

## Chloride Usage Education and Reduction Program

### HOMEOWNERS

#### Salt Improves Winter Driveway Conditions But Harms Ecosystems

Keeping roads and parking areas free of ice and snow is an essential part of modern life. However, road salt – one of the main tools used to achieve this task – contains chloride as its principal ingredient. Chloride does more than melt snow and ice; it negatively impacts local lakes and rivers. Other minor ingredients of commercial road salt include arsenic and cyanide.



Municipalities contribute more than 117,000 tons of chloride to local watersheds annually. Chloride never fully dissipates, and enters streams, where it harms the flora and fauna. (Photo courtesy City of Naperville)

As snow and ice melt, they drain into landscaped areas or storm sewers, and then to natural bodies of water. Waters from a deiced area contain high levels of chlorides, which do not degrade, and there is no cost-effective way to remove it. Excessive levels of chlorides can severely impair the ability of plants to absorb water and nutrients. These negative effects are common to both aquatic and terrestrial plants in residential gardens, landscaped areas, and rivers. Fish and other aquatic organisms are then impacted by the decline in habitat.

#### How Much Salt is Getting into Our Rivers?

The Environmental Protection Agency (EPA) has set total maximum daily loads (TMDL) for chloride in the DuPage River and Salt Creek. These TMDLs state



Residential deicing contributes to the degradation of the area's water resources. Using the "Just Enough" principle and a more eco-friendly deicer will help reduce the impact of chloride on our ecosystem.

that the legal level of chloride in the rivers is being exceeded, and require that the levels be reduced. In order to investigate current usage of chlorides and possible reduction strategies, the DuPage River Salt Creek Workgroup conducted a Chloride Usage Education and Reduction Program Study. The study gave a conservative estimate of the annual chloride use in the watersheds of the upper DuPage and Salt Creek, which exceeded 117,000 tons.

#### Efficient Deicing Protects Landscaping

In addition to harming the ecosystem, overusing chloride can damage residential greenery such as grass, plants, and trees, reversing any beautification efforts you have made.



Small mouth bass are found in both branches of the DuPage River and Salt Creek. Chlorides from road salt damage river vegetation, reducing the numbers and species of fish that can survive there. (Photo courtesy Forest Preserve District of DuPage County)

## What is being done to reduce chloride usage?

Roads must remain clear to protect public safety, and the Workgroup does not recommend that road salting cease. However, many communities are already employing alternative technologies to deice their roads, such as anti-icing, which applies salt brine to roads when a storm is forecasted, and prevents the formation of ice. Residents can use a similar treatment method by purchasing a deicing alternative to salt available in some grocers or hardware stores. If you must use salt, the Chloride Usage Study recommends employing the “Just Enough” principle – applying just enough salt to keep your property ice-free.

## What can I do to help?

- Shovel (or use a snow blower) before you use any product; never put a deicing product on top of snow.
- Adopt the “Just Enough” principle, putting down just enough product to keep high traffic areas clear of ice.
- Sweep up un-dissolved product after a storm is over for reuse.
- Consider switching to a non-chloride deicer.
- Support changes in chloride application in your municipality.
- Inform a neighbor about the impacts chlorides have in our streams and rivers.



Shoveling prior to deicing product application will increase that product's efficiency.



Some communities are switching from routine salt application to alternative forms of deicing. This protects the environment while saving communities thousands of dollars. (Photos courtesy Forest Preserve District of DuPage County and City of Naperville)

## The DuPage River Salt Creek Workgroup

The DuPage River Salt Creek Workgroup is a coalition of communities, sanitary districts, environmental organizations, and professionals working to improve the ecological health of Salt Creek and the Upper DuPage River. For more information go to [www.DRSCW.org](http://www.DRSCW.org)

### For More Information ...

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