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More pressure for less salt in the Park

By MIKE LYNCH, Enterprise Outdoors Writer

SARANAC LAKE - While a new study says road salt use in the Adirondack Park should be curbed and studied further, the state Department of Transportation says it is already trying to improve how it applies the de-icer.

The study was performed by the Adirondack Watershed Institute, a program of Paul Smith's College, and is called "Review of Effects and Costs of Road De-icing with Recommendation for Winter Road Management in the Adirondack Park." The report was released in February and was sponsored by AdkAction.org, whose Water Quality Committee chair is Lee Keet, a Lake Colby shoreowner and member of the Adirondack Council's board of directors. AdkAction.org is a coalition of Saranac Lake area property owners who originally banded together to focus on making changes the way land is assessed.

The study comes one year after the release of a report on road salt by the Adirondack Council environmental group titled "Low Sodium Diet: Curbing New York's Appetite for Road Salt" that called for reducing the use of salt in the Park.

This new study makes 11 recommendations that could improve the winter management of roads. The number-one recommendation is the creation of a road map that would highlight ecologically sensitive areas in the Park. The map would be used to "tailor application rates, methods, and deicer types to minimize the environmental impacts of de-icing." This recommendation was made in part because state agencies already have some of this information available and could make the maps with their GIS software.

"There is enough information out there about the organisms that are affected and ecosystems that are most vulnerable," said Daniel Kelting, executive director of the Adirondack Watershed Institute and a professor at Paul Smith's College. "We have the information through the DEC, through the APA, on where those vulnerable ecosystems are. We should be able to do a pretty good job in developing those sensitivity maps and use those as a guide, determining what application methods, what type of de-icers we should apply and also to think about doing some testing."

The report states that the DOT applies about 950,000 tons of untreated road salt to state roads annually. The report states there are 43,000 miles of "lane miles" in the state, meaning that 22 tons per "lane mile" are applied per year.

"Though the purchase price of road salt is low compared to other de-icing chemical alternatives, the environmental costs may be great," the report states. "The environmental impacts of road salt were first published in the 1950s, and since that time hundreds of scientific studies have documented its impact on water quality and the roadside environment. The consequences of road

salt are so well documented in the scientific literature that Environment Canada recently classified road salt as a toxic substance."

Ed Franz, Adirondack Park Forest Preserve manager for the DOT, says he was surprised by this report because he was told he would have a chance to review it for accuracy before it was released.

"I was kind of surprised that they didn't let us give them some information," Franz said. "It looks like they just pulled stuff from our Web site, and they don't really have a true story about how we do our winter maintenance."

Franz said an advisory group is being formed to study ways winter maintenance is being performed, including how road salt is applied in the Adirondack Park. The group will include representatives from the DOT, state Adirondack Park Agency, state Department of Environmental Conservation, Paul Smith's College and Keet, among others. Franz said he was under the impression the report would be discussed at the group's first meeting before it went public.

Franz said some of the recommendations could be implemented during road corridor planning in the Park, but he cautioned that cost plays a big role in the decision-making process. He also mentioned that the DOT is either doing some of the things recommended in the report or has looked into them.

"Things have to be reasonable and feasible," Franz said. "If it requires all new equipment, you have to have money to buy it."

DEC spokeswoman Maureen Wren said her agency was aware of the new report and was working with the DOT to address road salt issues in the Adirondacks.

"We do acknowledge that these concerns exist," Wren said. "We have been made aware by others who have raised these issues as well, and we have been working with the Department of Transportation on a salt and winter maintenance advisory group for the Adirondacks. So we'll be exploring that and see what recommendations and approaches might come out of that."

Although this recent report is critical of the effects of road salt, it does not call for it to be completely discontinued. It does suggest that the state do things like be proactive in management of storms. It recommends investing in a Road Weather Information System, which some other states already have installed. These systems use meteorological and pavement sensors located along the road system to provide real-time weather information, which helps guide management practices.

The report also recommends putting down chemical anti-icing agents, instead of road salt, on roads before storms. It also states that road salt is efficient above 15 degrees Fahrenheit but isn't very effective below that temperature. When the weather dips below 15 degrees, it recommends using materials such as magnesium chloride.

"At low temperatures, it takes about one-third the amount of magnesium chloride to have the same de-icing power as sodium chloride," Kelting said.

Kelting said if magnesium chloride were used in this manner, "its effect there would be really negligible" on the local environment.

Whether or not these types of recommendations are feasible or sensible will be explored in the near future, Franz said.

"We are really doing what we can, but we're dealing with a situation with safety and the environment," Franz said. "It's a difficult topic, but we're going to continue the dialogue, look over a little further with what they had mentioned. If there's something good in there, of course, we're going to look at those things. But really, we need to have that dialogue."

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