### Did You Know...

Road salts can make it safer for us to walk and drive around in the wintertime. It helps keep roads open, and allows businesses, government, and social services to stay open with little interruption.

However, it only takes one teaspoon of salt to permanently pollute 5 gallons of water.

Salt seeped into the environment can:

- Raise sodium levels in our drinking water and increase treatment costs.
- Harm fish, plants, and other wildlife.
- Corrode vehicles, roads, bridges, and parking lots.

Since there's no easy or cheap way to remove salt from our environment, we can all do our part to be **#WinterSaltSmart** by following the below tips for snow and ice maintenance.

# How should you prepare for a storm?

Have your shovel or snow blower ready!

- Shovels may be all that you need for winter weather in Northern Virginia. To make it easier on your back, you can choose shovel products with wheels. Remember to take breaks and avoid overloading your shovel with wet snow.
- For big storms or heavy weight snow, snow blowers may also be helpful.
- Always make sure to assemble an emergency or storm preparedness kit.
- Have your salt and traction materials ready and be sure to store them away for rain and snow!





Make sure to stock up on enough food, drinks and medicine (including prescriptions) before the storm!











## Smart Salt Management

#### Choosing the Best Salt or De-icing Product

- Always check product ingredients. Labels like "safe," "pet-safe" and "environmentally friendly" can be used inaccurately on certain salt products.
- All nitrogen and phosphorus salts are illegal in Virginia.
  - Nitrogen salts include urea, ammonium sulfate and potassium nitrate, etc.
  - Phosphorus salts may have "phosphate" (PO4) in the ingredients, although these are rare.

If applying a salt to your driveway or sidewalk, choose a product based on the **Lowest Practical Melting Temperature**, not the **Eutectic Temperature**. See the table below for different product options:

Product Type	Chemical (3)	Lowest Practical Melting Temperature (1)	Eutectic Temperature (2)
Salts (contain chloride)	NaCl (sodium chloride) - also called rock salt MgCl2 (magnesium chloride) CaCl2 (calcium chloride) KCl (potassium chloride)	15° F -10° F -20° F 25° F	-6° F -28° F -60° F 13° F
Other Salts (do not contain chloride)	CMA (calcium magnesium acetate) KAc (potassium acetate)	20° F -15° F	-18° F -76° F

For more information on these salts and some alternatives, visit "Materials to Treat Snow and Ice" and for more information on the temperature ranges of the different salts, see "Temperature Ranges and Terminology for Salts."

- 1 The temperature that a salt will melt ice in a reasonable amount of time. Also called "Lowest Effective Temperature."
- 2 The lowest temperature that a salt can melt ice. This is not a practical temperature to reference (see the warnings below).
- 3 Source: https://stormwater.pca.state.mn.us/index.php?title=Lowest practical melting temperature

#### Post-Storm Maintenance

- Clear snow by shoveling early and often.
- Make sure to clear snow and apply salt only where needed.
- Never use salt to "burn off" snow. It will quickly dilute and requires excess use.
- If the sun comes out and you can wait, let the sun do some of the work before you apply salt.
- After the storm, sweep up the extra salt or traction material and use it again next time winter weather hits.

#### Salt Application Tips

**Sodium chloride**: One 12-oz coffee mug holds enough salt to treat a 20-foot driveway or ten sidewalk squares. Aim for about 3 inches between pieces of rock salt.

**Calcium chloride**: Apply at a rate that is one third of the rate used for sodium chloride.

- If it is too cold for salt to work, or you'd rather not use salt, consider using other traction materials. These include sand, bird seed (make sure to use a native blend), wood ash, and zeolite crystals (like EcoTractionTM).
- Be patient and give the salt time to work. The colder it is, the longer it will take for the salt to melt what snow or ice remains after shoveling.