BEST PRACTICES

DE-ICER...How to Keep You, Your Pets, Plants & Streams Safe this Winter

As colder temperatures arrive, so does the concern about slippery driveways and sidewalks due to snow and ice. Many of us may turn to de-icers to help clear our stairs and walkways without realizing that the chemicals in de-icers can be harmful to our pets, plants, wildlife, streams and lakes and even our drinking water. Plus, the chemicals can be tracked into our homes, where it can harm our carpeting and flooring materials.

Historically, salt (such as rock salt) and/or sand were used as de-icers. Salt can be corrosive and harmful to plants, animals and aquatic systems. Sand can clog the spaces between the gravel where salmon eggs are developing and suffocate them. Sand can also



clog the gills of salmon and other fish and aquatic organisms that breathe through gills.

Today, there are a variety of chemical de-icers that are labeled as less corrosive and/or safer for pets; however, even these products can have a wide range of impacts to water quality, plants, birds, mammals (including pets and children) and aquatic organisms.

For a general description of common chemical de-icers, go to http://davesgarden.com/guides/articles/view/1954/

The Minnesota Pollution Control Agency offers an informative overview of the environmental impacts of road salts and de-icers at http://tinyurl.com/MPCARoadSalt

Whether you choose a salt-based de-icer, sand or one labeled safe for pets, here are a 10 tips to keep you, your pets, plants and streams safer this winter:

- Carefully read and follow the label instructions for application—More is not better and will not speed up melting.
- Use the right salt for the temperature (see list/table below).
- Apply de-icer before snow and ice start to accumulate.
- If it has already snowed, remove as much snow as possible before applying de-icer. De-icers work best when applied to thin layers of ice.
- Don't use rock salt within 5–10 feet of salt-sensitive plants in your landscape.
- Block off slippery areas you don't need to use for walkways. There's no need to treat areas in which you won't be walking.
- Remove shoes/boots before entering your home.
- Wipe the paws of your dogs and cats after they have been outside.



- If your dog will tolerate them, use booties on his/her paws when walking on sidewalks that have been treated with de-icer.
- Sweep or shovel up any excess de-icer and properly dispose.

De-Icer Comparison

The price of de-icers varies, and so does the temperature range at which they work.

| Туре | Cost | Effective Temperature |
|---------------------------------|---|---------------------------------------|
| Sodium chloride—aka rock salt | Least expensive | Effective between 15–32°F |
| Magnesium chloride | More expensive than rock salt | Most effective between 0–15°F |
| Calcium chloride | More expensive | Greater range of use between -15–15°F |
| Calcium magnesium acetate (CMA) | More expensive but more environmentally friendly | Effective down to 15°F |

Remember to remove treated snow/ice with a shovel or plow before it melts. Place it in a grassy or planted area where it can infiltrate into the ground.

Melting snow and leaves can clog stormdrains and lead to localized flooding in roadways. You can help by raking or shoveling the stormdrain (and properly disposing of the debris). Make sure to follow safety guidelines: look for oncoming traffic, wear bright colored clothing and have someone stand as a spotter, if possible. Otherwise, you can contact your local utility to alert them of the flooding issue.

To Report a Problem with a Public Storm Drain:

Call 24 hours/7 days a week Lacey: 360-491-5644

Olympia: 360-753-8333, Option 0

Tumwater: 360-754-4150

Thurston County: 360-867-2099

http://www.thurstoncountywa.gov/sw/Pages/rs-street-flooding.aspx

Did you know that it is illegal to put anything other than rain/melting snow into a stormwater drainage facility, such as a storm drain, drainage ditch, swale or stormwater pond? The Cities of Lacey, Olympia, Tumwater and Thurston County have all adopted and enforce Illicit Discharge ordinances that prevent the discharge of pollutants into storm drainage facilities. The jurisdictions have adopted these codes to comply with a Department of Ecology permit issued under the Federal Clean Water Act, known as the National Pollutant Discharge Elimination System (NPDES) permit.

In the event of an accidental spill or to report illegal dumping, call your local jurisdiction's stormwater program. If you have additional questions about the best practices for deicing, contact one of the Stream Team coordinators.

Thanks for doing your part to keep pollution out of stormwater and to prevent stormwater flooding!

Source: Stream Team News, Winter 2017



It is the mission of Stream Team to protect and enhance water resources and associated habitats and wildlife in Thurston County through citizen action and education. Stream Team is funded and jointly managed by the stormwater utilities of the Cities of Lacey, Olympia and Tumwater and Thurston County. www.streamteam.info