

Press Release

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Summit SWCD Promotes Winter Salt Awareness Week!

The use of road salt on our streets and sidewalks to keep them safe during the Northeastern Ohio winter season is a necessary evil that we all have come to expect. We may not realize though, that all this road salt we use is extremely harmful to our surface and groundwater and all the species that depend on freshwater for life. The salt has a cumulative effect, adding up over the years and permanently remaining in the water supply. One teaspoon of salt will pollute five gallons of water.

We at Summit SWCD, along with other Northeastern Ohio partners, are promoting Winter Salt Awareness Week, January 22-January 26, 2024. Winter Salt Awareness Week is the brainchild of the Wisconsin Salt Wise Partnership, created to spread education and awareness about road salt use and hazards. To learn more about this program, go to wisaltwise.com/, where you will find many resources for communities and individuals.

To promote wise winter salt usage in our area, we want everyone to know how they can manage their winter salt usage around their homes for safety in the slippery weather, and protect water quality at the same time.

Regular Road Salt, aka Rock Salt, is composed of Sodium Chloride, aka NaCl, and it's the same as table salt except the grains are larger, and granular in texture. We first started using road salt in the United States, to melt snow and ice, in New Hampshire, back in 1938. It worked, and by the winter of 1941, 5,000 tons of salt were used nationwide. Today, we use around 20 million tons.

Because the road salt runs off the road during rainfall and snowmelt, all this salt has increased the salinity or saltiness of our water to a point where it has negative effects on our environment, plants, and animals, and has a huge impact on our drinking water.

Freshwater fish and other freshwater plants and animals have not adapted to salt like the animals in the ocean have and they can't survive in salty water. Salt is not only toxic to aquatic life, but the runoff deposits salt in the soil, and plants can't survive when they take it in their vascular system. Excess levels of salts in the soil root zone limit the ability of plant roots to absorb soil water. Water normally flows osmotically from low salt concentration to higher salt concentration. Roots uptake water normally by having a higher salt concentration than the surrounding soil water pool. When there is more salt in the soil than the roots, then the osmosis doesn't work to the plants' advantage but

works the opposite way and inhibits growth. The same is true for the fish and bugs because they lose water from their bodies and become dehydrated.

Besides the disastrous effects road salt has on plant and animal life, there is also a great deal of damage to vehicles and infrastructure of all kinds due to corrosion of the metals.

The US EPA has set limits on the allowable levels of chloride in water but hasn't put limits on sodium. In high concentrations, both sodium and chloride are harmful not only to aquatic organisms and other wildlife, but sodium is especially bad for humans with high blood pressure.

So, what can residents do about this "Salty Problem?". People want safe streets and roads in the winter. Most people think that the more salt the community dumps on the roads, the safer they will be. That isn't the case. Road salt is ineffective below 15 degrees Fahrenheit. So, it doesn't matter how much salt you put on, the snow won't melt during those temperatures. When it does melt though, all that salt ends up in the stream, river, and lake, and the community has wasted a lot of money because salt is expensive. It is very difficult for the communities because people call the mayor and complain about the roads, and the mayor calls the Service Department to salt some more. As residents, we need to be more reasonable and stay off the roads unless absolutely necessary in a storm.

Yet, there is hope for solving this problem, and we can supply some hopeful solutions on our own sidewalks.

- Shovel your snow early and often if you are able because that reduces the amount of salt you need to de-ice the surface. Also, pile your snow in various locations, so the salt is not concentrated in one spot when the snow melts.
- Keep salt away from stormdrains because that is a direct route for runoff into the stream.
- Follow the application instructions on your de-icer. Less is More!!!!
- Only apply salt to the walkways you use all the time.
- Remember the temperature limitation and don't apply when it is less than 15 degrees Fahrenheit.
- Sweep up the extra road salt. That will also keep it off your grass and out of your soil.
- Use a Potassium Acetate de-icer if you have pets and make sure you wash their feet after walking them.
- Finally, the most important thing to remember is that one 8-ounce coffee cup of salt will de-ice 250 square feet, which is the same as 10 sidewalk squares. Go easy when you salt, please!

Another great resource is the Izaak Walton League's road-salt watch program that people can participate in at: <https://www.iwla.org/water/stream-monitoring/salt->

[watch/results](#) You can also obtain great information about salt intake from the U.S. Department of Agriculture, <https://www.myplate.gov/tip-sheet/be-salt-smart>. As always, if you have any questions about salt usage or other environmental topics, contact Summit SWCD at 330-929-2871, <https://sswcd.summitoh.net>, or sbarbic@summitoh.net.