

TECHNOLOGY UPDATE

Residential De-icer Options

Protect Stormwater: Protect Streams and Lakes

- ◆ **During periods of snowmelt, de-icers that have been applied to impervious surfaces such as driveways, mix with snowmelt and travel to nearby storm drains.**
- ◆ **In most cities, storm drains discharge directly to local streams and lakes.**
- ◆ **Some de-icers can change the salinity of streams and lakes, which impacts aquatic life.**

READ THE LABEL **...DE-ICERS CONTAIN** **DIFFERENT CHEMICALS**

Readily Available De-icers

Sodium chloride, or rock salt: It is the least expensive de-icer and most widely used. But it is harmful to vegetation, soil, streams and lakes. If you need to use rock salt, apply during the colder months (Dec-Feb). In March, plants are breaking dormancy, and the roots begin to actively absorb water, so this is a good time to use another alternative.

Magnesium chloride: This de-icer doesn't leave a powdery residue and is considered safer for humans, animals and vegetation. It is pricier than rock salt and can damage masonry.

Calcium chloride: Will not harm vegetation, but is expensive, and can leave a residue on flooring and shoes.

Potassium chloride: More environmentally friendly, but expensive.

Acetates: The acetate de-icers come as sodium acetate, calcium magnesium acetate, and potassium acetate. These organic chemicals can break down in the environment and leave little damage.

Providing educational resources statewide to communities and other groups to inform and educate local stakeholders.



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What Can You Do?

Helpful Hints...

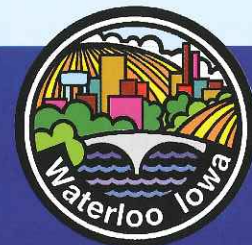
- ◆ **Shoveling and snow-blowing can be your best line of defense.**
- ◆ **Use de-icers sparingly, keep a safe distance from storm drains, streams, lakes, and wetlands.**
- ◆ **Use de-icers in combination with minimal amounts of sand for better traction.**
- ◆ **Pre-apply de-icer before snow or ice is expected.**
- ◆ **Know which de-icers impact vegetation and concrete.**

Additional Resources:

- ◆ **www.mnltap.umn.edu/Events/RoadSaltSymposium/**
- ◆ **www.newyorkwater.org/downloadedArticles/ENVIRONMENTANIMPACT.cfm**
- ◆ **www.iowastormwater.org**

Disclaimer: ISWEP is providing readily available information on these new technologies and is not endorsing any specific product or technology.

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