

Community Connections

Please Pass the Salt!

by Roland Sigurdson, Aquatic Education Specialist

February 2011

This winter has been a REAL Minnesota winter for many of us that spent our afternoons sledding, skating and skiing in the 1960s, 1970s and 1980s. Deep snow, slick roads, ice storms, treacherous sidewalks and the like make up our winter wonderland in 2010-2011. The thing is, that those of us that were sledding back then don't bounce like we used to do. I know three people, including my mom, that have slipped on ice, fallen and broken their wrists this winter. Ouch!

Safety on Minnesota's roads, parking lots, and sidewalks keeps municipalities and home owners on high alert until the first lilac buds are bursting forth. Plowing, chipping, scraping, shoveling and salting the surfaces that we traverse keep us all safer.



Photo from Minnesota Pollution Control Agency

Can there be any downside to these safety precautions?

While safety has to be our first priority for our fellow humans, we also need to be aware of how the methods we use to maintain that safety affects other organisms. New **research** at the University of Minnesota has shown that salt used on our roadways, parking lots and sidewalks makes its way to our lakes and rivers and is increasing the chloride concentration in the water. In fact, they found that approximately 70 percent of the salt scattered on metro streets and roadways remains in the watershed. That salt is taking its toll on aquatic organisms. **Download PDF** a report by the Minnesota Department of Transportation on the environmental impacts of road salts in the Twin Cities Metro Area.

Recent studies released by the U.S. Geological Survey (USGS) have shown that chloride levels above the recommended federal criteria set to protect aquatic life were found in more than 40 percent of urban streams tested across the northern United States. Elevated chloride can inhibit plant growth, impair reproduction, and reduce the diversity of organisms in lakes and streams.

So how do we balance the need for safety for our friends and neighbors with the need for survival of the aquatic organisms (also your neighbors) that live in the pond, lake, stream or river down the street?

There are a few simple steps that we can each take to prevent water pollution by chlorides. These recommendations are paraphrased from the **Residential Snow and Ice Care brochure PDF** produced by **9 Mile Creek Watershed District**.

- **Apply a liquid de-icer before snow storms** to prevent snow and ice from building up. This is not a substitute from shoveling, but does make it more effective.
- **Shovel that snow!** – Shoveling, snow blowing, plowing and sweeping mean using less salt.
- **Less is better.** When applying salt, if there are leftover crystals still visible, then the salt has been over-applied. The leftover salt can be swept up and reused.
- Finally, **temperature matters.** At low temperatures, salt becomes less effective. Read the recommendations on the bag for usage. If the temperatures dip below 15°F using sand is a better alternative for improved traction.

We'll all be grabbing our shovel and bucket of salt again in the near future to push winter off our driveways and sidewalks. Remember to consider all aspects of your actions. Safety for all organisms in the watershed, including us.