FLATHEAD LAKERS

Winter maintenance and deicing

WHY SHOULD WE CARE?

Winter's fury poses threats to the lake as we diligently work to keep our walkways clear and safe. The snow eventually melts and everything we've put on it throughout winter can end up in the lake. Rock salt and sand are the two most common solutions to slippery walkways and driveways. If used incorrectly, salt can deplete oxygen needed by aquatic life, change soil chemistry, make it difficult for plants to grow, and contaminate groundwater. Sand can bury aquatic life, fill in natural habitats, clog drains, and cloud the water.

WHAT CAN WE DO?

The best ways to keep chemicals and sand out of our lakes and rivers:

- **Snow removal** – Shovel and remove snow as soon as possible and continue shoveling during big storms. With less time to get packed down and less time to melt and refreeze, the snow won't turn to ice and deicers, of any kind, won't be needed. Also, minimize the area that needs deicing.

- **Salt application –** Follow the manufacturer's instructions and use only enough to break the ice/pavement bond. Apply deicer <u>before</u> the snow falls. Do not apply on vegetation or near waterways. Use the best deicer for your situation and try to use less harmful deicers. Always sweep up excess salt before it can be washed into our lakes and streams.

- **Sand application –** Use only enough to provide traction on slippery areas. Always sweep up excess sand and gravel after snowmelt.

- **Snow and ice disposal –** Do not dispose of snow and ice in wetlands, creeks or other bodies of water, or directly above storm drains.

CHOOSING THE RIGHT DEICER

The best deicer for you will depend on your situation. A low cost deicer might clear a walkway, but it might also kill adjacent plants, corrode metal, harm floors if tracked inside, and hurt pets. On your property, small amounts of sand and gravel may have little negative impact if cleaned up in spring, compared to chemical deicers. Consider your situation, research the potential impacts of deicers before purchase and use, look into alternatives, and always use products according to the manufacturer's instructions.

Manually removing snow as soon as possible is the best method for preventing slippery surfaces.

All deicing methods have pros and cons. Here are a few:

Rock salt (sodium chloride) is cheap and most commonly used. It contains cyanide, an anti-caking agent, which can be toxic to underwater life. It is the most harmful deicer for plants and animals.

Calcium chloride is better than rock salt since it doesn't contain cyanide, but it can also harm plants. It is more expensive, but less is required.

Magnesium chloride is considered a less toxic deicing salt as it is less harmful to plants, animals, soil, and water. It poses less of an environmental threat and is a more effective deicer than salt, working at temperatures as low as -13° F.

Calcium magnesium acetate is considered the best overall choice for safely melting ice and most eco-friendly deicer available. It has a low toxicity to plants and microbes and it's also less corrosive to metal. It works at the same temperature range as salt, but it costs more, and requires about twice as much product to achieve the same de-icing results.

Calcium Chloride	-25°F
Magnesium Chloride	5°F
Sodium or Potassium Acetate	5°F
Calcium Magnesium Acetate	5°F
Potassium Chloride	12°F
Sodium Chloride	20°F

Optimal temperatures for use

Read the label of your deicers to ensure they are safe for your furry friends!!

HOW TO LEARN MORE

The Flathead Lakers offer opportunities to learn more:

-*Clean Water Practices Site Visits*: We will explore clean water practices that might work for you.

-*Walk and Talk Tours*: Watch for our small group tours to see lake-friendly lawns and other clean water practices in use.

-*Additional clean water practices fact sheets* and informational brochures are available on our website.

Together, we can keep Flathead Lake blue!

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