

REPORT TO THE  
LEGISLATURE

FEBRUARY 2025



## State salt purchase report and reduction goal

Tracking de-icing salt use for State of Minnesota properties and operations, with strategies for reducing chloride pollution.

# Legislative charge

## **[116.2021] STATE SALT PURCHASE REPORT AND REDUCTION GOAL.**

### Subdivision 1.

#### **Definition.**

For the purposes of this section, “deicing salt” refers to salt in its solid form used to melt snow and ice, excluding salt used on roads managed by the Department of Transportation.

### Subd. 2.

#### **Salt purchase report.**

By February 1, 2025, and every year thereafter, the commissioner of the Pollution Control Agency, in cooperation with other state agencies, must submit a report to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over environment and natural resources policy and finance that details the purchase of deicing salt by state agencies, excluding the Department of Transportation, and strategies to meet the salt reduction goal established in subdivision 3.

### Subd. 3.

#### **Reduction goal.**

It is the goal of the state that no later than January 1, 2030, state agencies will reduce the purchase of deicing salt by 25 percent from the level first reported under subdivision 2.

### Subd. 4.

#### **Sunset.**

This section expires January 1, 2030.







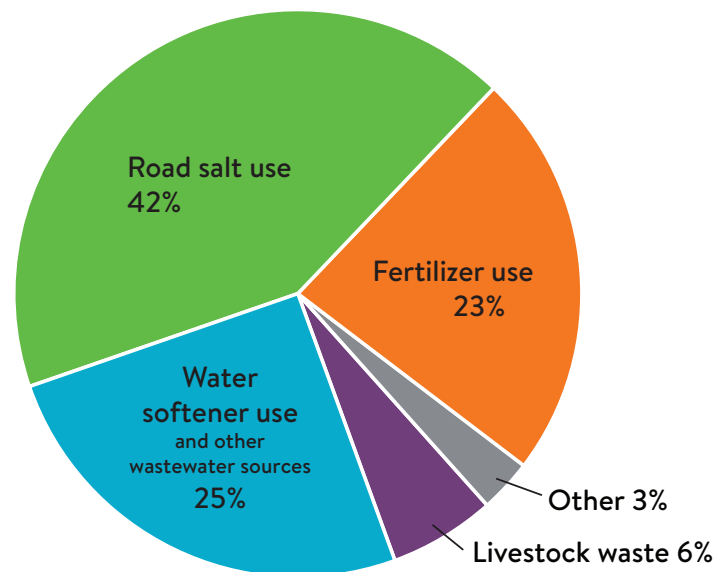
## Relevance of state salt purchases

Deicing salt is one tool used to keep road, parking lot, and sidewalk surfaces safe during Minnesota winters. But when deicing salts, including sodium chloride and other chloride-based salts, dissolve and runoff they pollute Minnesota's waters. Chloride pollution also comes from water softeners, dust suppressant used on rural roads, potash fertilizer, and livestock operations.

Once in the water, chloride is a permanent pollutant and continues to accumulate in the environment over time. Minnesota Pollution Control Agency (MPCA) water monitoring shows that chloride is increasing in lakes, streams, and groundwater around the state. Sixty-eight Minnesota lakes and streams have chloride levels too high to meet the EPA's water quality criteria (which Minnesota has adopted) that are designed to protect fish and other aquatic life. An additional 108 water bodies are considered high risk for chloride, and levels are increasing in groundwater, particularly in urban areas.

There are no feasible means to remove chloride from the environment, and it is very costly to attempt to remove it from wastewater. Reducing the use of chloride-containing products is the best way to manage this pollutant.

### Chloride pollution sources in Minnesota



Source: University of Minnesota 2019

# FY24 State Salt Purchases

Salt purchased during fiscal year 2023 and 2024 by agency

Agency	2023		2024	
	Salt Pounds	Cost	Salt Pounds	Cost
Amateur Sports Commission	–	–	–	–
Department of Administration	764,820	\$42,101	169,100	\$11,920
Department of Agriculture	–	–	–	–
Department of Commerce	0	\$0	0	\$0
Department of Corrections	702,700	\$58,210	492,400	\$28,696
Dept. of Employment & Economic Development	0	0	0	0
Department of Human Services	330,300	\$19,292	277,500	\$16,761
Department of Natural Resources	75,211	\$11,282	50,819	\$7,623
Department of Public Safety	–	–	–	–
Historical Society	–	–	–	–
Indian Affairs Council	–	–	–	–
Iron Range Resources	–	–	–	–
Military Affairs	925,000	\$50,305	601,250	\$33,192
Minnesota State Academies	–	–	–	–
Minnesota Veterans Affairs	75,552	\$39,112	57,664	\$30,635
Minnesota Zoological Garden	200,000	\$12,000	600,000	\$40,000
MN State Colleges & Universities				
MN State Fair/State Agricultural Society	–	–	–	–
MN State Retirement Systems	–	–	–	–
Perpich Center	–	–	–	–
Pollution Control Agency	0	\$0	0	\$0
University of Minnesota	–	–	–	–
<b>Totals</b>	<b>3,073,583 lbs</b>	<b>\$232,301</b>	<b>2,248,733 lbs</b>	<b>\$168,827</b>

(–) No data received

## Notes

- The 2023 Land Inventory report was used to identify agencies that own property in Minnesota. MPCA asked these agencies to report the amount of salt they purchased along with costs. Where no number is listed, the agency did not report.
- Some of these agencies occupy both leased and owned properties. For leased properties, the property owner is responsible for salt purchasing and application. These purchases have not been included in the data.
- As specified in the legislation, this report excludes salt purchased by the Minnesota Department of Transportation.

## Salt reduction goal

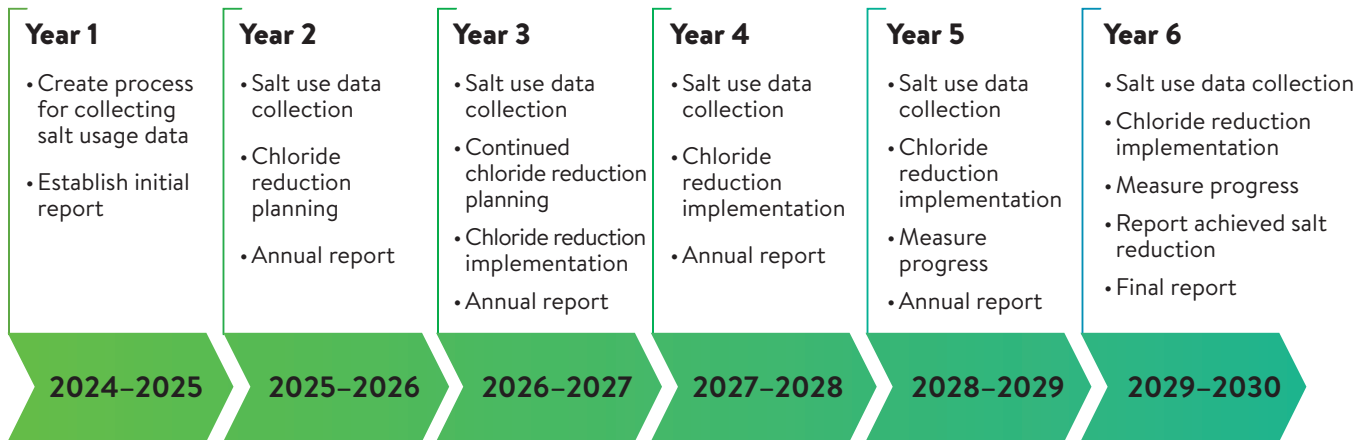
Deicing salt purchased by state agencies can be a proxy for understanding deicing salt use by the State of Minnesota. However, a reduction goal based on a single year of data has limitations. Weather, including the mild and snowless winter of 2023-2024, can significantly influence deicing salt purchase and use. According to the Minnesota Department of Natural Resources Climatology Office, “The winter of 2023-24 was dominated by warmth and snowlessness, with the December-through-February meteorological winter becoming the warmest on record at almost all stations.”

The trend in state salt purchasing volume over the 2025-2029 reporting period will depend on several variables, including weather and participation by agencies in these recommended (but not required) strategies.

**GOAL**

---

**25%**  
reduction in salt purchases



## Smart Salting

Smart Salting certification and training helps improve operator effectiveness and reduce chloride pollution while keeping roads, parking lots, and sidewalks safe. Participating organizations have been able to reduce their salt use by 30-70 percent. In addition, the training has been shown to prevent chloride contamination in lakes, rivers, and streams. Smart Salter training and certification is a program of the Minnesota Pollution Control Agency. [www.pca.state.mn.us/smart-salting](http://www.pca.state.mn.us/smart-salting)



# Strategies to meet the salt reduction goal established in subdivision 3

## Salt reduction strategies

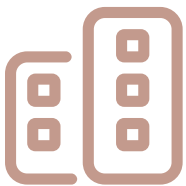
The following strategies will be promoted to all state agencies through the Office of Enterprise Sustainability (OES), starting in 2025. The OES communicates regularly with over 30 state agencies regarding operations and best practices. The OES and MPCA are developing messages to share and promote chloride reduction trainings, resources and tools for state agencies to assist in reducing salt use. The primary strategies to achieve the 25% reduction statutory goal, which will be part of the interagency outreach and training are described below.



**Educate agencies on importance of winter maintenance best practices and the value of the MPCA's Smart Salting certification and training program.** Messages and trainings will describe the effects of chloride on the environment and infrastructure and point to specific actions that can help reduce salt pollution on state properties. The [MPCA Smart Salting certification and training program](#) provides organizations the necessary education and tools to improve operator effectiveness and reduce chloride pollution, while keeping roads, parking lots, and sidewalks safe. It is common for maintenance professionals, building managers, and everyday Minnesotans to over-apply deicing salt and not understand the science behind how different de-icing products work. The MPCA's Smart Salting trainings have helped participating organizations reduce their salt use by 30% to 70% and has been shown to prevent [chloride contamination](#) in bodies of water. A critical premise in each of these trainings is that it is possible to adopt smart salting practices while still providing a level of service that maintains public safety.



**Strongly encourage *Smart Salting for Roads or Smart Salting for Parking Lots and Sidewalks* training for all employees and contractors who are involved in winter maintenance activities.** Maintenance staff need to be knowledgeable about the current and predicted weather conditions, understand all available tools to manage snow and ice, and be trained on how different deicers work and, if they are needed, how much to use. Participants in these trainings earn a five-year certification for attending each 5.5-hour training and passing the test.



**Strongly encourage *Smart Salting for Property Management* training for all state building managers, sustainability coordinators, and agency operations leadership.** Managers, leaders, and sustainability staff need to understand how to reduce indoor and outdoor salt damage and related costs, recognize best practices being used by maintenance crews, manage liability, and more. In this training they will gain knowledge of these critical issues and take a comprehensive look at the winter maintenance needs and goals for their properties and discover areas for improvement. Participants earn a three-year certification for attending this 4-hour training and passing the test.



**Recommend inclusion of--and provide technical assistant to agencies to accomplish--best practices for snow and ice removal in maintenance contracts.** The MPCA has [model contract language](#) available for use that requires a contractor to use best practices to limit the movement of chlorides, nutrients, and sand/sediments into public stormwater systems and surface waters. State contracts can

adapt the language and terms to suit their needs and ensure their contractors are protecting Minnesota waters from chloride pollution in addition to providing safe surfaces for their properties.



**Recommend all agencies develop or update their snow and ice management policy to balance safety, budget and environmental impacts of salt use.** The MPCA has a [model snow and ice policy](#) available that is designed to help government entities adopt winter maintenance policies that include protecting the environment among their goals. Everyone involved in providing, managing and participating in winter maintenance activities should be involved in implementing and communicating this policy to their organization.



**Encourage Smart Salting Level 2 Certification for each agency building managers and/or maintenance supervisors through the MPCA's Smart Salting Tool.** The [MPCA's Smart Salting Tool](#) allows users to complete a detailed evaluation of all their winter maintenance practices and identify opportunities to improve practices that can save money and protect water resources. The reports generated include a comparison of current and future BMPs, an estimate of monetary savings due to salt reduction, and a list of "poor" practices that can be improved. Participants can obtain an organizational Smart Salting certification by completing the required reports and submitting to the MPCA Smart Salting program.



**Encourage agency sustainability coordinators to utilize the MPCA Smart Salting tool to create a Chloride Reduction Action Plan for their agency.** The Smart Salting tool is also a comprehensive chloride reduction tool and will generate an estimate of chloride pollution sources for a specific location (e.g. a city or watershed). The user can then learn more about each source of chloride and strategies to reduce chloride at the source. A chloride reduction action plan can be developed for each agency that includes specific actions that will be taken to reduce chloride pollution. This chloride reduction action plan can be incorporated into each agency action plan. MPCA Chloride Reduction program staff are available to assist sustainability coordinators with this recommendation.



**Educate agencies about the MPCA's technical assistance and resources.** There are additional resources and tools available from the MPCA Chloride Reduction program to help agencies reach the goals set in their agency specific Chloride Reduction Plans. The MPCA's Chloride Reduction Program Coordinator is available to state agencies to assist sustainability coordinators or building managers find the right trainings, tools, and resources for their agency.

**Authors**

Britt Gangeness  
Brooke Asleson

**Contributors/  
acknowledgements**

Kami Lhotka  
Vickie Blomgren  
Brian Timerson

**Graphic design**

Scott Andre

**Estimated cost** of preparing  
this report (as required by  
Minn. Stat. § 3.197)

\$83.81/hr x 78 hours worked +  
24% fringe = \$8,106

Total cost:  
\$8,106.10