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This article is a summary of a meeting we recently attended regarding the use of salt as a deicer.

You may not think too much about seeing your local DPW sanding, salting and plowing after a snowstorm.... but they have. A recent "Conversations on Conservation" program sponsored by Westchester County Parks Department, provided a forum for all involved to discuss and share ideas on the most efficient and effective way to balance public safety, financial costs and environmental impacts of salting our streets.

We are all familiar with the corrosive effect of salt on cars, trucks and equipment. But what you may not notice is the negative effect salt has on our soils, vegetation, wild and aquatic life, and even human health.

Why is smarter application and salt reduction important? As rock salt dissolves and seeps into the storm drains or melts into the ground, it can enter our drinking water system and render them undrinkable. This has already happened to at least one homeowner in Rockland County who spent about \$50,000.00 of his own money in legal fees, bottled water, and replacing corroded copper pipe in his home after his well water became contaminated from over-salting. Imagine the value of your house if you tried to sell it without potable water hookup. While we may think that this is an isolated incident, current monitoring shows rising salt concentrations in the Hudson River Estuary tributaries. Winter salting has had a larger impact than anyone realized.

At this time, few practical deicing alternatives exist. While calcium chloride, magnesium chloride, calcium magnesium acetate, potassium acetate, urea and potash are effective deicers, some have other environmental impacts while all are cost-prohibitive except in specific applications. The use of sand for snow-melt is ineffective because it is not a deicer. Although it can temporarily create traction, the raw cost of sand and spring clean-up make sand an impractical option.

The best answer now is to reduce over-salting... but how?

James J. Dean, Road Master II Certified and Superintendent of Highways for Town of Orangetown, Rockland County has significantly reduced salt used in his town by pretreating roads with temperatures above 20 degrees with a salt-brine mix. The salt brine mix contains 22-23% salt, lowers the freezing temperature on the road and reduces the ability of snow to bond to the street. Up to three inches of snow can fall and melt on the road before he has to re-apply or plow.

Another tool in the snow fighting arsenal is truck mounted infrared sensors which monitor road temperature and automatically dispense the proper amount of salt. (This method has been successfully implemented in The State of Vermont).

Other towns have been able to significantly reduce salt use by classifying roads in terms of traffic usage and reducing the use of salt on less traveled roads and in environmentally sensitive areas (such as reservoirs).

Finally, storage of salt by private companies and individuals is on the rise and proper storage is essential. If you are keeping an eye on your wallet, more than 10% of salt can be lost due to improper storage. Depending on local village or town regulations, if, due to storage problems illicit discharge is detected, you may even be subject to fines.

More information about salt and salt storage is available at the Salt Institute website: www.saltinstitute.org. You may also be interested in "From Icy Roads to Salty Streams" published by the National Academy of Science.