



# Low Salt No Salt – Chloride Reduction Program Proposed Project Outline

## Purpose

The purpose of *Low Salt No Salt – Dakota County*, a chloride reduction program, is to “build community capacity to maintain winter safety while reducing chloride-based deicer use and its associated damages through relationships with local properties.” It is an outreach program that provides support and resources for local properties to effectively and confidently reduce their use of deicing salts without sacrificing safety and to educate their community members about the problem of chloride pollution.

## Problem

Over the past several decades in Minnesota, deicing salts have become an important safety tool in keeping our roads, parking lots and sidewalks free of ice. However, this led to a salty water problem in the state. Chloride, the chemical that makes up deicing salts, is a permanent pollutant (it doesn't naturally break down). It only takes one teaspoon of salt to pollute five gallons of water. Chloride levels in our lakes, streams and groundwater continue to increase. As of 2024, there are 68 waterbodies impaired for chloride in Minnesota (14 were added in 2024), and an additional 75 waterbodies are considered “high risk,” according to the [Minnesota Pollution Control Agency \(MPCA\)](#). In Dakota County, Thompson Lake in West St. Paul has been impaired for chloride since 2013. Additional waterbodies (Fish Lake in Eagan and sections of the Vermillion River) have seen elevated chloride levels in recent years, but not high enough to meet MPCA's impairment threshold.

Excess salt and elevated chloride levels in water damage the environment and infrastructure. Chloride is toxic to aquatic species, especially invertebrates and amphibians. Chloride disrupts the natural mixing process of lakes and can encourage the release of phosphorus and heavy metals from sediment. Salt is very corrosive and damages our roads, bridges, building exteriors and interiors, and pipes. Though chloride doesn't impose a direct human health risk, it can affect the taste of our drinking water. These reasons are why the State of Minnesota prioritizes tracking and managing salt use thus limiting the amount of chloride that enters our environment.

The [Minnesota Statewide Chloride Management Plan](#) provides information and strategies to combat chloride pollution, including an evaluation of the primary sources of chloride (winter maintenance, water softening, fertilizers and dust suppressants). The largest source of chloride in our environment is from winter maintenance and deicing salts.

## Groundwater Plan Tactic Linkages

Strategy 1B4 – Prevent groundwater contamination from chloride.

Tactic 1B4B: Partner with cities and townships to develop and implement a chloride reduction plan and policies in accordance with the MPCA Statewide Chloride Management Plan and Twin Cities Metropolitan Area Chloride Management Plan.

## Proposed Project

### Goals

The goals of *Low Salt No Salt – Dakota County* chloride reduction program are to:

- Increase capacity among local property decision makers to decrease deicing salt use while maintaining safety.
- Establish and maintain relationships with these properties to provide support, consistent communication and resources to reduce deicing salt use.
- Recognize the efforts of the participating properties/organizations in adopting best management practices to reduce deicing salt use.
- Increase awareness about the negative impacts of salt/chloride and smart salting practices to community members.

### Outline

This program will be an extension and adaptation of the [current Low Salt No Salt program](#) being implemented in Hennepin County and the Capitol Region Watershed District. This proposed program will use the current Low Salt No Salt program materials, including the logo, with slight modifications to best suit Dakota County. The program will be implemented in collaboration with partner organizations, which will include cities, townships, and watershed management organizations (WMOs).

The following components are proposed for the Low Salt No Salt program:

- Program Participation
  - The program is free and open to any local properties/organizations/groups, whether they are currently implementing smart salting best practices or not.
  - Participation criteria is a completed and signed pledge form of smart salting best practices.
    - Check-in with participants about the best practices they've pledged to do and update them accordingly.
  - Participants will be tracked through a web map and include any testimonials and success stories of reducing their salt use.

- To maintain a program participant, they must complete surveys that will be sent out before, during and after the winter season.
- Outreach & Recruitment
  - Direct outreach will be conducted by Dakota County staff and partner organizations (cities, townships, WMOs).
  - Outreach will first be to faith-based communities and schools.
    - Consideration: Use existing relationships for outreach to increase chances of program participation (like Landscaping for Clean Water).
    - Organizations like homeowner/townhome/condo associations, property managers and commercial properties will be targeted for outreach in later years of the program.
  - Utilize the recruitment letter template, videos and the Low Salt No Salt logo in direct outreach. Slight modifications may be made to materials, as needed to best fit Dakota County.
  - Follow up with phone calls and/or in-person meetings to start a relationship with the prospective faith-based communities and schools.
- Consultations
  - Interested organizations/groups can request to have an in-person consultation to discuss winter maintenance at their property and details of the Low Salt No Salt program.
  - Consultations will be done by Dakota County staff or partner organizations, based on the property location and availability of staff.
- Incentive Items (also known as Support Items)
  - Example items could be a [long handled steel ice scraper](#), a [pavement temperature gun](#), or a [50 pound bag of chicken grit](#). Items will be adjusted based on partner support needs and funding availability to purchase items.
  - To receive an incentive item, participants must commit to smart salting practices by completing and signing the pledge form.
  - Incentive items will not be mentioned in any public-facing information sources (Dakota County website, e-newsletters, social media) but will be included in direct outreach efforts to encourage program participation.
- Educational & Outreach Materials
  - Materials will be developed and shared to minimize partner organization workloads in engagement efforts. Identification of educational and outreach materials may be adjusted based on needs of the partner organizations.
  - Examples of educational and outreach materials to be developed by Dakota County (or are already developed as part of the current Low Salt No Salt program) for the program include:
    - Recruitment Letter Template
    - Instructional Videos
    - Consultation Presentation Slides
    - FAQ and Card Handouts

- Social Media Kits
- Newsletter Articles
- Dakota County Webpage
- MS4 Education (including proper storage of salt, illicit discharge)
- Other education materials developed by Dakota County, but not necessarily for this program, can be used if applicable.
- Dakota County will develop train-the-trainer sessions and resources as needed for partner organizations on how to utilize the education and outreach materials, and/or how to conduct consultations.
- Partner organizations are free to develop and utilize their own materials for this program if applicable.

## Responsibilities

- Dakota County: overall program coordination, direct outreach, support partner organizations in implementing the program, create education and outreach materials as needed, lead or co-lead consultations, create and send surveys and newsletters to participants.
- Partner Organizations (cities, townships, WMOs): aid in direct outreach, leverage county provided resources, include the program in social media and newsletters or other media outlets, lead or co-lead consultations, be the local contact for program participants.

## Measures of Success

To evaluate the effectiveness of Low Salt No Salt – Dakota County, the following measures of success will be adopted:

- Number of signed pledges
- Number of program participants
- Number of partner organizations
- Number of each best practice marked on the pledge form
- Success stories and testimonials shared from program participants
- Reduction in de-icing salt use, as identified in follow-up surveys

## Fiscal Impacts/Funding

The Low Salt No Salt – Dakota County chloride reduction program will be implemented with existing staff and within currently approved operating budgets. Additional staff and funding needs are not anticipated. Cost to purchase program incentive items for committing to salt reduction is anticipated to be minimal and will be funded through the Environmental Resources Operating Budget approved through the annual budget process. Non-county funds (e.g., grants) will be evaluated and leveraged as much as possible to support implementation.