

HORSEHEAD LAKE PROTECTION & REHABILITATION DISTRICT NO 1



May 1, 2022

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DePere, WI
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Secretary

Kevin Collins
Orland Park, IL
(708) 925-2551
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Treasurer:

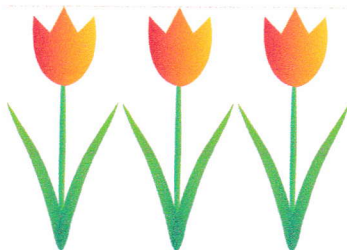
David Averbeck
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Town Board:

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County Board:

Mitchell Ives
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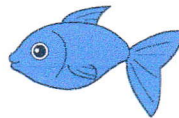
www.horseheadlake-wi.org

April 9, 2022

Commissioner's Meeting

The balance in the accounts as of March 31, 2022 is \$39,084.02.

The annual meeting is August 13, 2022 at 9 AM at the Lake Tomahawk Pavilion at Snowshoe Park in Lake Tomahawk. Please mark your calendar.



Fish / Aerator News

Unfortunately, we experienced a significant winter kill this year. Many small blue gills, sunfish and crappie were found dead around the shores. Therefore, based upon advice from the DNR, we cancelled our fish stocking for this year. The DNR now seem to support obtaining an additional aerator which will reduce the impact of winter kills by providing more refuge for fish. It is important to keep in mind that all the fish haven't perished and that winter kills cannot be 100% eliminated on our lake.

Dave Averbeck has worked the last several years on making our current aerator run as efficient as possible. Many parts of the aerator, including all 4 of the blowers and 2 of the diffusers, have been replaced and we feel we have done what we can with the current aerator.

We are now working on researching options for adding a 2nd aerator on the lake. Our goal is to have a proposal put together for the membership to approve at our annual meeting, August 13, 2022.

A request for proposal was sent to vendors and we are awaiting replies.

We had sent an email around seeking volunteers, as much work will need to be done to meet our goal. Thanks to those who volunteered: Nancy Collins, Dan Moran, Tom Eichstaedt, Dusten Tornow, and Dennis Batchelet.

The aerator was turned on November 4, 2021 and turned off April 19, 2022, when one blower was found to not be working. Ice was off the lake on April 29, 2022.

A reminder, at the annual meeting in August 2020, residents voted to recommend only **catch and release for blue gills and black crappies** from 2021-2023, giving the fish time to establish in our lake.

Lake Study / Management Plan

Per our management plan, Onterra will be performing an early season aquatic invasive plant water survey (to be

conducted in June) and a point-to-point survey (to be conducted in August). Results will be available in the fall.

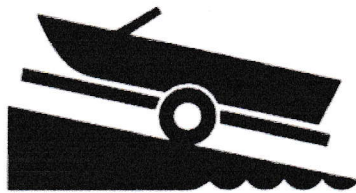
We were happy to learn we successfully obtained a grant from the DNR for these 2 projects. The total cost of the projects is \$7,925 and our grant award was \$5309.75, what we requested.

Last year, Onterra identified some water milfoil plants in the south part of the lake and couldn't be sure if they were the native species of Northern Water Milfoil, or a hybrid of Northern Water Milfoil and Eurasian Water Milfoil. The samples were sent for DNA analysis and results showed they were Northern Water Milfoil, which is a native plant in our lake and good to have.

Phosphorus Levels

There are 2 things district members can do to lower phosphorus levels on the lake: 1) keep a natural shoreline; and 2) keep your septic system well maintained. Please take time to read the enclosed flyer on maintaining your septic

system. High phosphorus leads to high algae levels and low oxygen levels in the lake.



Boat Landing

Power loading boats causes the lake bottom to be pushed into a berm at the end of the landing. Please avoid power loading your boat. There is no solution for this as we have a shallow landing with a sandy bottom.

Please only park in designated areas at the landing to ensure others coming to use the landing are unencumbered.

Weed Harvesting Presentation

Ty Krajewski, Water Resource Management Specialist with the DNR, addressed our group via Zoom on March 8, 2022 to discuss weed harvesting. Ty spoke about the pros and cons of weed harvesting on the lake.

We are issued a permit and allowed to cut up to 75 acres (our lake is about 380 acres) in an area identified in our Comprehensive Management Plan (map 9). If the ability to

navigate the lake is impeded, we can cut the weeds, which leaves paths in the weeds to allow for boat navigation. That is the major benefit.

Ty also discussed the adverse effects weed harvesting can have on the lake. Harvesting will impact aquatic insects, zooplankton and the fish community which can affect water quality.

Horsehead Lake is classified as a shallow headwaters lake. Lakes in this classification are either in a clear water state or turbid state. Fortunately, Horsehead is in a clear water state. Lakes in a turbid state have mucky algae filled water. Primarily native plants are cut during weed harvesting, the very plants that help to keep invasive weeds in check. Our main invasive is curly leaf pond weed, which dies down by the time we harvest.

Hiding within the native plants are zooplankton and aquatic insects, which graze on the algae. Without the cover of the weeds, zooplankton can be diminished, allowing for algae to expand in the lake. Also, small fish can also be caught in the harvester and removed from the lake.

While removing some plants from the lake can have a positive effect on the

dissolved oxygen level in the lake, the amount of plants we are removing will not have a huge impact on overall dissolved oxygen levels in the lake.

Ty gave an example of a lake in Vilas County with a history of annual weed harvesting and the lake changed from a clear water state to a turbid water state. So yearly harvesting is not recommended. It is a balancing act to decide if cutting is beneficial.

Another risk of weed harvesting is contamination of Eurasian Water Milfoil into our lake. All the harvesting companies are cutting on lakes with Eurasian Water Milfoil. Although we are assured they are following DNR procedures for proper decontamination before entering our lake, it remains a risk.

Ty also pointed out that our water quality numbers on Horsehead Lake have remained constant over time. Water quality is measured by phosphorus, chlorophyll and secchi disk transparency.

Individual property owners can remove a 30' wide area of aquatic

plants in front of their property out to a reasonable depth. This 30' area has to encompass the dock, swimming area and boat lift. Floating weeds that wash up and are not attached to the bottom of the lake can be removed from your entire shoreline.

The session was recorded for anyone who wants to watch it. Please email Deb Bursik for the Zoom link if you would like to watch the presentation.



Weed Cutting

We have a contract with TSB Restoration for weed cutting at the end of July, if needed. Per our management plan, we will have a committee to assess the weed status and need for cutting in early July.

Elections

Every year we have an election for a commissioner position on the lake. Our board is comprised of 5 commissioners, but 2 are appointed from the County and the Town of Lake Tomahawk, so we have 3 elected positions. Kevin Collins, our secretary, informed the board at our April meeting he will not seek re-election. So we are seeking individuals to run for this commissioner position. The

secretary position has 2 basic duties: 1) to prepare minutes following the 4 commissioner meetings and 1 annual meeting every year; and 2) handle the mailings that are sent to district members. The work is not overwhelming and 2 of our commissioner meetings we have been doing virtually.

It is healthy and important for board positions to rotate and the work to be shared among the district members. We strive to keep our positions in check, so no one is overwhelmed by the workload. Please consider running for this position.

Thank you to Kevin Collins for your service and work on the board and your willingness to continuing to handle the water quality testing in the summer.

Safe and Courteous Boating

Please be sure to practice safe and courteous boating and jet skiing on the lake. The DNR regulates boat safety and prohibits operating your vessel within 100 feet of a shoreline, dock, raft, pier or restricted area greater than slow or no wake speed. It is unlawful to chase, harass or disturb wildlife.

Personal watercraft (such as jet skis) cannot be operated

at faster than "slow, no wake speed" within 100 feet of any other vessel on any waterbody, 200 feet of shore on any lake and 100 feet of a dock, pier, raft, or restricted area on any lake.

Also be careful of the numerous submerged rocks in the lake. Many are located off the points of the peninsula and the island.

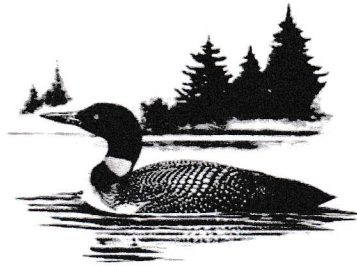


From the Chair

By Deb Bursik

I was greatly saddened by the winter fish kill, but this made clear the need for an additional aerator and opened up the door to make that happen. When we realized how much work was needed to make this happen, I sent out an email to the group. Within hours, we had multiple volunteers with a depth of relevant qualifications that will greatly assist us. I was also impressed by the number of people attending our Zoom session with the DNR and

number asking for the link to the recorded session. This illustrates the caring the district members have for the health of our lake.



Shhh...Loon Nesting

For years, the loons have nested on the northeast side of the island:



Please be respectful coming around the corner of the island so as not to disturb the nesting loon and keep in mind the boating regulations mentioned above.

If we have your Email address, we can keep you up to date on lake events. If you haven't received an email lately regarding Horsehead Lake, it means we do not have your email. Please send your email to horseheadlakePRD@gmail.com

Our Volunteers

Webmaster:
Deb Bursik

Aerator:

Dave Averbeck

Secchi testing/water sampling:

Kevin Collins

Dissolved Oxygen Testing:

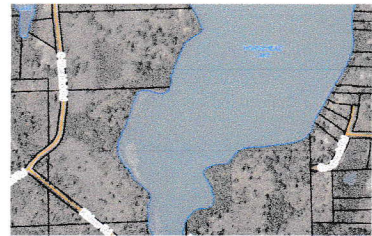
2021-2022 Kevin Collins

2022-2023 Paul Bursik

Audit Committee:

Hans Delius & Bev Fagan

Did You Know?



The 40 acre parcel of land, where our aerator sits, was donated by the Theil Family to the DNR in 1978. The DNR subsequently purchased the adjacent 40 acre parcel directly to the south at the corner of S. Bluebird and Kildeer. The prior owner of this parcel operated a wood / log mill on the property.

Thank you to Hallie Moline for sharing this lake history!

Sincerely,
Debra Bursik
David Averbeck
Kevin Collins
Mitchell Ives
Larry L. Hoffman

Horsehead Lake Protection & Rehabilitation District #1 (HLPRD)

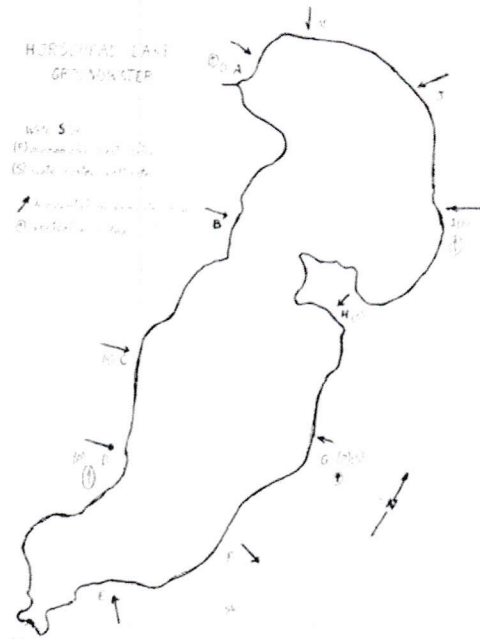
Private On-Site Wastewater Treatment System (POWTS)

What's POWTS?

We all have it and it's not contagious. POWTS is the formal name for your septic system. Every residence has one and the owner is responsible for maintaining it. The state of Wisconsin and Oneida County regulations require that your septic system is inspected at least every three years by a certified inspection service with some exceptions. An improperly maintained POWTS not only costs the owner money to repair but can allow pollutants to get into the groundwater or lake water.

Why is HLPRD informing residents?

HLPRD is concerned with issues that could affect the water quality of our lake. The figure to the right is from a study conducted by Northern Lake Service in 1976 for HLPRD. The arrows around Horsehead Lake show the direction of groundwater flow. The study showed that the direction of the groundwater flow is into Horsehead Lake for all areas except the southeast (SE) section of the lake. Any discharge of partially treated sewage or sewage water entering into the ground water table around the lake will migrate into Horsehead Lake except for the SE section. These discharges can contribute to excessive plant and algae growth or even fish kills that affects everyone's enjoyment of our natural resource.

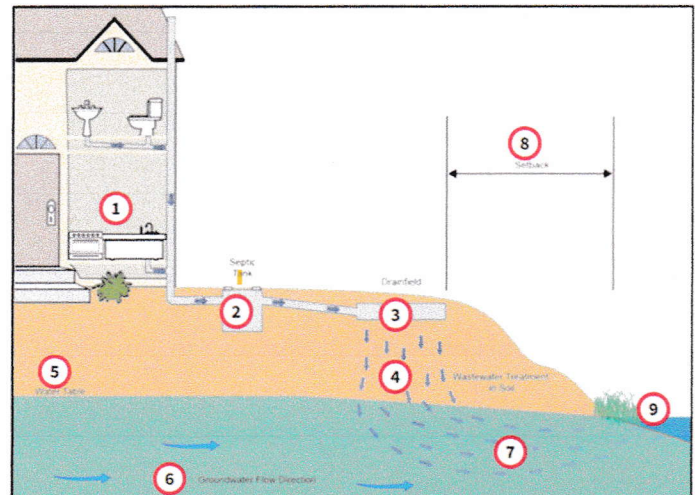


What are the signs of Septic System Failure?

Septic systems collect effluent from drains in your home into the septic tank (#2) on your property. The tanks separate the solids from the liquid. The liquid is then dispersed in a drainfield (#3) where the aerobic conditions and natural bacteria in the soil neutralizes the contaminants contained in the liquid.

- Water and sewage from toilets, drains, and sinks are backing up into the home.
- Bathtubs, showers, and sinks drain very slowly.
- Gurgling sounds in the plumbing system.
- Standing water or damp spots near the septic tank or drainfield.
- Bad odors around the septic tank or drainfield.
- Bright green, spongy lush grass over the septic tank or drainfield, even during dry weather.
- Algal blooms in nearby ponds or lakes.
- High levels of nitrates or coliform bacteria in water wells.

Septic systems can fail in two ways, increasing the risk of contamination and human health impacts. First, there can be a hydraulic failure, such as a broken pipe, which is relatively easy to detect. A hydraulic failure typically manifests as wastewater surfacing on the ground or a backup in plumbing which is often immediately noticeable. In contrast, the other type of failure, a treatment failure, may be more difficult to notice. These can go undetected for years. With a treatment failure, the plumbing may be functioning just fine, however, the wastewater may move relatively unimpeded to ground and surface waters. Much of the treatment of wastewater relies upon the unsaturated soil below the drainfield (#4). When the vertical section of soil below the



bottom surface of the drainfield is saturated, the wastewater moves through the soil faster, reducing treatment time. This prevents the naturally occurring bacteria in the soil from completely digesting the organic material in the wastewater. The incomplete digestion of the wastewater then can affect nearby fresh water wells and lake water potentially causing illnesses.

What can you do?

You can conduct periodic visual inspections of your drainfield looking for saturated areas and noxious odors which can be an indicator of a problem. Some drainfields have pipes driven into the soil that are inspection ports to see if there is standing water at the bottom of the field. If you see standing water in your drainfield, this should be remedied. You also shouldn't have vehicles driving over or parking on the drainfield and tree and shrub roots should not grow thru your drainfield. As mentioned before, the property owner is required to have an inspection/cleaning by a certified inspection service every three years. All septic systems are designed for the properties that they service, so if you expand your house's capacity, add a dishwasher or garbage disposal, you might exceed the capacity of your septic system.

How do I know if I am due for an inspection?

Oneida County Planning and Zoning department maintains a database of all permits for property parcels. You can contact them at 715 -369-6130 or use their online permit search which can provide you with a link to your property's sanitary permits. <https://octax.co.oneida.wi.us/> Here is an example of link to a sanitary permit. If the maintenance date is over 3 year old, you should get an inspection.

Permit Number	Issue Date	Maint. Date	Inspector/Pumper	System Type
[REDACTED]	8/27/2002	9/18/2019	CHAMPION SEPTIC	IN GROUND LEACHING CHAMBER (NON-PRESSURIZED)

They also maintain a list of POWTS inspectors and maintainers that is available online. (https://www.co.oneida.wi.us/wp-content/uploads/CST_Plumbers-in-Oneida-Co-1.pdf)

What Else?

Periodic testing of your well can also indicate any potential health related issues. Private well owners are NOT required to regularly test their wells or correct water quality problems. It is your choice to decide which test to do and actions to take. The DNR recommends that you test your well once a year for bacteria and nitrates and one time for arsenic. The Oneida County Health Department contact is Jody McKinney (715) 369-6111. <https://dnr.wi.gov/dwsviewer/BactiLab>. The cost for all three tests is \$60 and the sample kits can be picked up at the Health Department.

Maintaining your septic system is not only required by law, but is good practice to keep contaminants from entering our lake.

Curly Leaf Pondweed

Curly leaf pondweed is currently our only known invasive species in the lake. It was first found in 1992. Its reproductive structures are called turions, which are brown and look like small pinecones. The turions will float on the lake, so please pull them out and throw them on shore if you see them. Our early season aquatic invasive species survey last year found them in the areas on the map. The dots represent where it was found and the squares show where it was dominant.

