boating for the health and safety of all.
- 5. Develop an arrangement with boat liveries to control hours and the deposit of refuse into the lake.
- 6. Develop public relations with the township to improve police powers for maintaining and protecting public health and safety.

As early as 1962, the PLPOA began monitoring local property development by working with the township regarding ordinance violations, establishing a water safety program, and originating a lake weed control program. Through the years the board has continued these activities and expanded them to include the enhancement of water quality.

The PLPOA today

Today, the PLPOA is managed by an elected board consisting of 10 members. Approximately 1/3rd of the board is elected annually from and by the members at the PLPOA annual member meeting. The Board of Directors meets once a month seven months out of each year, or as needed. The PLPOA annual meeting is held during the first week in May each year at the Pine Lake Country Club. All members are cordially invited to attend.



PLPOA Dues. There are approximately 175 lake front homes,13 homeowner or condominium owner associations, a country club and one marina (grandfathered) on Pine Lake and who

are eligible for membership in the PLPOA. All members in good standing contribute annual dues to the PLPOA. These dues cover: Sheriff patrol (budget \$3600/year), lake quality studies by our lake Limnologist, weed studies by our weed expert, treatment of invasive weeds, and goose egg and nest remediation.

Many lake front homes also belong to their subdivision's homeowners association. These lakefront homeowners pay annual dues to their local homeowners association as well as the PLPOA. Other homeowners in the Pine Lake area are members of the following associations: Birch Harbor, Pine Lake Manor, Pine Center, Pine Lake Estates Beach Assn. and Cedardale. These homeowners pay annual dues ONLY to their local homeowners association and their associations are members of the PLPOA (not the individual homeowner). Similarly, of the condominium developments around the lake, those condominium owners pay their regular monthly dues to their condominium assocation and their condominium association is a member of the PLPOA. Some of the names of condominium associations around the lake are South Shores Condos, Maple Hill East and West Condos, Pine Harbor Condos, and West Bay Condos.

As mentioned above, if you pay homeowner dues to your homeowners association, these dues are separate from PLPOA dues, which are paid by individual lakefront riparians, the associations, the Marina and the Pine Lake Country Club. Both types of **dues** are needed to help maintain Pine Lake and the lake management plan and you're the PLPOA.

NEW PINE LAKE RESIDENTS

The PLPOA Board of Directors **Welcomes you!** The board asks you to go to its web site <u>www.PLPOA .net</u> and click on the contact us button (<u>info@plpoa.net</u>) and send us an email with your name and address, and we will add you to our roster of PLPOA riparians and send you our newsletters . Also, you will find a wealth of good information about the area on the website so we hope that you'll take a moment to look in on the website.

For Homeowners – Please send your **dues** to our PO Box by the **<u>end of May</u>**:

PLPOA	P.O. BOX 222	Keego Harbor,	MI 48320.

HELP US TAKE CARE OF PINE LAKE Fertilizer and Lawn Care:

The PLPOA has a **NO FERTILZER CAMPAIGN IN PLACE.** If you water your lawn and beds using lake water, our lake limnologist has determined that you do **NOT** need to apply fertilizer, because the water contains sufficient nutrients for your lawn and beds. Please advise your lawn care company to apply only weed killer, and **NOT** fertilizer on your lawn and beds, especially those sections that abut the lake.

West Bloomfield has an ordinance to regulate the application of manufactured fertilizers and designed to protect our lake as a natural resource. No manufactured fertilizer is permitted within any wetland, watercourse or lake area **within 50'** of the edge of the lake. The ordinance also provides that no fertilizer may be applied prior to **May 1st or after October 1**, in the areas near water, lakes, rivers, or canals in the township.

Note: Michigan law prohibits the use of phosphorus in fertilizer.

For further information, contact West Bloomfield Township Development Office at (248) 451-4818.

Our lake Limnologist, Dr. Jude has advised the board that applying too much nitrogen is also harmful to the lake. He advises PLPOA members that July and August are the most important times to be sure to <u>limit nitrogen and</u> nutrient introduction into the lake from a lake water quality perspective. As a result, Dr. Jude would like no one in the watershed to *fertilize in July and August*.

TO DO: Erosion of dirt into the lake is <u>especially hard on the</u> <u>lake</u>. Erosion can add more nutrients to the lake than does commercial fertilizer for the same volume. Every lakefront owner and association should **plant a rain garden** to promote healthy plants around the lake front perimeter to *resist erosion*. We all need to be vigilant if we see erosion around the lake to try to stop it.

HELP US TAKE CARE OF PINE LAKE CHART

Emergencies- Injuries- Lake Violations and Reporting Thefts



Rake Your Leaves



Raking Your Leaves and keeping them out of the lake help protect the lake. The nutrients from the leaves fuel algae growth and lower dissolved oxygen levels in the water

Washing your boat

throughly and emptying your bilge before putting your boat in the lake protect against invasive species such as Zebra Mussels and Eurasian Milfoil

Use Granular Fertilizer

Wash

Your

Boat



Fertilize using granular slow release products and stay 25' away from lake. All fertilizers have a three number system. I st number Nitrogen, 2nd Phosphorous, 3rd Potassium. Phosphorous should be a 0.

Don't Dump your Bait



Don't dump bait most bait can be put in the trash, but crayfish and worms, which can crawl out of the trash, should placed in a sealed container before disposal.

WEST BLOOMFIELD POLICE (Emergency)	- 911		
Lake Violations on Pine Lake can be reported to			
the Oakland County Sheriff's Department,			
Marine Division - 248.858.7831			
Oakland County Sheriff General Number	- 248.858.5000		
Oakland County Sheriff Dispatch	-248.858.4950		

WEST BLOOMFIELD CODE ENFORCMENT	- 248-451-4800
WEST BLOOMFIELD THEFT REPORTS	- 248-682-9200

Some Lake Violations Include:

- Boats traveling in the wrong direction (counterclockwise is the proper direction)
- Reckless Personal Watercraft riding
- Riding in a Personal Watercraft without a life vest
- Not having an observer when pulling a skier
- Swan Harassment
- DUIL Note ALL boaters are now subject to the same alcohol rules as car drivers. Only those of legal age may drink and .08 is the NEW alcohol limit.

LOST AND FOUND

ITEMS CAN BE REPORTED TO PINE LAKE MARINA or PLACED AT THE END OF YOUR DOCK. Often owners look for lost items & find & retrieve them on your dock!

Lake Walls and Construction within 25' of the Water

If you plan to (1) add to or replace your lake wall on Pine Lake, or (2) make any changes to your property within 25' of the lake, West Bloomfield Township ordinances require that you contact the Development Services Office of West Bloomfield Township (248) 451-4818 to be advised of any permits and necessary plantings which accompany any construction.



SECTION 2: MANAGEMENT, MONITORING AND PLANNING FOR PINE LAKE AND ITS WATER QUALITY

Fifty years ago, the PLPOA implemented a water quality testing program, conducted by a limnologist, which includes an ongoing series of tests to continually monitor the quality of our water and items that impact the water quality. As a result, the PLPOA has a long historical record tracking the changes in water quality of the lake over the years. This historical information is invaluable in providing the necessary information to successfully manage and enhance the lake water quality going forward.

Water samples are obtained several times each spring/summer season. Our limnologist tests the following: Temperature Dissolved Oxygen Total Phosphorus Total Nitrate Nitrogen Alkalinity Chlorophyll-A Conductivity Hydrogen PH Salt

Other Tests performed may include: Weed Mapping (as needed) and Fish Survey (every 10 years). Secchi Disk (Water Transparency depth) Lake bottom sedimentation Watershed analysis Lake Shore Green Belt Programs Soil Samples Storm Drain Runoff Pesticides and mercury Algae Study Treatment needs for Invasive Lake Weed Species

Weed Maps and Aquatic Weed Study:

Pine Lake's weeds were mapped in the summer of 2016. Detailed sampling was taken of the location and identification of native aquatic weeds and invasive aquatic weeds on Pine Lake's lake beds. Consultation with our lake limnologist, lake weed expert and our lake contractor have guided PLPOA to develop a long-term lake management plan for the elimination of invasive aquatic weeds and the management of native aquatic growth.

Invasive Aquatic Weed Management and Weed Harvesting:

After consulting with our lake limnologist, our aquatic weed specialist, and weed harvesting contractor, the PLPOA discontinued the long-standing weed harvesting program in 2016 after it was determined that the new invasive weeds found in the lake, such as Eurasian Milfoil, were being spread around the lake due to the weed harvesting process. In 2013, the PLPOA Board adopted a pilot program to combat the invasive Eurasian Milfoil weed in Pine Lake. This program has been effective in reducing and controlling the invasive weed beds. Guidance was and is being obtained from our limnologist, aquatic weed specialist and lake contractor as to the annual work needed to attempt to eliminate all invasive aquatic weed species.

Lake Level of Pine Lake:

Pine Lake is a kettle lake (not spring fed), and gets its water solely from the watershed acreage that surrounds Pine Lake. Pine Lake's median water height is approximately 931.5 feet above sea level. The amount of water in Pine Lake depends upon the amount of *snow in winter* and rain in summer. It is normal to have the water level vary as much as a foot or more during any summer season. Excess water is absorbed into the soil around Pine Lake and drains into Orchard Lake, which is lower in sea level than Pine Lake. In fact, Pine Lake is the highest lake above sea level in Oakland County!



Leaves (Fall) can damage the water quality of the lake

West Bloomfield Township has an ordinance that does not allow leaves to be raked into the lake as they breakdown into *nutrients which encourage weed growth* and adds to 'muck' on the lake bottom. If possible, remove leaves that fall into the lake. Also, please instruct your lawn care company to blow all leaves *away* from the lake and remove them.

Michigan state law prohibits the burning of leaves and other yard waste or debris

All yard waste removed needs to be placed in large lawn paper bags or in garbage cans labeled "Yard Waste Only" for removal by West Bloomfield Township.



Remove Leaves from the lake edge, or they turn into muck.

Septic Systems

There are septic systems in various locations around the lake. For those with septic tanks, have your tanks pumped every two or three years.

If your field is over 20 years old or closer than 100 feet to the lake, please have it inspected annually by an expert to assure that it is operating properly and not harming the lake.

Ducks, Geese, and Swans



PLEASE DO NOT FEED ANY WATERFOWL. Ducks, geese and swans all contribute '*waste nutrients*' into the lake.

The PLPOA has taken steps to slowly reduce the goose population on Pine Lake by hiring a Michigan DNR licensed and approved expert to implement a program to remove nests and eggs during a 3-week period in April each Spring. If you observe any geese loitering in an area where a nest may be present, please send a message to us at PLPOA.net (<u>info@plpoa.net</u>) with details of exactly what home and location the nest is located.

There are two established Mute Swan families with a possible 3rd pair which arrived in the summer of 2016. Mute Swans are not native to Michigan and have multiplied exponentially taking over the native Trumpeter Swan's territory. PLPOA is trying to keep the swan population on Pine Lake at two families. While swans do keep the geese away, the goose population on Pine Lake has been managed well with the DNR approved Nest and Egg Remediation Program.

Other lakes have found if too many swans are on a lake, the swans may protect their territories by attacking personal watercraft or boats. There have been published incidents in Oakland Count Lakes where swans have attacked humans to protect their territories.

Swans should not be teased, **FED** or have personal water craft come to close to the swans. Protection of Swans is enforced by the Oakland County Sheriff's Department and the DNR, who have issued large fines for harassing or killing a swan.

Eurasian Milfoil, Invasive Weeds and Excessive Nutrients in the Lake:

Our lake limnologist has made recommendations which include containing the invasive aquatic weed Eurasian Milfoil with a management program and to watch for the new invasive Starry Stonewort weed.



Eurasian Milfoil Invasive Species in Pine Lake.

Our limnologist, Dr. Jude has also made the following recommendations to the Board and to owners on the lake:

Nutrient inputs into Pine Lake

 Discourage waterfowl - no waterfowl feeding, hire a contractor to destroy goose eggs/nests, identify and report mute swans nest locations.

- Each home (riparian) and the associations/businesses must develop plans to reduce nutrient applications (lawn fertilization), especially nitrates, and stop using high-phosphate detergents for car washing or other cleaning activities. Get leaves out of the watershed; no burning. Some modifications have been done for some of the drains and input should be made to suggest changes to the design of drains to ameliorate nutrient inputs, which sometimes can become severe, especially during rain events.
- Encourage the road commission, lake front owners and associations etc. to sweep roads and clean out man hole traps around Pine Lake to remove leaves, organic matter, and other sources of nutrients. Some drains have already been upgraded; continue these efforts to modify or divert any drains coming into the lake if developments, upgrades, or modifications offer the opportunity.
- PLPOA worked with West Bloomfield to change the current fertilizer ordinance to mandate no placement of fertilizer within 50 feet of the lake! This new rule is effective in 2017. Note: fertilizer can be placed and limit the period of fertilization from 5/1 10/1.

Prevent Additional Invasive Species from Entering Pine Lake

 Much has been done to alert residents of exotic weed species, such as Eurasian Milfoil. The boat access has warnings to clean boats and rid them of plants, bait, water, and other sources of alien species. The newsletters contain similar warnings.

Dr. Jude recommends that we continue the effort to educate all who use Pine Lake, so that no more exotic species, such as quagga mussels or Viral Hemorrhagic Septicemia (a fish virus), are introduced to the lake.

SECTION 3: BOATING SAFETY INFORMATION

Pine Lake has mandated a <u>COUNTERCLOCKWISE</u> direction for safe boating. Please contact the Marine Patrol on Pine Lake or the Oakland County Sheriff if you have any questions.



Please go to *PLPOA.net* for the current Boat Safety Rules on Pine Lake. Below are a few of *the key items*:

- Operating a vessel/snowmobile or Over the Road Vehicle under the influence of Alcohol or drugs is unlawful and any blood alcohol level over .08 will be prosecuted.
- If you pull a skier or tube you must have a spotter or OBSERVER and the skier/tube passengers must have a life vest on.
- Your boat (including Paddleboards) must have the proper number of life preservers in the boat for each person; and a throwable Type IV floatation device for boats over 16 feet.
- Water skiers must be **kept 100 feet away** from docks, rafts, anchored boats and designated swim areas.
- Water skiing is **NOT** permitted during the period of 1 hour prior to sunrise or 1 hour after sunset.
- When boats approach each other "head on" each should turn to the **Starboard** (the right).

Boating Courses

Contact the Oakland County Sheriff Department via its web site for a list of local boating courses.

https://www.oakgov.com/sheriff/Pages/about/div_law_patrol _marine.aspx

Oakland County Sheriff, Marine Division - 248.858.7831

U.S Coast Guard Tip for Safe Boating:

- People who fish from boats have one of the highest boat fatality rates.

Be weather wise. Sudden wind shifts, lightning flashes and choppy water can all mean a storm is brewing. Tell someone where you are going in your boat and how long you will be out. Check your boat equipment, boat balance, engine and fuel supply BEFORE you go out onto the water.

SECTION 4: WINTER INFORMATION

As winter approaches and ice forms, or as spring comes and the ice begins to thin, **DO NOT GO ON THE ICE**. PLPOA wants every lake resident to enjoy the lake as the seasons change.

IF you, a family member or animal falls into ice - **PLEASE CALL 911.** According to the US Search and Rescue Task Force the body loses heat 32 times faster in cold water so it is critical to get out of the water and dry ASAP.

Some things to keep in mind before an icy situation becomes life threatening are:

- Never travel on unfamiliar ice.
- Ice is never completely safe.
- Beware of pressure ridges or ice heaves. This means thin ice or open water is about.
- Look for clear ice. Ice with air bubbles or snow-covered ice are generally weaker.



Ice Rescue of Dog in White Lake, MI Also, take a moment to review rescue some accepted procedures:

- If you see someone in the ice water call 911
- Do not try to get close to someone in the water surrounded by thin ice.
- A flotation device with a rope on the end can be used to slide to the person to grab.
- If you are walking and the ice begins to crack and leak
 lay down and spread your weight call 911
 or yell to have someone nearby call 911.
- If you fall in the ICE call 911 and try to have someone slide a flotation device, pole or branch to you so you can use it across the ice to hold your head up and

perhaps pull up and roll yourself out or be pulled from the ice.

- A method called lay down and reach can be used where each person lays down and holds the ankle of a person in front of them until they can reach the person in the ice.

Dial 911. Other numbers for Oakland County Sheriff: Oakland County Marine Division 248.858.7831 Oakland County Sheriff – general number 248.858.5000 Oakland County Sheriff Dispatch - 248.858.4950

Ice Shanties and Hockey Goals:

All ice shanties on Pine Lake must be identified with the owner's name, address and phone number. If you observe an ice shanty without proper information contact the Oakland County Sheriff Marine Patrol. All Ice Shanties and Hockey Goals must be removed before the ice melts or by early March.

Debris on the Ice

As spring approaches and the ice begins to thaw, please remember to remove all equipment used to enjoy our winter activities. If your winter sports includes old tires, ice shanties, hockey goals or other items, please be sure to remove them before the spring thaw or in late February depending upon the spring weather.

Winterizing your Boat

Remember if you winterize your own boat - use biodegradable antifreeze. It costs a little more but is worth it. When launching your boat in springtime, **do not drain** any antifreeze into the lake. Dispose of the antifreeze in a proper manner. It kills fish and wildlife if it gets into the lake.

SECTION 5: HISTORICAL INFORMATION

The History of the Pine Lake Area

Before the arrival of Europeans to the area, Indians are believed to have lived in the West Bloomfield area for some 12,000 years. They survived mainly by hunting and fishing. No one is quite sure exactly why the Indian civilization died out in the area. When the first pioneers arrived, two Indian reservations had already been established in the township. One was located on Apple Island, then known as Orchard Island. The other was located at the south end of Orchard Lake. These reservations remained until 1827 when the U.S. government auctioned them off for \$1.25 per acre. The reservations also served briefly as orchard nurseries. Many of the existing orchards got their start from those trees.

The French are believed to have been the first white men to explore the area. It is known that in May and June, 1817, surveyors commissioned by the United States Government were the first white men to systematically tread the West Bloomfield area. They found that what we now know as Pine Lake was called "Lake Canfield" at that time.

The First Settlers

During the 1820's, the government began auctioning off land around Pine Lake and rumor spread throughout the country that the outlying areas of Detroit were perfect for habitation, citing cheap land and an abundance of water. There is confusion as to which settlement of the white man was the first. John Huff of New York started clearing an area on the southeast shore of Pine Lake in 1821. He also erected a substantial log cabin on the site. However, he did not register his claim until 1824. In 1823, Benjamin Irish settled on the western shore of Walnut Lake and registered his claim the same year. Foraging bears and marauding wolves gave early Pine Lake pioneers some anxious moments. Wolves were often seen according to the accounts of the pioneers during the winter traveling in packs across the ice of Pine Lake.

The Pine Lake settlement was the home of the first West Bloomfield post office, started in 1831 at the home of John Ellenwood on the eastern shore of Pine Lake. His tract was just north of John Huff's. In fact, the Ellenwood family shared Huff's cabin until they could erect their own. Like most early settlers, Ellenwood did not have deep financial resources. But the settlers who survived worked hard and used their ingenuity to get through. Charles H. Martinez on page 67 of his book "Reflections on the History of West Bloomfield" says of Ellenwood:

"But he and his family applied the energy and muscle they did command to barter goods and trade services among their neighbors so a successful start could be made. For example, Ellenwood needed milk for his family during that first winter. Arrangements were made with a Bloomfield settler to borrow his cow and keep her well fed on the luxuriant grass that grew on Ellenwood's property all the Pine Lake lakeshore. Similar deals allowed the family to put down strong roots, build a home, and prepare the land. Ellenwood was also cognizant of his larger responsibilities to community stability and growth. To these ends he served as postmaster, justice of the peace, and township supervisor. He also lent a hand in helping frame the State Constitution, serving as a delegate at Detroit in 1835. Moreover, with all his other duties, Ellenwood found time to plan and lay out many of the township and county roads.

To facilitate settlement and commerce, a network of roads was laid out early in the township mostly through the efforts of John Ellenwood, as noted previously. The first road hacked through the wilds of the township, however, was done under the influence of Colonel Stephen Mack and other members of the Pontiac development group. It ran south, approximating the course of present day Middlebelt Road, but bent like a fishhook beneath the southeastern edge of Pine Lake. It stopped there in 1823 and did not progress much further for many years."

For a lot more historical information on Pine Lake, go to our website: **www.PLPOA.net**. This area has a long and rich history, if you are interested in history, we think that you'll enjoy the extensive history of the area found on the web site.