

When snow starts to melt, Northland waterways get a heavy dosage of salt

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Salt running off roads isn't just inefficient — it can be deadly to the environment. Computer monitors in streams show salt levels can skyrocket to levels toxic to trout after just a day of melting snow and ice.

"When the first snow starts melting, or after the first snowstorm in the fall, we see the salt in the stream within an hour or two," said Rich Axler, aquatic ecologist at the Natural Resource Research Institute in Duluth. "It's rolling right in off the parking lot piles and the banks along the streets."

Salt at high levels is toxic to most organisms,

especially stream trout. In the Twin Cities, several streams are so polluted from road salt that fish can't thrive, and the streams have been ranked as impaired.

In the Northland, salt level spikes seem to be short enough that they haven't killed fish outright. But there may be more subtle impacts on trout health or reproduction.

"We don't really know what impact these big spikes [in salt] have on the fish," Axler said. "We don't know which one of the stressors they face might be too many."

Axler said the good news is that the salt is totally

diluted and has no impact by the time it gets to Lake Superior. But less is known about salt levels in local ponds and smaller lakes.

Minnesota Pollution Control Agency consultant Carolynn Dindorf said there are acidic and organic de-icing substitutes for salt. But they also cause problems, including spurring phosphates that cause algae growth. Organic compounds also can deplete oxygen in water.

"Someday, we may finally find a chemical to melt ice that doesn't harm the environment," she said. "Until then, our answer is to use less salt."

