Quarterly–
Winter
Edition

February
2024

What's Going On In Our Corner?

Southeast Wisconsin MS4 Permittees

The Importance Of Calibration

Recently, the city of Cudahy purchased a new plow truck for their winter road operations. Below are pictures showing how much salt is dispensed with the truck's factory setting (left image) and after city staff calibrated the equipment (right image).

The new truck was kicking out roughly 3 1/2 times the amount of salt the factory setting was showing inside the truck. The city explained that calibrating its equipment allows it to provide the right amount of salt to effectively cover streets without over-salting.

This is better for the environment and reduces overall salt costs. The city thanks its Public Works Foreman, Jeremy Windt, for sharing these photos and calibration information.

Photo Credit: Jeremy Windt, City of Cudahy

Photo Credit: Waukesha County

Topics

Waukesha County's Brine Recycling System

Salt spillage caused by loading and unloading trucks during the winter season can be problematic. Salt spillage can run off into waterways if not properly cleaned up on a regular basis. However, with Waukesha County's brine recycling system, salt runoff is captured, and money is saved by collecting the salty stormwater for brine making.

Typically, water used to make brine is purchased from the local municipal water supply system. However, since Waukesha County extensively uses brine for both pre-wetting truckloads of salt and for pre-wetting roadways (using an average of 500,000 gallons of water per year), they looked for cost-saving options.

Waukesha County stores and distributes road salt from its main highway shop and four substations. To capture salt runoff and reduce the need to purchase water, each substation has a salt containment pad in the loading area with an underground storage tank.

One storage tank captures 6,000 gallons of salty runoff, and the other captures 30,000 gallons.

The collected runoff is pumped into nearby containment tanks, which are accessed when making brine. As the collected runoff contains salt, less salt is needed to make brine.

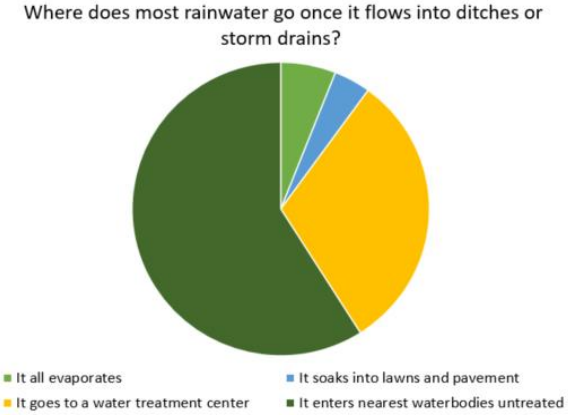
Additionally, the underground storage tanks can fill up with runoff until full. Once full, the storage tank inlets can be closed until needed.

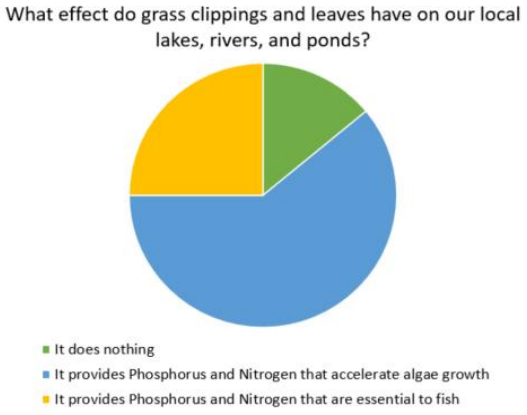
When storage tank inlets are closed, these areas are swept, and any residual salt is collected and put back into the storage sheds. Lastly, runoff from the clean containment areas is discharged to a stormwater best management practice when closed.

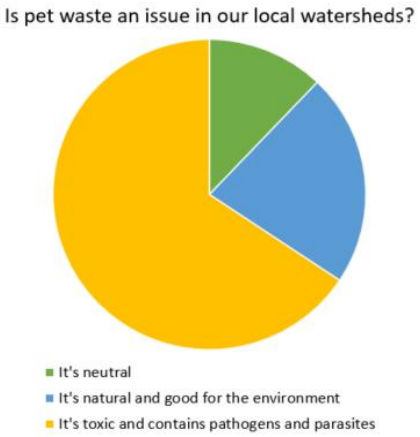
Waukesha County's brine recycling system is a great example of a combination of stormwater best management practices in action.

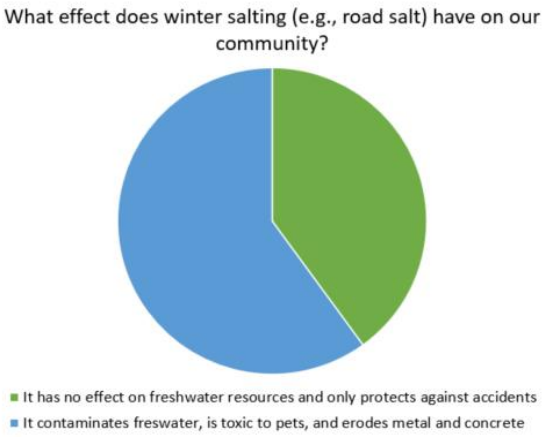
Respect Our Waters 2023 Survey

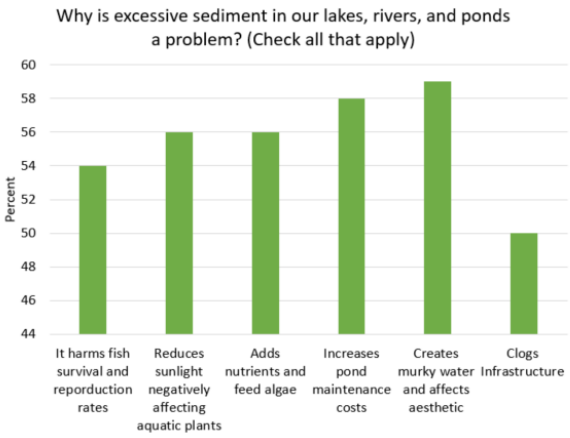
In 2023, Root Pike Watershed Initiative Network conducted a stormwater survey to gauge how residents/people in twenty southeastern Wisconsin municipalities view specific water quality issues. In all, every municipality was represented, 750 surveys were completed, and 356 were used in the final scoring once bots and suspect submissions were removed. Survey results were compiled for all municipalities together, and for each separately. Data extrapolated will be used to help target the most pressing topics for each municipality and assist in Root Pike Watershed Initiative Network 2024 education and outreach planning. Below is a summary of the results:

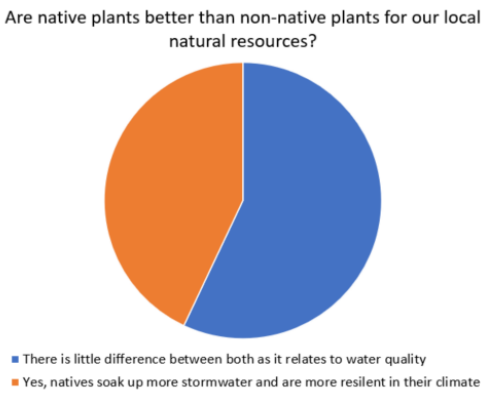












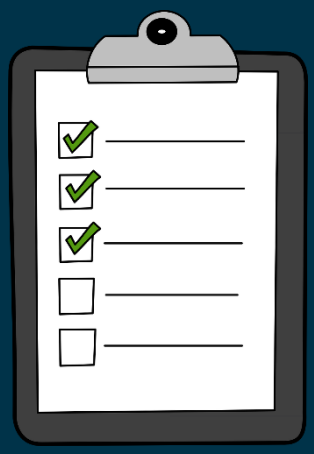
Village Of Thiensville: Targeted Education On Oversalting

The village of Thiensville is working on an identified education need – oversalting in their community, specifically targeting private businesses.

The village is collecting baseline data to measure if their efforts will be successful. Through a partnership with Milwaukee Riverkeeper, receiving waterbodies are being sampled, and village staff are tracking visual observations of oversalting within the study area (e.g., parking lots and sidewalks).

The village hopes to reduce over-salting by incentivizing businesses to participate in smart salting practices or training. Currently, the village is researching grant opportunities to help with their efforts. At the end of the educational effort, stream sampling and visual observation will be performed again to measure the effectiveness of their targeted education.

Photo Credit: Cary Institute of Ecosystem Studies



Want To Be Featured In The MS4 Spring Edition?

We want to hear about your municipality's success stories and practical procedures.

Please reach out to Wisconsin DNR stormwater specialists with stories to include in upcoming editions:

Lexi Passante
Elexius.Passante@wisconsin.gov

or

Samantha Katt
Samantha.Katt@wisconsin.gov

WISCONSIN DEPT. OF NATURAL RESOURCES

Upcoming Dates, Reminders And Events

MS4 Annual Report Due March 31, 2024

The MS4 annual report can be submitted via the e-permitting system. A WAMS ID is required to access the annual report. If you do not have a registered WAMS ID, please visit the Wisconsin Web Access Management System website.

Smart Salting Training Opportunities

- **Smart Salting For Parking Lots And Sidewalks Workshop**: Feb. 13, 2024, from 8 to 11 a.m. Location: Madison Metropolitan Sewerage District. You can sign up on the Wisconsin Salt Wise webpage.

This is a free training for winter maintenance professionals who remove snow, apply road salt or maintain snow removal equipment used on parking lots and sidewalks. Learn how using the right amount of salt can save time, budget and our waters.

The training will include best management practices to keep paved areas safe, the benefits of using a liquid salt system, guidance on how to determine the right amount of salt to use and case studies from local applicators. The last hour of the event will be an equipment open house.

Winter Salt Awareness Week: All Past Presentations On WI Salt Wise's YouTube Channel

Winter Salt Awareness Week featured several different experts across the country daily from Jan. 22-26, 2024. If you were unable to tune in, all presentations are available on WI Salt Wise's YouTube channel. Each talk can be viewed at: Wisconsin Salt Awareness Week (wisaltwise.com).

Wisconsin Public Radio – What Winter Does To Roads, Sidewalks And Our Environment

We rely on salt to keep our roads, sidewalks and other pavement clear of ice, but all that salt can have an adverse effect on the environment. On WPR, they talk with two experts (Allison Madison with WI Salt Wise and Shannon Haydin with Wisconsin DNR) about what is being done to decrease the use of salt. Listen to the episode.

2025 Urban Nonpoint Source Construction Grant Applications Now Available

Urban Nonpoint Source and Storm Water Construction grant applications for projects beginning in 2025 are now available on the Wisconsin Department of Natural Resources' grant program webpage.

The following eligible applicants have until April 15, 2024, to submit applications for 2025 construction projects: cities, villages, towns, counties, regional planning commissions, tribal governments and special purpose lake, sewage and sanitary districts.

The Urban Nonpoint Source and Storm Water grant program offers local governments competitive grants to control pollution that is carried by stormwater runoff from diffuse urban sources. The grants reimburse the costs of construction projects that control this type of pollution. Eligible construction projects include:

- Construction of structural urban best management practices, including wet detention
- Infiltration or wetland basins or infiltration trenches
- Engineering design and construction services for best management practices installation
- Land acquisition and easement purchase, including appraisal cost
- Storm sewer rerouting and removal of structures
- Streambank and shoreline stabilization

Please note that Urban Nonpoint Source and Storm Water planning grant applications will not be solicited in 2024 but will be solicited again in 2025.