

Woodbury CleanWater

November/December 2017

A special edition about water in Woodbury



Low-salt diets also are great for driveways and sidewalks

Earlier this year, the Woodbury Streets Division was recognized at the Minnesota Road Salt Symposium for increasing its efforts to use less salt on the city's roads without decreasing motorists' ability to drive safely in winter weather. This effort includes updating technology that calibrates application rates with road temperature information and using different chemical compounds when temperatures drop below the known level of effectiveness.

Why does this matter?

Using less salt saves money and releases fewer pollutants into the local environment. Did you know that it only takes 1 tablespoon of salt to contaminate 5 gallons of water? Salt is a permanent pollutant. It cannot be removed from stormwater, but instead flows wherever the water goes. That means it washes off streets, driveways, walkways and parking lots, enters our ponds and streams, moves into lakes and rivers, and eventually makes its way into the groundwater. Around the state, monitoring shows increasing levels of chloride contamination in surface water and groundwater resources – mostly due to salt applied to hard surfaces.

What can you do?

As the Streets Division works to decrease salt use while keeping drivers safe on winter roads, residents and businesses can help protect lakes, rivers and drinking water from salt pollution. Follow these four steps:

Water softener tips

Water softeners drain water through the city's sewer system, but the salt in the water is not removed at the sewage treatment plant and eventually drains to the Mississippi River. Here are some tips to consider when purchasing a water softener:

1. Test your water for hardness to see if a softener is necessary (only recommended if hardness is greater than 120 mg/L).
2. Purchase demand-based softeners that recharge based on household water use. (This will help save money on water bills, too.)
3. Install a bypass to avoid unnecessary softening of the water used outdoors.



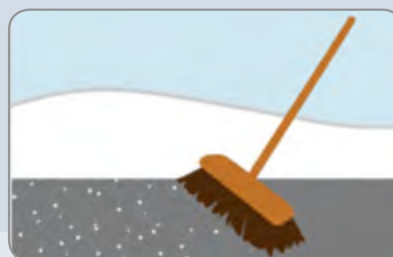
1. Shovel: Clear walkways and parking lots before snow turns to ice and you apply salt. The more snow you clear manually, the less salt you'll need.



2. Select: Salt doesn't melt ice if the pavement is below 15 degrees, so use sand for traction when it's too cold.



3. Scatter: Use salt only where and when it's critical. When you apply salt to pavement, leave plenty of space between granules. A 12-ounce coffee cup of salt is enough to cover 10 sidewalk squares or a 20-foot driveway.



4. Sweep: Clean up leftover salt and sand to save in a separate container and reuse as needed.

Watch for thin ice on Battle Creek and Colby Lakes

Thin ice and areas of open water may be found all winter on Battle Creek and Colby Lakes in Woodbury due to aeration systems operated by the city. The aeration systems circulate the water in the lakes to oxygenate them, keeping the fish alive through the winter.

The lakes were selected for aeration because their shallow depth results in low oxygen levels. All neighboring residents and recreational users of Battle Creek and Colby Lakes should note the location of the aeration systems and stay clear of the area posted for thin ice.

This will be the sixth winter an aeration system will operate in Colby Lake. It will be located in the southeast part of the lake near Edgewater Park.



The city has operated an aeration system in Battle Creek Lake for more than 20 years. It will be operated adjacent to the fishing pier, north of the public access area in Shawnee Park.

The perimeter of each aeration system will be posted with orange and white reflective signs that warn: "Danger - Thin Ice."

The aeration systems will be turned on in December, weather permitting, and remain in operation until the ice is out. For more information, call the Parks Division at (651) 714-3720.

Water users are saving money with new irrigation controllers

Incentive program continues in 2018

The city's Water Efficiency Incentive Program was created to help residents and businesses reduce water use and save money.

In 2017, 22 homeowners associations and commercial properties upgraded their irrigation systems, resulting in a total reduction of 9.4 million gallons of water each year moving forward. Through this program, properties with a separate irrigation meter are eligible to apply for 50 percent funding assistance up to \$8,000 for irrigation upgrades such as WaterSense certified controllers, pressure regulated sprinkler head replacements, audits and weather-sensing technology. Applications for the 2018 program will be accepted via the city's website beginning in February through mid-April. Visit smartwateruse.org and select "Water Efficiency Incentive Program for Commercial" or email Kristin Seaman, environmental resources specialist, at kristin.seaman@woodburymn.gov to be added to the email notification list.

There are also incentive opportunities for individual homeowners. After two years of pilot programs, along with funding from the South Washington Watershed District and Washington County, the city has assisted 460 single-family homes with existing irrigation systems upgrade to WaterSense certified controllers. These controllers use weather forecasts to decide whether or not a lawn needs watering, and make it possible for users to control their irrigation system through a mobile phone, computer or smart-home technology.

Water savings per household is estimated to be around 40,000 gallons each year, reducing water wasted for these homes by an estimated 18.4 million gallons each year ahead. Homeowners who have an irrigation system on city water are encouraged to learn more at woodburymn.gov/smartirrigation.



Thank you to the following Woodbury associations and properties that participated in the 2017 program and their commitment to water efficiency in Woodbury.

- AJ Alberts Plumbing
- Brookview Gardens
- Evergreen Community Association
- Evergreen Country Homes
- Fairway Meadows Manor Association
- Hampden Woods
- I&T Investment property
- Kingsfield Rambler
- Lakeside Townhomes
- Lodges at the Preserve
- Plaza at Landsway Dancing Waters
- Pond View Townhomes
- Powers Lake Townhomes
- Rivertown Office Building
- Sienna Ridge Townhomes
- Stonebrooke Homeowners Association
- Stonemill Farms
- Tall Trees Townhome Association
- Tamarack Hills Office Complex
- Villas at Carver Lake
- Wedgewood Estates
- Woodbury Hills West

Maintaining ponds keep lakes and wetlands clean

Did you know there are more than 500 stormwater ponds within the City of Woodbury?

These ponds provide flood control and help prevent soils, debris and nutrients from reaching our natural lakes and wetlands.

City staff evaluates stormwater ponds annually to identify which ones need to be cleaned to allow for another 10 years of water quality and storage.

Selecting ponds to be analyzed is a process that begins in the spring. Through computer modeling, site inspections and soil samples, city staff creates a project list that meets budget requirements and fits the timelines for completion. Staff also looks at the concrete structures (inlets, outlets and catch basins), vegetation and flood storage to identify issues and improvements that can be made while the necessary work is being done. The goal for these efforts is to improve the flow of water, improve habitat

and reduce maintenance requirements. This happens during analysis and design stages to be appropriately included in the scope of work.

Pond maintenance is done mostly in the winter to allow contractors to work around frozen water and remove frozen soil, making the work more efficient and less expensive. Pond maintenance activities typically take place in the same areas as the following summer's road rehabilitation project, allowing the heavy equipment needed for maintenance to travel on roads and trails that are scheduled to be replaced, instead of those in better shape.

Road rehabilitation also creates an opportunity to identify areas for water treatment and storage, such as the roadside rain gardens along Interlachen Parkway. These features are possible with the support of Woodbury's three watershed districts, which typically lead the design, installation and maintenance of these important infrastructure improvements.

This year's pond maintenance project will take place in and around Eagle Valley and Prestwick Golf Courses.

Pond maintenance projects are mainly paid for through the \$18.75 stormwater charge collected through quarterly utility bills.



This roadside rain garden along Interlachen Parkway was installed as part of the 2016 Roadway Rehabilitation Project.