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# District of Powers Lake NEWSLETTER

Published for all those who use and love Powers Lake

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## Road Salt Awareness:

Snowfall in the US has traditionally meant more road salt. It's an effective way to clear roads — but also brings cascading environmental impacts on aquatic life, disrupting ecosystems and making its way into groundwater and corroding pipes.

New data reveal that:

- Mississippi River levels of chloride — one of the elements that make up salt — have increased by more than a third since the late 1980s from the river's headwaters in Minnesota to southern Illinois.

- Reported increases are even higher at monitoring sites in Wisconsin and Minnesota.

- Other reasons exist for increased chloride in water, like salt from water softeners and the use of potassium chloride fertilizer, but road salt is typically a dominant source in colder states.

Leaders in state and federal environmental agencies now realize a change is needed.

Unlike other pollutants, chloride doesn't break down in water over time. In other words, once it's in, there's no getting it out.

**Just a teaspoon of salt can pollute five gallons of water forever.**

So the increase in chloride in the river isn't just from a recent overabundance of road salt being laid down in the winter months. It has built up over decades. Because it doesn't break down, it's all headed down into the Gulf of Mexico.

At a Wisconsin Department of Natural Resources monitoring site in Lynxville, about an hour south of La Crosse, chloride levels in the river had increased by more

than 60% since the 1980s, according to a 2021 study from two Mississippi River water quality specialists with the DNR.

Also, chloride levels in the portion of the river that runs through the Twin Cities metro area **increased 81% between 1985 and 2014**, according to a 2016 report from the nonprofit group Friends of the Mississippi River.

Chloride levels are rising at all 43 DNR river monitoring sites across Wisconsin.

Ecosystems are hurt by high chloride.

- Toxic amounts of chloride can kill freshwater aquatic plants and animals. That includes zooplankton, microscopic animals that feed on algae. Die-offs can then lead to harmful algal blooms, which have their own adverse effects.

- Chloride can also make its way into groundwater, the source of drinking water for about two-thirds of Wisconsinites.

- Salt's other component — sodium — can alter the taste of water and could pose health risks for people who are on low-salt diets.

Many municipalities are already experimenting with ways to fix the problem. Brining, where salt is mixed with water before being applied to roads, resulted in a 23% reduction in salt use on average on Wisconsin highways, a 2022 study from the University of Wisconsin-Madison found. Some places even use beet juice to help the solution work at a lower temperature, since standard road salt is much less effective at temperatures lower than 15 degrees.

Advocates for reducing road salt say

public awareness is critical. That is why Walworth County conducted Salt Awareness Week from January 21-27th this year. All the salt that we apply to roads and sidewalks ends up in our freshwater. Salt can be an effective deicer, but more is not always better.

To reduce the county's use of salt, Walworth County Public Works has implemented several smart-salting practices, including annual equipment calibration, operator education and training, continual analysis of material usage and application, and the increased use of salt brine.

Public Works Director Richard Hough said in a press release. "Over the last 4 years, we have reduced our salt use by nearly 40% while maintaining or improving safety on roads. This was accomplished by the smart-salting practices being used."

Like Walworth County, dozens of Wisconsin municipalities are striving to improve their winter maintenance programs and slow down the salting of our lakes, streams, and drinking water. Many citizens, however, are not aware of this issue. Kenosha County also participates in state and county programs to use compounds to allow less amounts of salt to be effective.

The purpose is to educate citizens on the issue of salt pollution: how salt impacts freshwater ecosystems, the role of water softening, ideas for teaching kids about salt pollution, and other ways to get involved.

For more information visit the WI Salt Wise YouTube channel or register at [www.saltwise.com](http://www.saltwise.com).

### **Eat cheese and help clear roads**

In Wisconsin, it's not only rock salt that's being sprinkled on the roads, it is waste from the state's burgeoning cheese industry as well. Cheeses are washed in brine that can then be used to clean roads.

If it were a country, Wisconsin would be ranked fourth in the world for cheese production, just behind Germany. And, where there's cheese, there's always salt, as it's one of just three ingredients needed to make cheese alongside milk and rennet. It makes sense,

then, that dairy experts across the state might be able to help with uncovering a new way to keep Wisconsin's roads more free of ice in the winter.

Wisconsin has been experimenting with using waste from cheese production for its roads for some time. Liquid cheese brine, used to salt wheels of cheese, is mixed with rock salt once it's done with at the dairy plant.

Then, it is sprayed onto roads across in Wisconsin and it seems to make it go down to a lower freeze point.

As well as making use of a waste product, there are practical benefits of using cheese brine to clear roads. The solution helps salt stick to the road, rather than bouncing off into the hard shoulder. It has also been found to speed up the melting of ice and snow that falls onto roads, as well as saving the state thousands of dollars in rock salt orders every year.

### **Smart Winter Salting**

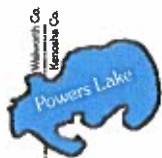
#### **Best Practices for Snow and Ice**

**You can keep sidewalks and driveways safe this winter while protecting our waters by following these simple steps:**

- 1. Shovel - Clear walkways and other areas before the snow turns to ice. The more snow you remove manually, the less salt you will have to use and the more effective it will be.**
- 2. Scatter - If you use salt, scatter it so that there is space between the grains. Believe it or not, a coffee mug of salt is enough to treat an entire 20-foot driveway or 10 sidewalk squares.**
- 3. Switch - When pavement temperatures drop below 15 degrees, salt won't work. Switch to sand for traction or a different ice melter that works at lower temperatures.**
- 4. Select a Certified Contractor - Check to see if your contractor is already certified through the [Winter Salt Certification Program](#). If not, encourage them to become certified and to follow appropriate [application rates](#).**

### **Lakes and Rivers Convention**

This year's gathering will be in Stephens



THE  
DISTRICT OF  
POWERS  
LAKE  
P.O. Box 462  
Powers Lake, Wisconsin 53159

**Elected Commissioners:**

Neal Kuhn, Chair  
Ken Vesely, Secretary  
Dave Anstett, Treas.  
Lou Manfredini  
Jim Michels

**Appointed Commissioners:**

Judy Jooss, Kenosha Co.  
Bob Stoll, Randall Twp

Point, WI at the Hilton Inn April 19th-21st. Early registration is recommended to obtain reservations on site. This year's Convention theme, Building Trust Around Water Together, encourages us to build new relationships with individuals, groups, businesses, and organizations and cultivate trust, together, so we can better collaborate and cooperate around our lakes, in our watersheds, and across Wisconsin

**Ice On/Off Dates:**

Full lake ice on occurred on December 22, 2022 Full ice off occurred on March 9, 2023.

**Reminder**

Please remember to use phosphorous free lawn fertilizer. Most soils in Wisconsin naturally provide all the phosphorus your established lawn needs. Much of the phosphorus (phosphate) you apply actually runs off the lawn before penetrating the soil. Runoff into our lake could contribute to algae bloom and undesirable aquatic plants. Check the second number on the package formula. 15-0-10, for example, means zero phosphate. The first number is the nitrogen content, the middle number is the phosphorus content and the last number is the potassium content. Make sure the middle number on the bag is 0 indicating it is phosphorus free. If you use a lawn service, ask your applicator service not to use phosphorus on your lawn. If they are unwilling to do this, contact another provider or consider applying the no-phosphorus fertilizer yourself.

**DISTRICT OF POWERS LAKE  
MISSION STATEMENT**

Within the scope of the powers vested in it under Chapter 33 and in furtherance of the Public Trust Doctrine of Wisconsin, the mission of the District of Powers Lake is:

To support, protect, preserve and enhance the native ecosystem of the watershed, shoreline, and waters of Powers Lake as a natural resource for generations to come;

To be responsive to the interests and concerns of the district residents and the public; and

To proactively advocate when faced with potential damage to Powers Lake's environmental values, wildlife, natural beauty, peacefulness, safety and/or recreational value.

**Website Signup**

If you have not already done so, please visit our website and sign up for notifications of lake events such as E. coli advisory/closure at the Knolls Beach or Slow No Wake.

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**Quarterly Meeting**

The next quarterly meeting will be held on Friday, April 14th, 2023 at 5 p.m. at the Randall town Hall, 35430 Bassett Road, Bassett, WI. This meeting and others are open to the public.