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1 message

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Spare the road salt or spoil the water, county officials urge communities

By Lawrence Synett Chicago TribLocal reporter

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[PHOTO] A Crystal Lake public works employee takes part in the department's annual snow rodeo last month.

Although the cost of road salt has dropped, officials in McHenry County are still urging municipalities to proceed with caution when spreading the stuff on roads this year because of the way it affects groundwater.

In a county dependent on vast aquifers that supply all of its potable water, officials say road salt is the number one cause for increased chloride levels in ground and surface water. Using the right amount of salt helps keep that water clean, officials say.

"Once salt is in the water, it's always in the water," said Cassandra McKinney, water resource manager for the McHenry County Division of Water Resources. "If you add salt to the road or any pavement, it has the opportunity to travel off of that and into a water system. Just because you no longer see it, doesn't mean it's gone."

The increased chloride from road salt also causes corrosion of infrastructure and vehicles, adverse growth effects of vegetation and impairment of aquatic life.

"Have you ever walked outside in the summertime along a parking lot and seen brown or dead grass? That is from salt," McKinney said. "Residents need to understand the salt we use will impact our drinking water supply and possibly your recreational hobbies."

The goal is to educate operators, superintendents and other who manage snow and ice operations on how to maintain safe, drivable roads by using less salt.

The state's average annual salt bid is for 1.4 million tons. In 2010, the county ordered 60,000 tons of road salt during the state bid. Of that, the McHenry County Division of Transportation received 12,000 tons. The county on average uses 9,000 tons of road salt each year.

Last year, Crystal Lake used 2,562 tons out of the 6,000 tons it purchased for more than \$350,000. This year, officials purchased 4,000 tons at \$61.60 per ton. In 2008-09, salt prices exceeded more than \$100 per ton.

The public works department has 19 established snow routes. If the

weather pattern indicates that it would be best to dispatch all 19 trucks for salting operations, then they are dispatched. If staffers believe the city can be covered in a safe, efficient manner with fewer trucks, then that is how they are dispatched, said Bob Huss, streets supervisor.

All the trucks have salting components and ground speed sensors that only spread salt when the truck is in motion. Fifteen are equipped with computerized spreader controls that make sure the trucks are spreading accurate amounts of salt.

"It is our goal to use the least amount of salt possible and still maintain safe roadways," Huss said. "Everywhere, but especially McHenry County, it is essential for agencies to be responsible with salt use since it directly impacts our groundwater."

Other measures to limit salt use include spreading beet juice on roads before a storm, which prevents snow from sticking to the pavement. Crystal Lake workers also moisten the salt before it hits the road to keep it from bouncing around.

The City of McHenry primarily uses its road salt at intersections, hills and curves. It has stopped its past practice of pre-salting before it snows, and carefully calibrates how much salt is spread onto the roads.

"It is important to recognize the potential impact road salt could have on the environment and infrastructure," said Jon Schmitt, director of public works.

The city used 1,700 tons out of the 4,080 it purchased last year. This year, 3,000 tons are approved for purchase at \$60.70 per ton, costing the city \$182,100.

In Algonquin, a conscious effort by staff to reduce the amount of salt used on the roads has netted positive results, said Al Mozola, superintendent of streets and right of way.

The village purchased 3,600 tons in 2007-08, 3,000 tons in 2008-09 and 2,400 tons in 2009-10. This year, staff budgeted \$179,000 for 2,800 tons of salt at a price of \$61.52 per ton. Last year, 1,860 tons were applied to the roads.

Along with pre-wetting, staff has changed the settings on the snow plows to only allow them to go to 300 pounds per lane mile instead of 800 pounds.

"You can really see the difference over the last three years," Mozola said.

Huntley's storm water system was designed so that all catch basins drain into a detention basin before entering streams. By doing so, it helps reduce the amount of pollutants, like those from the salt, that can enter the streams, public works director Jim Schwartz said.

The village has contracted for 2,500 tons of salt at a price of \$60.37 per ton, totaling \$150,800. Each year, the goal is to restock the village's salt facility, which holds 2,000 tons. Last year, 2,700 tons were used.

Limiting road salt doesn't stop at educating municipalities, as statistics don't take into account the amount of salt purchased and applied by private snow plowing companies or residents, McKinney said.

"Residents are another group we have to remember and inform," she said. "More isn't always better. Only one to three pounds of salt is needed per 1,000 square feet of sidewalk or driveway to effectively break the pavement-ice bond."

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