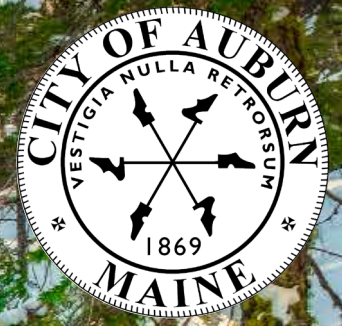


CHLORIDE USAGE

FACT SHEET



Salt improves winter road conditions, but harms ecosystems. Keeping roads and parking areas free of ice and snow is essential.

However, road salt – one of the main tools used to achieve this task – contains chloride as its main ingredient. And chloride negatively impacts local lakes and rivers.

Other minor ingredients of commercial road salt include arsenic and cyanide. As snow and ice melt, they drain into landscaped areas and storm drains, then to natural bodies of water. Waters from deiced areas contains 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.

Auburn's BMPs | BEST MANAGEMENT PRACTICES

Using less salt in general can help reduce chloride levels and help the community – environmentally and financially. Auburn Public Works uses the following best management practices to reduce salt usage:

Defining a level of service through operational guidelines and a winter operations program

Preparedness through pre- & post- storm meetings

Plowing just before salting prevents the application of salt on heavy snow

Automatic Vehicle Location that helps optimize plow routes and adjust application rates

Careful selection of treatment product - salt/sand/liquid calcium/salt brine

Efficient **material spreading equipment** and equipment **calibration**

Temperature sensors to measure pavement surface temperature

Proper salt and sand storage and handling

Responsibly **rinsing and washing** equipment and vehicles

Effective **snow pile placement** to avoid discharge of pollutants to surface/ground water