

Salting roads draws concern

As winter weather looms, officials worry about impact on Lake George

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Highway salt will de-ice slick roads, but what keeps motorists safe in the winter is causing concerns among those watching Lake George's water quality.

Studies show the concentration of salt in Lake George has more than doubled since the 1980s, and scientists point to road salt as a major contributor. Sand from highway trucks also finds its way into the lake, and it can be costly for municipalities and property owners to remove.

Motorists have grown accustomed to clear roads during the winter but are perhaps unaware of impacts to water bodies, said David Decker of the Lake George Watershed Conference.

"We need to change the mind-set and recognize that salt is not necessarily a good thing," Decker said.

Highway trucks often coat roads with salt before a storm. The preemptive measure, with continued application during foul wintry weather, helps road crews keep pavement bare and often dry by the next day.

About 42 tons of sand and 13 tons of road salt are used per lane mile of road in the Lake George watershed each winter, according to a watershed conference analysis. That amounts to an average of 29,000 tons of sand and 9,000 tons of salt annually.

Sand, which is becoming more prominent in lake deltas, alters aquatic habitat, according to Lawrence Eichler, a research scientist with the Darrin Fresh Water Institute. Increased levels of chloride and sodium affect habitats by interfering with fish spawning, degrading streams for fish and invertebrates and creating a new environment for invasive species.

The impact of salt on land is noticeable because of burned out roadside vegetation, Eichler said.

At the same time, however, the lake's water is not near the salt concentration where it would become undrinkable.

Sodium in Lake George is at 7 parts per million, while a measurement of 20 parts per million would have an affect on those who must adhere to a salt-restricted diet, Eichler said.

The sodium concentration is likely higher in bays closer to roads and after snowstorms, Decker said.

Highway chiefs recognize the impacts to the lake, but they maintain keeping roads safe is the top priority.

"The same people saying we're using too much salt call when the roads aren't clear and they can't get to their card party or go bowling," town of Lake George Highway Superintendent Hollis Ovitt said.

Decker said departments had traditionally used sand, but through the years they've switched to a sand-salt mixture. In the case of the state Department of Transportation, they use pure road salt.

The state uses about 1,800 tons of salt on routes 9N and 9L each year, DOT spokesman Peter Van Keuren said.

Decker said highway trucks use calcium-chloride salt. The Lake George Watershed Conference reported an increase in the concentration of chloride from about 5 parts per million in 1980 to roughly 15 parts per million in 2005.

Decker noted that calcium levels have increased, too. The town of Lake George uses a mixture of salt and sand, Ovitt said.

The salt melts the snow while the sand provides a little grip, he added.

Warren County is responsible for plowing Bay Road north of Route 149 in Queensbury and Diamond Point and Bolton Landing Riverbank roads in Bolton. Towns around the lake are also contracted to plow some of the county's roads, Warren County Department of Public Works Superintendent William Lamy said.

The county has gotten away from using sand and now only uses salt, Lamy said. Trucks treat the roads with salt before a storm hits to prevent hard-packed snow and ice from forming.

Queensbury DPW Superintendent Michael Travis said when the town plows roads in the Lake George watershed, like Lockhart Mountain Road, it uses a mix of salt and sand. The town has three street sweepers to collect the sand in the spring.

Eichler recognizes the need for salt and sand but would like to see highway departments calibrate their trucks to minimize the amount of salt around the lake, he said.