


LAKE DISTRICT OFFICE

Oakland Town Hall
N4450 County Rd. A
Cambridge, WI 53523
 (608) 423-4537
 Lake.manager@tn.oakland.
 jefferson.wi.gov.

 www.lakeripley.org
 @LRMDLS2020

BOARD OF DIRECTORS

Jimmy DeGidio
 Chair
 (608) 921-1340

Debbie Kutz
 Treasurer
 (920) 650-9122

Georgia Gómez-Ibáñez
 Secretary
 (608) 628-7212

Steve Bieschke
 Commissioner
 (847) 420-5330

Doug Maurer
 Commissioner
 (608) 515-3976

Meg Turville-Heitz
 Jefferson County Rep.
 (608) 695-0313

Laura Payne
 Town of Oakland Rep.
 (608) 279-7173

LAKE MANAGER

Lianna Spencer
 Lake.manager@tn.oakland.
 jefferson.wi.gov
 (608) 423-4537

WEED HARVEST CREW

Leo Allen
Ed Grunden
Jim Jermain
Richard Moen



FROM THE HELM

A Cold Day at Enbridge

On the coldest day of the year, I was invited to visit the Enbridge – Cambridge Pump Station site with Oakland Town Chair, Laura Payne. At the time of our visit, it was -5 degrees with wind gusts up to 20 MPH. I could barely keep my eyes open! We were met by DNR representatives, Caroline Rice and Trevor Bannister and Enbridge representatives John Schwarz and their hired consultant from



Laura Payne, Town of Oakland Chairman, and me standing near Line 6 at the Enbridge Pump Station.

GEI Consultants, Inc, Brad DeSanto. We were given tours of both pump stations and were able to walk the yard. We spent three hours observing the operations at the facility off Highway 18, near the racetrack, where the oil spill occurred. On November 11, 2024, a leak was discovered, and it was later reported that approximately 69,000 gallons leaked from a flange, roughly four feet underground.

Enbridge has stated that when the leak was detected, Line 6 was shut down and repairs were made. We were able to see the area where the flange failed, and similar flanges which are properly functioning. The flange is the bolted joint between two sections of pipeline. The joint is connected with many large bolts and has a gasket in the center. The

leaking flange was installed in the early 1970s and is still underground today. We were able to see the second station, which was constructed in the late 1990s, and these flanges are above ground and easily accessible for observation and maintenance.

The process of remediation was outlined by Enbridge, and they stated that

ENBRIDGE CONTINUED

60% of the contaminated soil has been removed and disposed of at an approved landfill. We also saw the addition of the temporary monitoring wells, which have been installed to monitor the contamination. I asked several pointed questions about the spill and the process looking forward.

- How is it possible that 69,000 gallons of oil leaked at this location and remained undetected until it was noticed on the surface, 4 feet above the leak?
- Why wasn't Enbridge's system able to detect the leak?

From the answers, I summarized it as there is so much product moving through the system, a leak like the one that occurred doesn't drop the pressure enough to trigger the alarm system. Additionally, federal regulations that control this pipeline do not require Enbridge to monitor the flanges that are underground.

The underground flanges are 50+ years old and need to be better monitored for leak detection. Enbridge is required to develop a Work Plan outlining how this leak will be addressed and managed. I requested that the Work Plan include updating the currently underground flanges to above-ground construction (like the more recent). If that is not an option, then I have requested that monitoring wells be located near all underground

flanges so that a leak could be quickly identified and addressed.

I hope that Enbridge takes the extra effort, along with the DNR, to ensure that the inlet creek and the wetlands that surround Lake Ripley remain pristine and able to support the diverse wildlife habitat that thrives here. It is important to remember that while we all use this land differently, for agriculture, industry, our homes, and leisure, we must do so thoughtfully, and with vision toward protecting our shared resources for the future.

Chairperson,

Jimmy DeGidio



Photo of the site where the leak happened at Unit #4.



This photo shows an above ground example of the flange.



Photo courtesy of Enbridge. This photo was taken during when the excavation work was taking place.

WHAT IS CAUSING THE STRIKING ICE HEAVES ON LAKE RIPLEY?

Alternating cold and mild temperatures combined with the lack of snow have led to a number of ice heaves along the shorelines of Lake Ripley.

Ice heaves are sheets of ice that push against each other or against the shoreline. We typically see these formations in the spring as the ice begins to melt, the weather starts to get warmer, and the wind pushes the ice up into solid, jagged waves. But they can also be seen where water levels and temperatures fluctuate rapidly. As water freezes it expands, pushing sections of ice up against one another to create heaves between a few inches

to a few feet high! The warmer temperatures we have been experiencing over the last few weeks mixed with some of the frigid temperatures was the perfect climate for ice heaves and ice ridges to form. The temperature swings allow for thermal expansion and contraction, and you can get these cracks in the ice that either refreeze or shift.

Some of these ice heaves can cause serious shoreline damage! Large toe rocks at the bottom of your rock riprap can help alleviate some of the damage, but sometimes nature is too strong for even the toughest rocks.



Ice heave at Lake Ripley Park.



Ice heave along the Lake Ripley shoreline.

BOAT LAUNCH INFORMATION

Do you launch your boat for the season at the public boat launch on Island Lane? Here is your friendly reminder that you should be filling out and paying for a boat launch pass! Yes – even if you are just launching your boat and parking it at your pier for the season. The same goes for when you remove your boat from the lake for the season. The launch is available to use from May 1 through September 30. Daily passes are available for \$7.00, but you can purchase a seasonal pass at the Oakland Town Hall, Cambridge BP Gas Station and the Piggly Wiggly. No fishing or swimming is allowed from the ramp or the pier at any time.

There will also be a new sign this year instructing you to check your boat and trailer for any aquatic invasive species (AIS) before entering Lake Ripley or before leaving the boat launch! The District is going to provide tools for this station for everyone to be able to use. Please make sure you are checking



New boat launch signage at Island Lane. The sign on the left informs boaters about Aquatic Invasive Species and the sign on the right cites the lake's ordinances.

your boat before and after enjoying the lake, and use the tools provided to help clean some of the harder-to-reach places. Join us in keeping aquatic invasive species out of Lake Ripley!

BE A FRIEND!

It's February! Garden talk time! Why? For gardeners, winter is the season to dream big and plan the gardens for the coming growing season! And the Lake District hopes you will take a step towards being a real friend of Lake Ripley by planting a lake-friendly garden in your yard.

What do yards and gardens have to do with our lake? Everything! Long ago the lake's surroundings were all rain-absorbing places like wetlands, prairies and woodlands, which all protected the lake's water quality.

Now the lake is surrounded by impermeable surfaces (our homes, garages, patios, driveways) which create runoff. Even lawns are a part of the problem, only absorbing about 20% of runoff because their roots are so shallow.

Here's where native plants can help! They have incredibly deep roots which can absorb runoff. Establishing a buffer garden between your lawn and the lake creates a space where runoff can be absorbed before it contributes contaminants to the lake. You don't have to give up your view! Many native plants are short above ground. It's their deep roots underground that are doing the work.



There are so many different types of native plants you can pick from!

How about a raingarden (butterfly and bird-attracting garden), installed upslope where you can watch it from your deck or window? These gardens can also stop the flow of runoff to the lake.

Why not participate in our annual Native Plant Sale? Our large, combined order gives you high quality plants at very low costs. You can view the 2025 plant selection at www.agrecol.com. That website contains information that can help you choose plants that will succeed in your specific yard. Need more help? We are happy to provide advice! Just call the District office at 608-423-4537 or email us at Lake.Manager@tn.oakland.jefferson.wi.gov.

Please get your order to us by March 31st, 2025. Payment must accompany your order. Important tip: for each plant species, choose 4 (or multiples of 4). We will pick up the combined order about mid-May, and assemble into individual orders at the Town Hall, where you can pick them up. We will notify you beforehand what day that will be.

Please join the growing number of lake-friendly gardens around our lake. Be a friend!



The Town of Oakland partnered with the District back in the early 2000s to install a raingarden at the Town Hall to capture runoff from their building and parking lot. It blooms beautifully from May through October!

SALT BRINE PROTECTS ROADS...AND WISCONSIN'S LAKES!

Maintaining safe roads during winter storm conditions requires skill and knowledge. Rock salt has traditionally been used in Wisconsin for winter roadway maintenance since the late 1950s. Rock salt is simply sodium chloride, or table salt – just not as refined. Back then it was cheap, and it got the job done. However, using rock salt on our roadways for decades doesn't come without a price – environmentally and economically. Rock salt is corrosive, damages infrastructure and vehicles, and can permanently pollute our freshwater. Nationwide, winter salt use causes roughly \$5 billion a year in repairs to infrastructure according to the U.S. Environmental Protection Agency. But salting is an almost unavoidable practice for maintaining safety during Wisconsin's winters.

So, how can rock salt effect the environment? Rock salt breaks into separate sodium and chloride ions when dissolved in water but the chloride component doesn't break down any further and impacts our environment in many ways. ONE teaspoon of salt permanently contaminates 5 gallons of drinking water. Salt usage in Wisconsin tops more than 525,000 tons every year (Clean Lakes Alliance, 2025). That much salt can pollute more than 400 billion gallons of water! In the early 2000s, the DNR measured 600,000 tons of chlorides annually. By 2018, that number increased to nearly 800,000 tons per year (WDNR, 2025). The uptick in chloride levels can have significant impacts on our freshwater ecosystems. Chloride does not break down or settle out of water; fish, aquatic bugs, and amphibians (which are all important to the lake's food web) are all negatively affected by increased chloride levels in the water. Plants, soil, gardens, wildlife, and even our pets can be negatively affected by rock salt if not used properly. We know that rock salt can be extremely useful when used appropriately, but there are other tools in our toolbox that we should be utilizing, too!

Over the last decade, we have seen counties and municipalities start pre-wetting their salt, creating a brine. Pre-wetting is a strategy of applying a liquid deicing chemical to a dry solid before or during its application to the pavement (WI Transportation



Rock salt can be easy to overuse!

Information Center, 2005). Pre-wetting speeds up the time it takes for the salt to work, as salt needs to be wet to bind to reduce ice. When compared to rock salt, brine typically works faster, saves money and stays in place (less bouncing and scattering). When trucks are putting rock salt down before a storm, other vehicles, people and even pets can move that salt around – removing it from the area it is intended to prevent ice from forming. The pre-wet salt tends to stay in place better, resulting in less waste and less salt entering our environment. The DOT recently conducted a study where the key findings indicated that “salt brine applications reduced the amount of salt used, improved time to bare/wet road conditions, presented better pavement friction conditions, and benefits outweighed the cost of investment to introduce salt brine to existing salt applications” (WI DOT, 2021). Brine has a freezing point lower than pure water, and as such, is a useful tool in reducing the adhesion of snow and ice to road surfaces. Rock salt does not reduce the freezing temperature of the pavement surface until it has created a brine. Salt requires moisture to begin working and take effect, but liquid brine starts working immediately.

SALT BRINE CONTINUED

A few years ago, our Public Works Supervisor, Jeff Scheel, made the decision to start pre-wetting salt before applying it around Lake Ripley, especially on environmentally vulnerable streets like Ripley Road. We recently sat down with Jeff and asked him what led to his decision to use different salting strategies and what differences he has noticed throughout the seasons.

Over the next couple of years, Jeff continued researching new and improved techniques that the Town could implement to reduce salt use but still keep the roads safe and clear – his number one priority is safety. This season, Jeff and his team decided to try anti-icing, sometimes called pre-treating. Anti-icing is a proactive snow and ice control strategy (WI Transportation Information



One of the snowplows Jeff and his team use. This plow has the brine tank on the back of it to pre-wet the salt.

Jeff told us that he has always been interested in brine applications since it was introduced in Wisconsin. He discovered how other departments were benefitting from using some type of brine mixture in their winter rotation. After much research, Jeff concluded that using multiple, different techniques to maintain winter road conditions would be cost-effective, safer, and better for the environment. Being environmentally conscious, he decided to start experimenting with pre-wetting the salt that they were applying around the lake. It didn't take much to get started back in 2021; they equipped an existing truck with a tank and a sprayer to apply the brine to the salt. Within the first year he noticed that the pre-wetting technique was seemingly doing just as good of a job, if not better, as rock salt around the lake. He documented that the roads around the lake seemed to become safer more quickly because of the pre-wetting. There seemed to be more traction on the roads, which is safer for traveling. He was pleasantly surprised with how well the pre-wetting was working and what a huge bonus that it was better for our lake!



The brine tank is attached to the back of the truck. The brine mixture pre-wets the salt before the salt is spread on the roadways.

Center, 2005). A small amount of liquid chemical is applied to pavement before a storm to prevent ice from bonding with the surface. Anti-icing can produce significant benefits including better pavement conditions, reducing the number of crashes. One study in Idaho reported 83% fewer accidents! This season, Jeff has experimented with applying the anti-icing technique to all hills, curves and stop signs in the Town of Oakland prior to predicted storms. Being that this is the first season Jeff's team has used this technique, their conclusions about this practice will have to wait until next season so they can gather more data for comparisons. The Roads Crew team continuously monitor the winter weather conditions to determine

PROPER TREE PRUNING

Pruning is one of the most important maintenance tasks you can do for a young tree. If pruning is done correctly, you will enjoy a healthy, long-lived tree. Pruning young trees can establish good branch structure and spacing, a central trunk and proper trunk taper.

The best time to prune any deciduous tree is when it is dormant, typically November-March in Wisconsin. Pruning during dormancy is the most common practice. It is usually best to wait until the coldest part of winter has passed. The second-best time is mid-summer, after leaf growth is complete. The worst time to do major pruning is in the spring, when tree buds and/or leaves are still growing, and food reserves are low. You also do not want to prune in the fall. Decaying fungi spread their spores profusely in the fall and wounds seem to heal more slowly on fall cuts. This is a good time to keep your pruning tools in your storage shed!

You prune your tree for safety, tree health, aesthetics and value. The amount to remove depends on the tree's size, species, and age – as well as your pruning objectives! You should prune to allow for and encourage U-shaped branch unions as opposed to V-shaped branch unions. V-shaped branch unions are weak and could fail when the tree matures. Avoid removing more than 25% of the live branches no matter the tree's age, size or species!

Topping and tipping are pruning practices that could potentially harm your tree. Topping is the pruning of large upright branches to reduce the height of a tree. Topping subjects the tree to large open wounds that will not close quickly or easily. It allows insect, disease and decay damage to occur and drastically shortens the life of your tree. Tipping is cutting of lateral branches to reduce crown width. Improper pruning techniques can cause unnecessary injury to your tree.

Photo courtesy of:
www.aces.edu

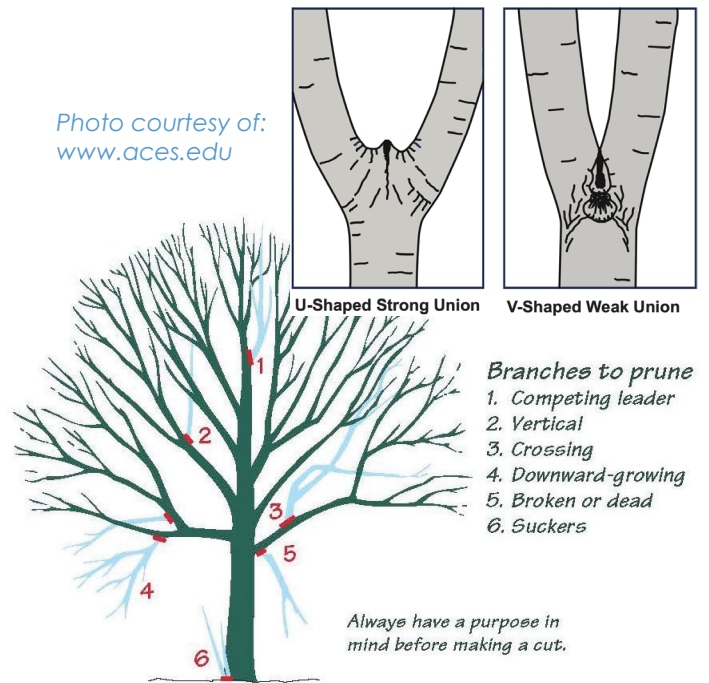


Photo courtesy of WDNR

SALT BRINE CONTINUED

what actions they are going to take, as winter storms are notoriously variable. I asked Jeff if there was potential for future anti-icing applications on more roads in the town, and he said absolutely! Depending on how the next few seasons go, there is definitely room for growth and improvement.

The District monitors Lake Ripley's chloride levels, and in 2022, our results were 29.7 mg/L. In 2024 our results were 27.7 mg/L of chloride in our lake – indicating a decrease of 2 mg/L! We can't help but wonder whether Jeff's innovative thinking contributed to the reduced chloride levels in our lake – it certainly seems plausible! We will continue measuring chloride levels in Lake Ripley and sharing those results with our Roads Crew. Also,

considering how long Wisconsin has been utilizing rock salt during the winter, that's pretty good news! (For comparison, Lake Wingra in Madison has a chloride concentration level of roughly 100 mg/L, increasing by about 2 mg/L each year since 1962 and Lake Mendota's levels are around 50 mg/L (www.lakewingra.org).)

When you need to use salt in the winter, remember that one 12-ounce coffee mug of salt is enough to treat an entire 20-foot driveway or 10 sidewalk squares. And, next time you see our Roads Crew out, be sure to give them a wave! They are trying to find the perfect balance between keeping our community safe on the roads and keeping our freshwater fresh!

PARTNERING WITH STANTEC

In fall 2024, the District began a partnership with a local environmental engineering firm, Stantec, LLC., to help us move toward finding a solution to some of the water quality issues in the watershed. This year, the District has budgeted monies to begin preliminary surveys that will give us information necessary to create a wetland restoration project within our Preserve that will be effective at reducing nutrient loading to the lake through the inlet stream. Historically, our inlet stream wasn't as long as it is now. In our 2009-2019 Lake Management Plan (that can be found on our website), it states that "the length of the lake's inlet tributary stream has been artificially extended as a result of ditching and channelization. Over the last century, the inlet has increased from 2.5 miles to 4.25 miles in length."

Be sure to visit, to LIKE and FOLLOW our Facebook page at: www.facebook.com/LRMDLS2020

This spring, the District and Stantec will be completing a field assessment to identify areas along the inlet tributary and smaller side channels to the inlet tributary that are contributing sediment from bank erosion or other sources. The field assessment will identify areas of significant streambank erosion and will evaluate the susceptibility of streambank to erosion from multiple erosional processes. This will help determine where we can work most effectively to reduce sediment reaching the lake.

Over the next few years, the District is committed to developing a project that will protect Lake Ripley from nutrients and sediments.



A section of our inlet stream that is experiencing undercut banks which contributes to sedimentation.

RETURN SERVICE REQUESTED

Bulk Rate
U.S. Postage
PAID
Permit No.
798

Ripples
Lake Ripley Management District
N4450 County Rd. A
Cambridge, WI 53523