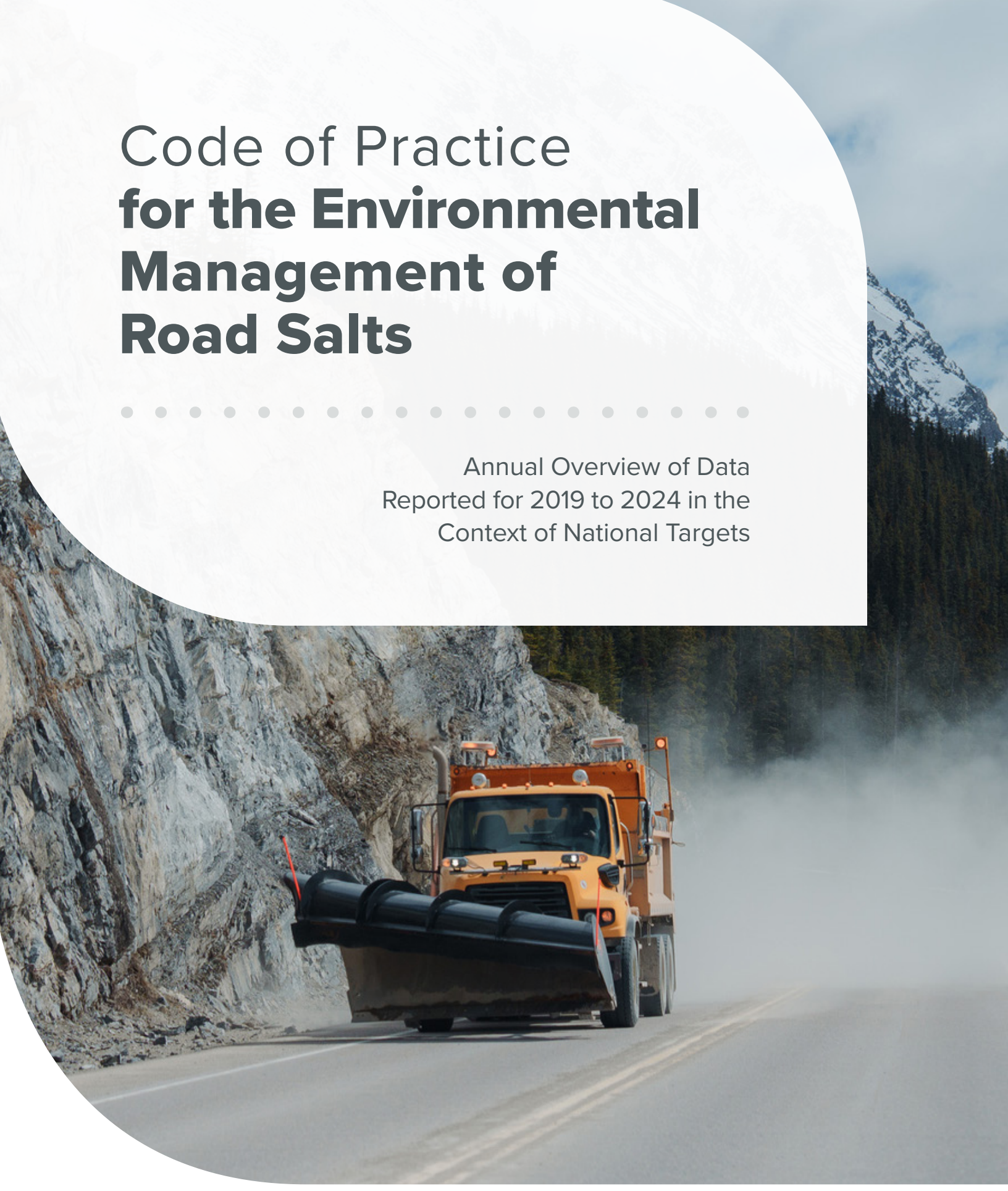
Code of Practice **for the Environmental Management of Road Salts**

Annual Overview of Data Reported for 2019 to 2024 in the Context of National Targets



Environment and Climate Change Canada
Environnement et Changement climatique Canada

Canada

Cat. No.: En11-13E-PDF
ISSN: 2371-1523
EC25052

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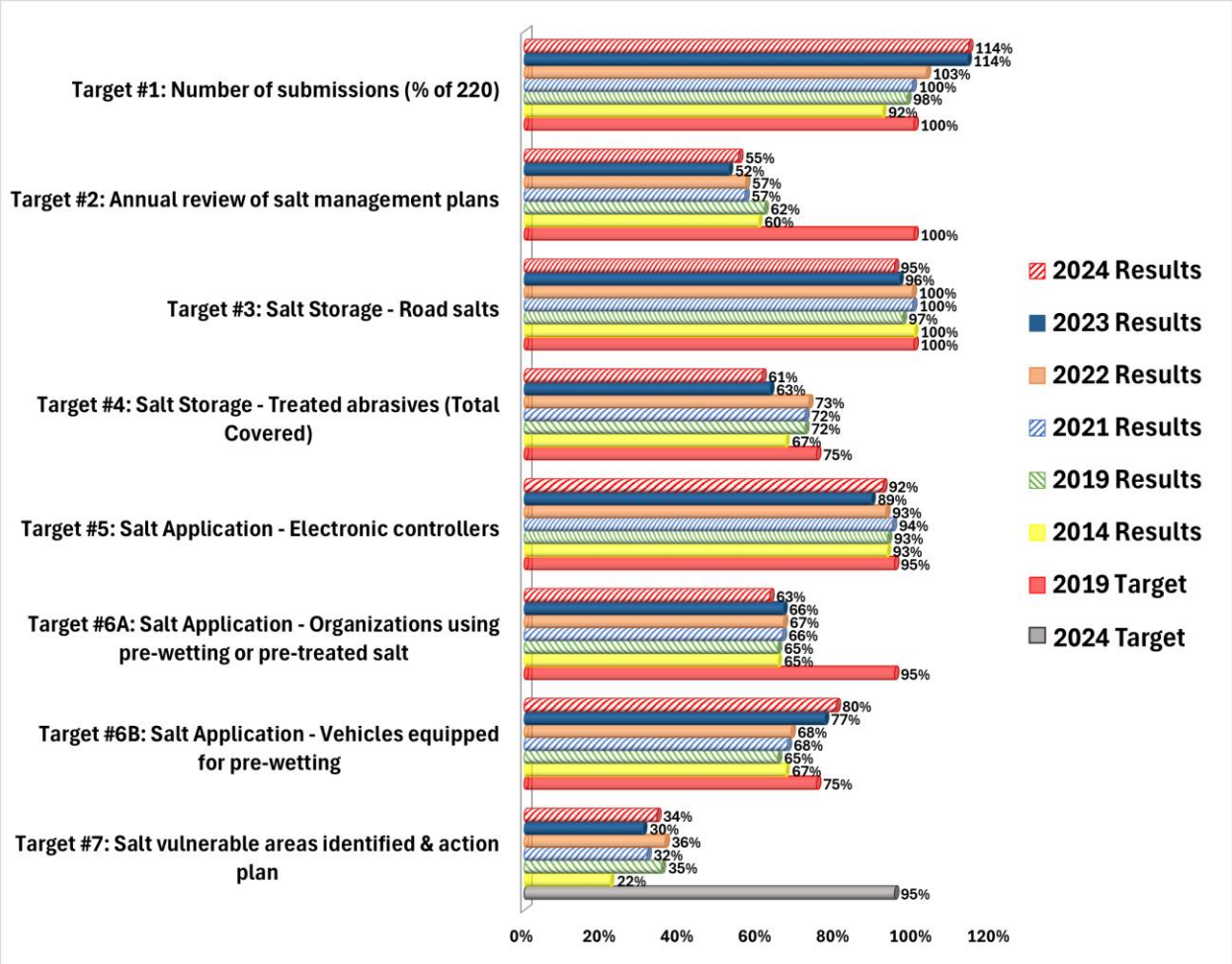
In this report

Overview

Environment and Climate Change Canada published the Code of Practice for the Environmental Management of Road Salts in 2004. In December 2014, Environment and Climate Change Canada (ECCC) set seven Performance Indicators and National Targets in order to monitor the effectiveness of the Code of Practice for the Environmental Management of Road Salts (the Code).

Federal, provincial, municipal, and private road organizations that adopted the Code reported the following results (Figure 1) which are compared with the National Targets (#1 to 6) set for 2019 (Target #7) set for 2024.

Figure 1: Summary results for performance and comparison to national targets



Highlights*: 2024 reported data in the context of national targets

Results reported for winter **2023 to 2024**:

- 250 road organizations reported under the Code (target is 220), including:
  - nine provinces
  - one territory
  - 225 municipalities
  - four private road organizations
  - 11 national parks and other federal organizations
- 55% annually reviewed their road salt management plan (target is 100%)
- 95% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 61% of their treated abrasives are covered (target is 75%)
- 92% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 63% are using pre-wetting or pre-treated salts (target is 95%)
- 80% of their vehicles are equipped for pre-wetting (target is 75%)
- 34% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024)

* See Annex 1 for highlights of past reporting seasons

Background

The Code of Practice for the Environmental Management of Road Salts (the Code) was developed in 2004 to assist municipal and provincial road organizations to better manage their use of road salts in a way that reduces the harm to the environment while maintaining roadway safety. The Code recommends that road organizations that use over 500 t/year of salt or who have salt vulnerable areas in their territory review their existing winter maintenance operations to improve practices and reduce adverse impacts of salt releases in the environment. This includes the development and implementation of salt management plans identifying actions they will take to improve practices in salt storage, use of salts on roads, snow disposal, and protection of salt vulnerable areas. In addition, the Code recommends that road organizations provide an annual report[1] on the progress achieved.

Of note, Quebec launched the Strategy for the Environmental Management of Road Salts in 2010. Administrations that manage and maintain roads in Quebec are invited to participate in the Strategy on a voluntary basis. As a result, the federal Code is not implemented in Quebec. However, the general objectives of the Code and of the Strategy are similar. In 2019, the province conducted a five-year study during which an online questionnaire was made available to municipalities to learn about best management practices in place. Sixty-four municipalities

[1] The information is submitted directly to Environment and Climate Change Canada through its **Single Window Information Manager System** (ECCC's SWIM) by June 30 of each year.
[2] See report ***Five Year Review of Progress: Code of Practice for the Environmental Management of Road Salts*** (Environment Canada, 2012).

responded to the questionnaire. The survey results are published on the Quebec Strategy website (French only).

ECCC published the Five-year Review of Progress[2] (2005 to 2009), available online, to measure the effectiveness of the Code in April 2012. Based on the review, ECCC recommended maintaining the Code and encouraged road organizations to continue improving their salt management. However, at the time of the first review, the lack of targets created challenges in determining whether the objective of the Code had been achieved. It was recommended that the list of performance indicators for future evaluations be examined to ensure that they reflect key components of the Code and current techniques in winter maintenance.

In 2014, ECCC published Performance Indicators and National Targets for the Code of Practice for the Environmental Management of Road Salts for the implementation of best practices so that progress can be tracked and the success of the Code can be evaluated. The main objective for setting national targets was to increase environmental protection. All road organizations are expected to reach a minimum level of progress in the implementation of best practices to prevent and reduce negative impacts from road salts.

National targets help to monitor progress in specific areas of the Code and formed the basis for the second Review of Progress: Code of Practice for the Environmental Management of Road Salts 2014 to 2019 evaluating the effectiveness of the Code[3].

There are seven performance indicators (with six targets set for 2019 and one for 2024) that fall under four main activities of the Code (adoption of the Code, salt storage, salt application and salt-vulnerable areas).

Results

The data collected through the reports are analyzed and compared against those 7 targets. The following results are based on the analysis of data reported annually by road organizations under the Code for 2019 to 2024. Throughout this report, 2014 data represent the baseline when analysis was initiated against the targets. Data prior to 2019 can be found in previous annual Overview reports and both Review of Progress reports mentioned above.

Data submitted in annual reports is compiled and analyzed for a winter period, which is generally from November of one year to April of the next year. Throughout the report, a reporting year is represented by the final year of that winter (e.g. 2024 represents the winter starting in 2023 and ending in 2024). Note that some year-to-year variation in results exists due to the variance in the number of reports submitted annually.

In addition to presenting the results in meeting the targets, Annex 3 presents additional information on reported use of de-icers (salt, liquids and abrasives) and salted road length data.

[3] Review of Progress: Code of Practice for the Environmental Management of Road Salts 2014 to 2019.

Performance indicator 1: "Submission of annual reports" represents the number of road organizations reporting regularly (Figure 2). The purpose of this indicator is to increase the level of implementation of the Code and best practices in road salt management. Overall, the number of submissions has increased since 2014 and exceeded the target in 2024 with 250 organizations reporting. Table 1 also presents the breakdown of organizations by type that have reported during winter seasons. Annex 2 presents the list of road organizations that reported in 2024.

Figure 2: Number of reports submitted by road organizations to Environment and Climate Change Canada

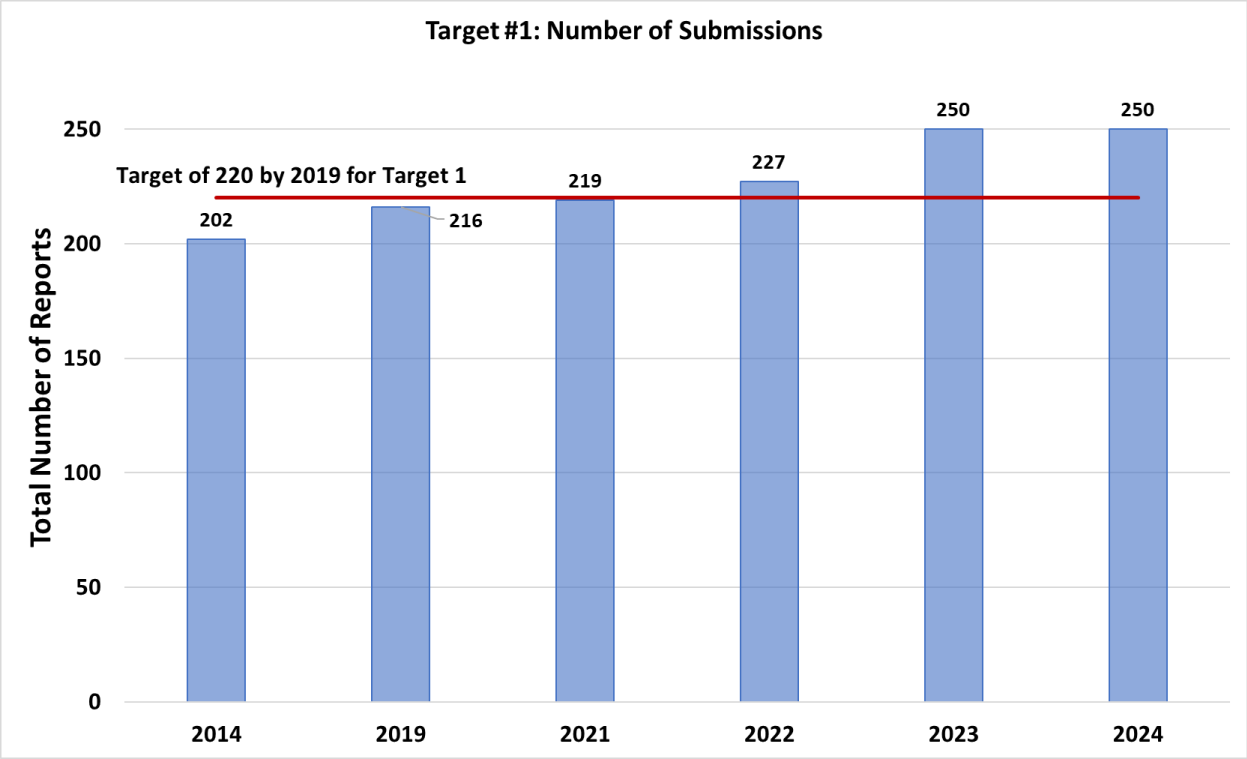
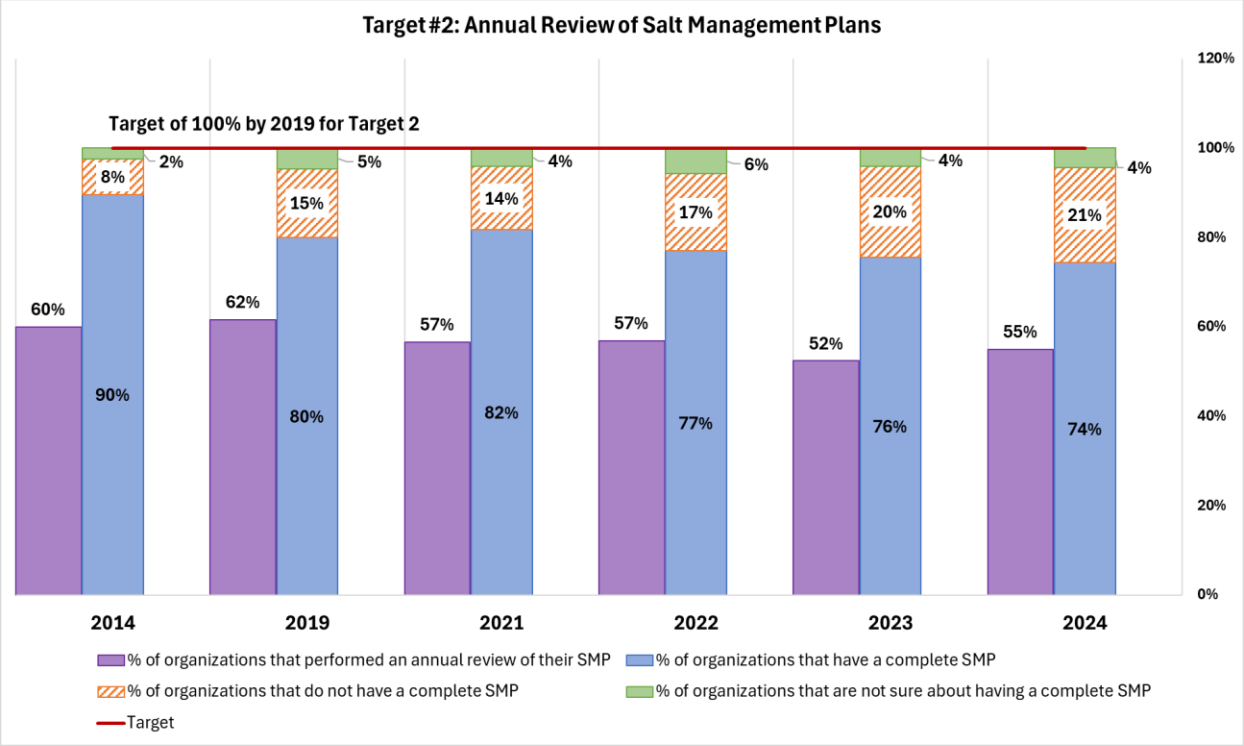


Table 1: Breakdown of the type of road organizations that have reported under the Code during winter seasons.

Type of road organization	2014 baseline	2019	2021	2022	2023	2024
Provinces and territories	8	9	8	7	**9**	**10**
Municipalities	180	189	195	203	**226**	**225**
National parks and other federal organizations	10	11	11	11	**10**	**11**
Private organizations	4	7	5	6	**5**	**4**
Total number of reporting organizations	**202**	**216**	**219**	**227**	**250**	**250**

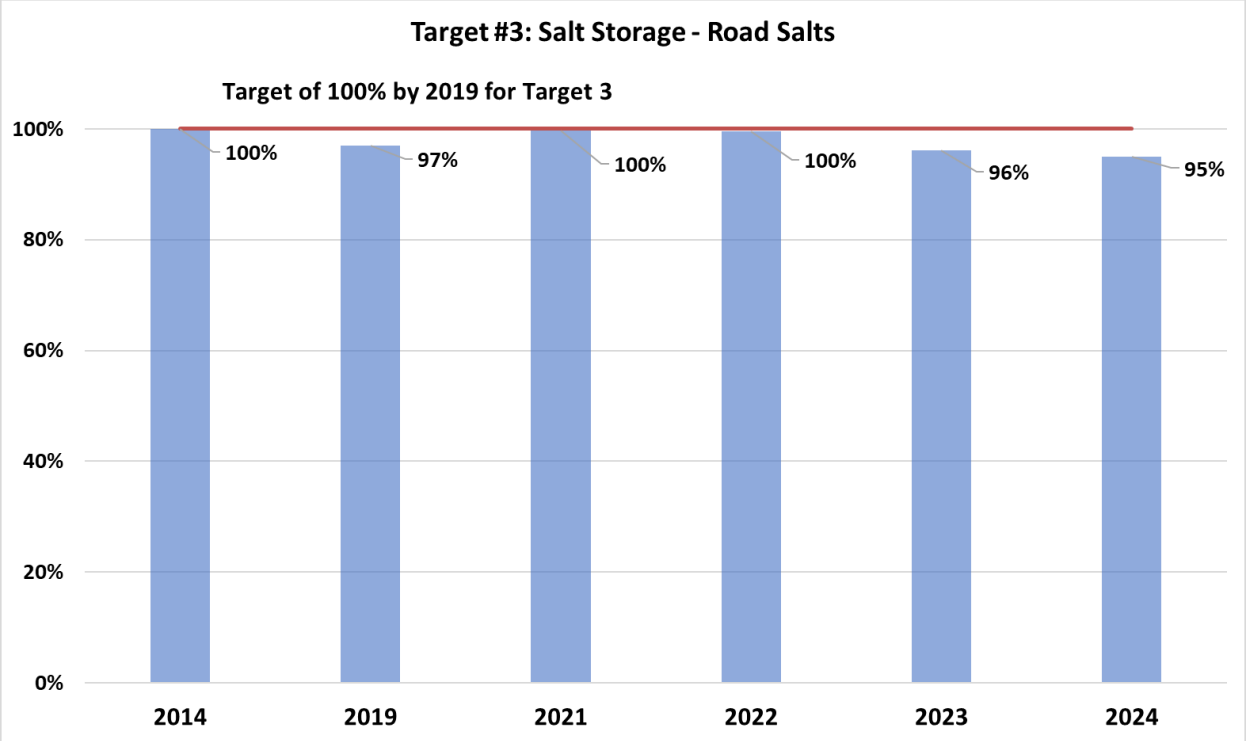
Performance indicator 2: "Annual review of salt management plan" represents the percentage of road organizations that annually review their salt management plan (SMP) when compared to all organizations that report under the Code. (Figure 3). The objective of this indicator is to ensure that planning is current and allows for continuous improvement. Road organizations should revisit their SMP at the end of each winter in order to identify shortcomings, issues, and areas where improvements are needed prior to the start of the next winter season. In 2024, the target of 100% was not met since only 55% of organizations reported conducting an annual review of their SMP. It is also important to note that 25% of reporting organizations either do not have a complete SMP or are unsure whether their SMP covers all elements as described in the Code.

Figure 3: Percentage of road organizations that review their SMP and the percentage of organizations that report having an SMP



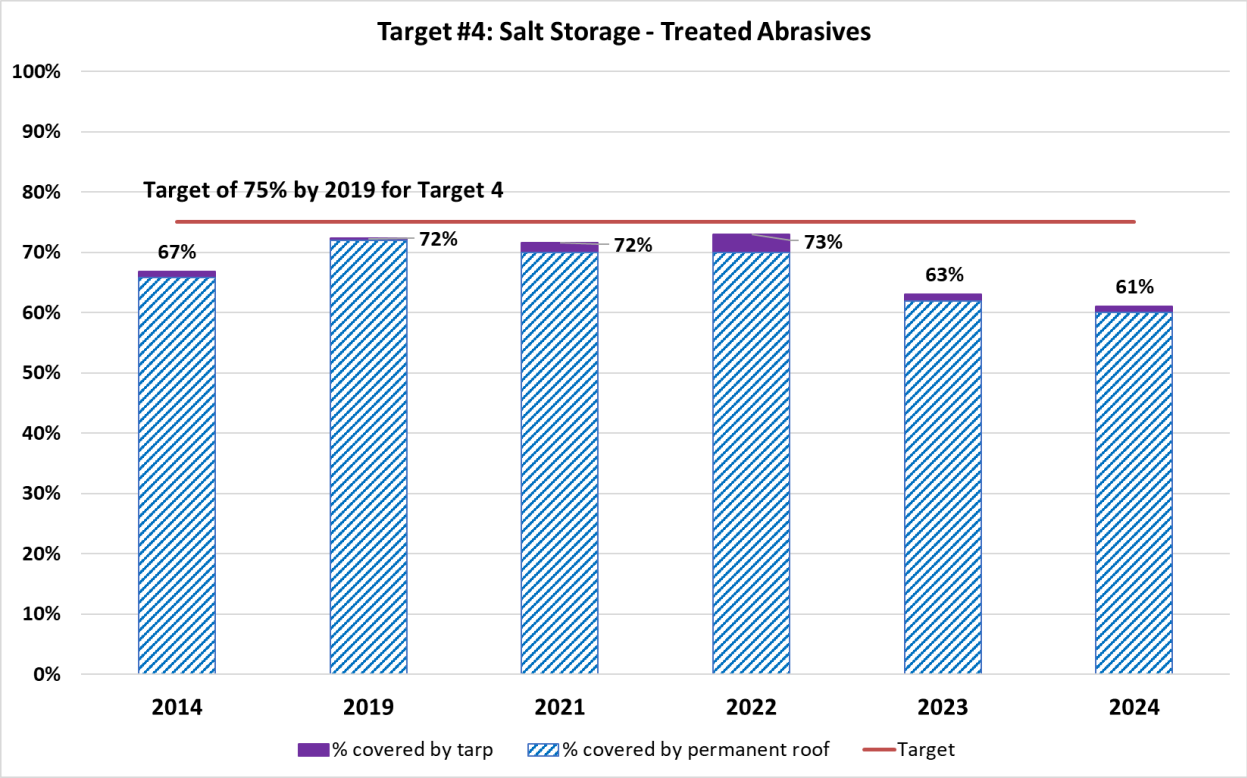
Performance indicator 3: "Storage of road salts" represents the percentage in tonnes of road salts stored under a permanent roof and on impermeable pads (Figure 4). The objective of this indicator is to ensure that road organizations have committed to managing their material storage facilities and that best practices are applied at point sources to prevent the release of salt to the environment. In 2024, the target of 100% was almost met since 95% of reported road salts were stored under a permanent roof and on impermeable pads. The 5% decline from 2022 when the target was last met is partly attributed to an organization reporting that a large quantity of salt was covered by a tarp rather than a permanent roof and who did not report in 2022.

Figure 4: Percentage of road salts stored under a permanent roof and on impermeable pads



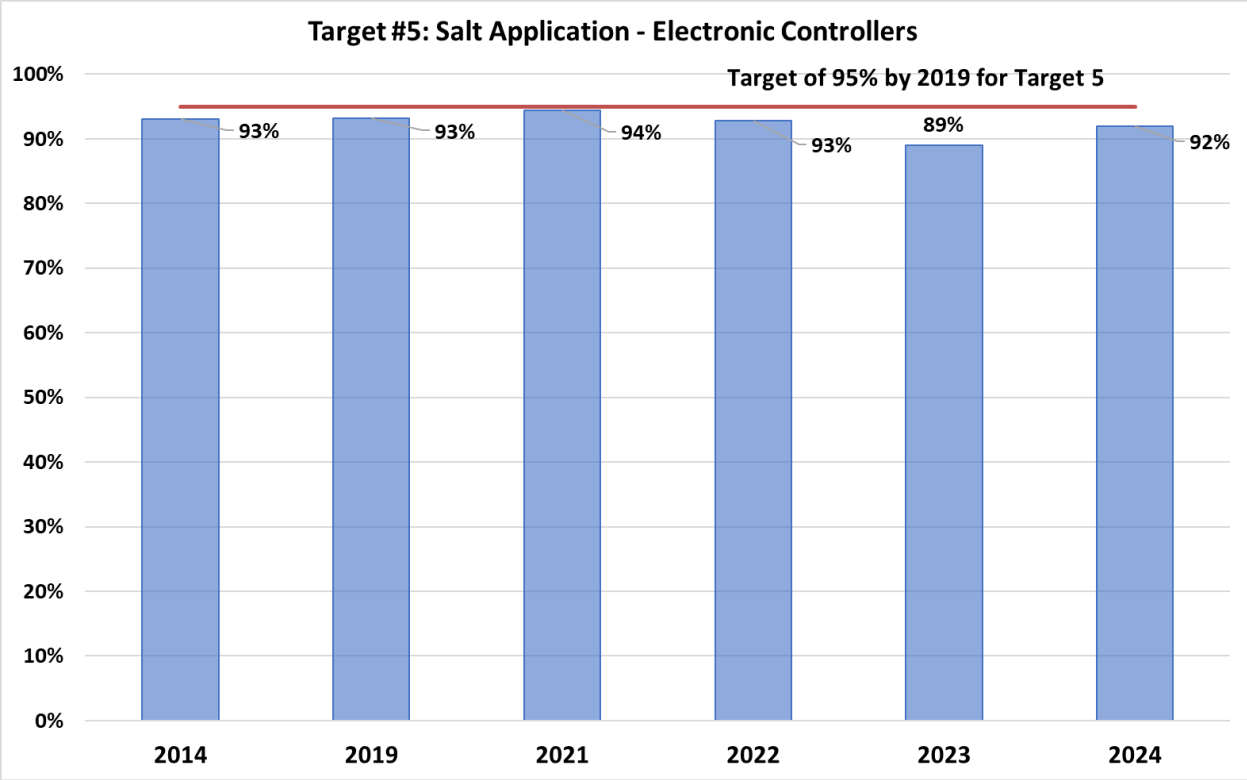
Performance indicator 4: "Storage of treated abrasives" represents the percentage in tonnes of treated abrasives (blended sand and salt) that are stored under cover, either under a tarp or under a permanent roof (Figure 5). The objective of this indicator is to ensure that road organizations cover their treated abrasives in storage facilities and that best practices are applied at point sources to prevent the release of salt to the environment. In 2024, the target of 75% was not met with 61% of treated abrasives being reported as covered by tarp or permanent roof. The decline in abrasives coverage from 2022 is partly attributed to the same organization reporting no coverage of abrasives and who did not report in 2022.

Figure 5: Percentage of treated abrasives covered by tarp or covered by permanent roof



Performance indicator 5: "Groundspeed electronic controllers" represents the percentage of total vehicles equipped with groundspeed electronic controllers when compared to the total number of vehicles assigned to solid salt application (Figure 6). The objective of this indicator is to ensure that salt is applied at a proper rate regardless of the speed of the truck being used to spread the salt. Also, to ensure that salt stops discharging when the truck stops. Over time, use of this technology is expected to become a core practice for all organizations to optimize the use of salt. In 2024, the target of 95% was almost met with 92% of organizations reporting solid salt application vehicles equipped with electronic controllers.

Figure 6: Percentage of vehicles equipped with groundspeed electronic controllers



Performance indicator 6: "Optimization of salt application" indicates if organizations are adopting practices that enhance their salt application techniques to optimize their use of salt. This can be accomplished either by using pre-wetting and/or pre-treated salts (Figure 7) or by increasing their pre-wetting capacity (Figure 8). The objective of this indicator is to ensure that organizations are using advanced technologies such as pre-wetting to reduce the use of salts and pre-treated materials. These technologies have proven to be a cost-effective alternative to road salts with similar results. Target #6a is calculated by comparing the number of organizations that reported using pre-wetting or pretreated salts to the total amount of organizations that reported. Target #6b is calculated by comparing the reported number of vehicles with pre-wetting technologies to the reported total number of vehicles assigned to solid salt applications from organizations that reported equipping at least one vehicle for prewetting. In 2024, target 6a of 95% was not met since only 63% of organizations reported adopting pre-wetting and pre-treating methods for salt application optimization. However, in 2024, target 6b of 75% was met since 80% of reported vehicles were equipped for pre-wetting.

Figure 7: Percentage of road organizations using pre-wetting or pre-treated salts

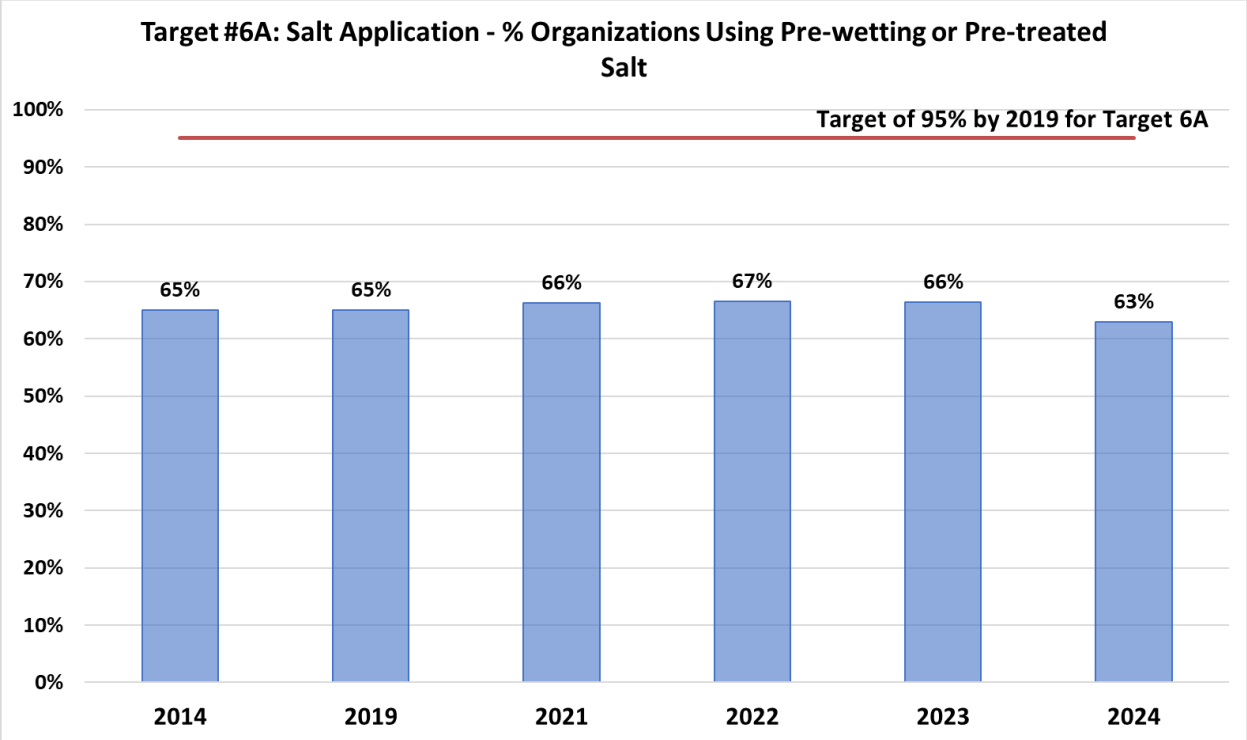
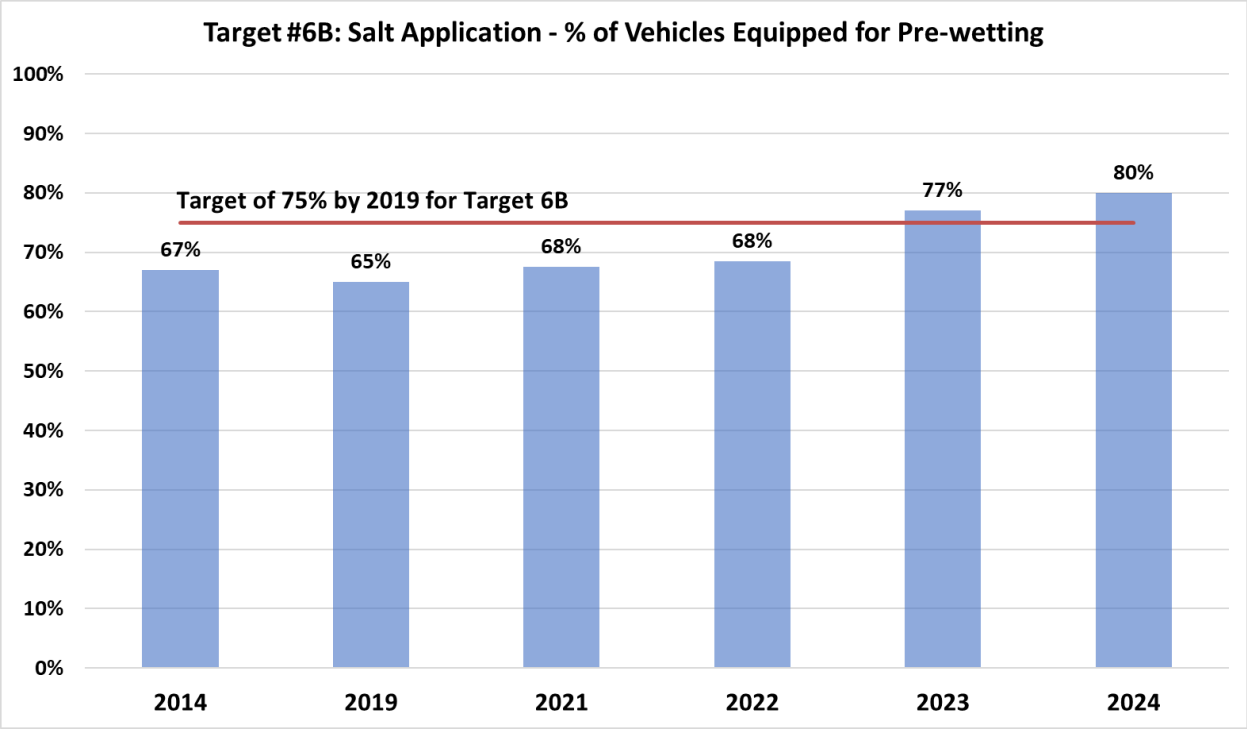
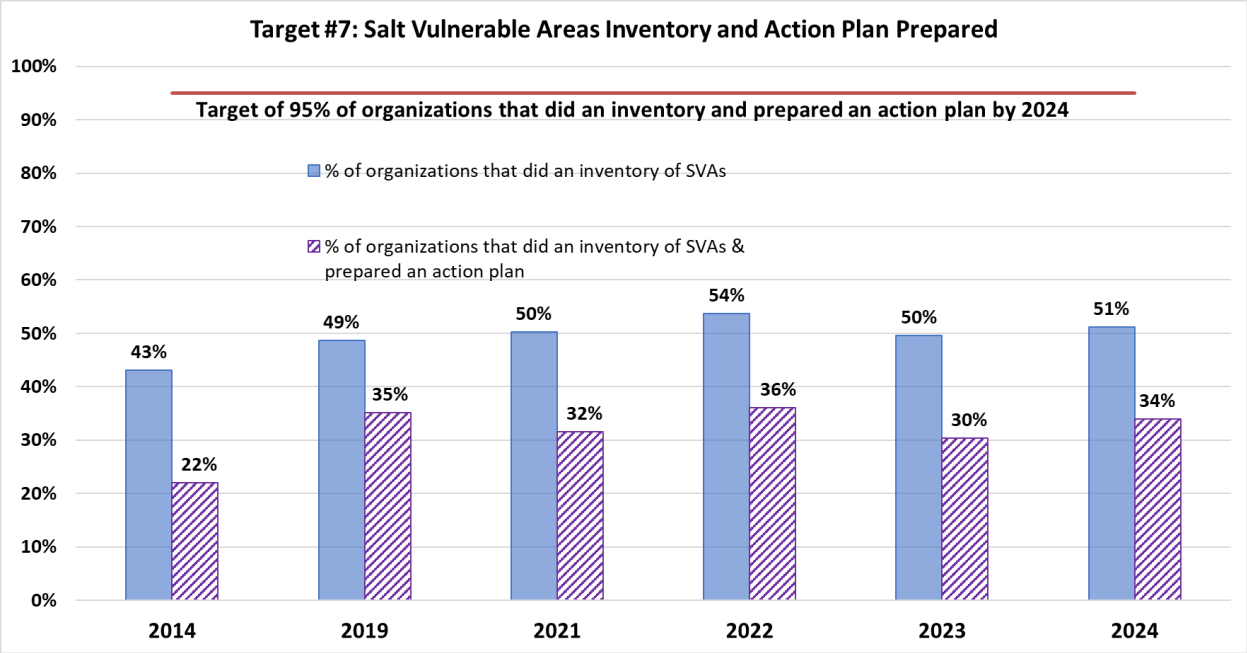


Figure 8: Percentage of vehicles equipped for pre-wetting



Performance indicator 7: "Salt-vulnerable areas" indicates if organizations have identified salt vulnerable areas (SVAs) and if an action plan has been prepared with the purpose of protecting those areas that are sensitive to road salts. Figure 9 presents the percentage of reporting road organizations that have identified SVAs. Figure 9 also presents the percentage of road organizations that have met the performance indicator (both identifying vulnerable areas and preparing action plans). In 2024, the target percentage of 95% was not met since only 51% of organizations reported having an inventory of SVAs and only 34% reported having both an inventory and an action plan to address the SVAs.

Figure 9: Percentage of road organizations that have identified salt vulnerable areas and prepared an action plan



Progress towards the national targets

Setting national targets offers transparency in the expected performance level from road organizations and provides a basis for conducting future reviews of the effectiveness of the Code. National targets assist road organizations in prioritizing their ongoing efforts in the management of road salts.

The summary of the results of the Code since 2019, Figure 1, shows the progression in achieving national targets over time. Previous annual overview reports present historical data prior to 2019. While some targets were achieved or close to being achieved (Targets #1, #3, #5 and #6b), others were not (Targets #2, #4, #6a and 7). The second review of the Code concluded that the Code is still an effective risk management instrument. It recommended continued evaluation against the targets and identified several actions for consideration to improve Code implementation and the

environmental management of road salt. One of the actions for consideration includes scheduling a third 5-year Review of Progress.

ECCC will continue to promote the implementation of the Code with stakeholders, consisting of provincial and municipal road authorities, federal and provincial governments, related associations, industry, environmental non-governmental organizations, and academics, in order to encourage the implementation of best practices in road salt management and prevent or reduce negative impacts of road salts on the environment.

Contact us

For questions about the Code or for more information about salt management, please contact us.

Annex 1: Highlights of reported data for 2014 to 2023 reporting seasons

Highlights: 2023 reported data in the context of national targets

Results reported for winter **2022 to 2023**

- 250 road organizations reported under the Code (target is 220), including:
  - nine provinces
  - one territory
  - 226 municipalities
  - five private road organizations
  - ten national parks and other federal organizations
- 52% annually reviewed their road salt management plan (target is 100%)
- 96% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 63% of their treated abrasives are covered (target is 75%)
- 89% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 66% are using pre-wetting or pre-treated salts (target is 95%)
- 77% of their vehicles are equipped for pre-wetting (target is 75%)
- 30% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024)

Highlights: 2022 reported data in the context of national targets

Results reported for winter **2021 to 2022**

- 227 road organizations reported under the Code (target is 220), including:
  - seven provinces
  - one territory
  - 203 municipalities
  - four private road organizations
  - 12 national parks and other federal organizations
- 57% annually reviewed their road salt management plan (target is 100%)
- 100% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 73% of their treated abrasives are covered (target is 75%)
- 93% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 67% are using pre-wetting or pre-treated salts (target is 95%)
- 68% of their vehicles are equipped for pre-wetting (target is 75%)
- 36% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2021 Reported data in the context of national targets

Results reported for winter **2020 to 2021**:

- 219 road organizations reported under the Code (target is 220), including:
    - seven provinces
    - one territory
    - 195 municipalities
    - five private road organizations
    - 11 national parks and other federal organizations
- 57% annually reviewed their road salt management plan (target is 100%)
- 100% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 72% of their treated abrasives are covered (target is 75%)
- 94% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 66% are using pre-wetting or pre-treated salts (target is 95%)
- 68% of their vehicles are equipped for pre-wetting (target is 75%)
- 32% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2020 reported data in the context of national targets

Results reported for winter **2019 to 2020**:

- 218 road organizations reported under the Code (target is 220), including:
    - eight provinces
    - one territory
    - 194 municipalities
    - five private road organizations
    - 10 national parks and other federal organizations
- 56% annually reviewed their road salt management plan (target is 100%)
- 100% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 69% of their treated abrasives are covered (target is 75%)
- 95% of their vehicles are equipped with ground speed electronic controllers (target is 95%)
- 69% are using pre-wetting or pre-treated salts (target is 95%)
- 66% of their vehicles are equipped for pre-wetting (target is 75%)
- 32% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2019 reported data in the context of national targets

Results reported for winter **2018 to 2019**:

- 216 road organizations reported under the Code (target is 220), including:
  - eight provinces
  - one territory
  - 189 municipalities
  - seven private road organizations
  - eight national parks and three other federal organizations
- 62% annually reviewed their road salt management plan (target is 100%)
- 97% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 72% of their treated abrasives are covered (target is 75%)
- 93% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 65% are using pre-wetting or pre-treated salts (target is 95%)
- 65% of their vehicles are equipped for pre-wetting (target is 75%)
- 35% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2018 reported data in the context of national targets

Results reported for winter **2017 to 2018**:

- 212 road organizations, reported under the Code (target is 220), including:
  - eight provinces
  - one territory
  - 187 municipalities
  - five private road organizations
  - eight national parks and three other federal organizations
- 58% annually reviewed their road salt management plan (target is 100%)
- 99% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 72% of their treated abrasives are covered (target is 75%)
- 94% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 67% are using pre-wetting or pre-treated salts (target is 95%)
- 64% of their vehicles are equipped for pre-wetting (target is 75%)
- 31% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2017 reported data in the context of national targets

Results reported for winter **2016 to 2017**:

- 225 road organizations reported under the Code (target is 220), including:
    - eight provinces
    - one territory
    - 200 municipalities
    - six private road organizations
    - seven national parks and three other federal organizations
- 57% annually reviewed their road salt management plan (target is 100%)
- 99% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 61% of their treated abrasives are covered (target is 75%)
- 94% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 61% are using pre-wetting or pre-treated salts (target is 95%)
- 62% of their vehicles are equipped for pre-wetting (target is 75%)
- 24% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2016 reported data in the context of national targets

Results reported for winter **2015 to 2016**:

- 199 road organizations reported under the Code (target is 220), including:
    - eight provinces
    - one territory
    - 175 municipalities
    - five private road organizations
    - six national parks and four other federal organizations
- 63% annually reviewed their road salt management plan (target is 100%)
- 99% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 64% of their treated abrasives are covered (target is 75%)
- 96% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 65% are using pre-wetting or pre-treated salts (target is 95%)
- 60% of their vehicles are equipped for pre-wetting (target is 75%)
- 24% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2015 reported data in the context of national targets

Results reported for winter **2014 to 2015**:

- 208 road organizations reported under the Code (target is 220), including:
    - eight provinces
    - 184 municipalities
    - five private road organizations
    - seven national parks and four other federal organizations
- 60% annually reviewed their road salt management plan (target is 100%)
- 99% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 68% of their treated abrasives are covered (target is 75%)
- 94% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 68% are using pre-wetting or pre-treated salts (target is 95%)
- 64% of their vehicles are equipped for pre-wetting (target is 75%)
- 22% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024).

Highlights: 2014 reported data in the context of national targets

Results reported for winter **2013 to 2014**:

- 202 road organizations reported under the Code (target is 220), including:
    - eight provinces
    - 180 municipalities
    - four private road organizations
    - seven national parks and three other federal organizations
- 60% annually reviewed their road salt management plan (target is 100%)
- 100% of their road salts are under a permanent roof and on impermeable pads (target is 100%)
- 67% of their treated abrasives are covered (target is 75%)
- 93% of their vehicles are equipped with groundspeed electronic controllers (target is 95%)
- 65% are using pre-wetting or pre-treated salts (target is 95%)
- 67% of their vehicles are equipped for pre-wetting (target is 75%)
- 22% of road organizations have identified their salt vulnerable areas and have prepared an action plan (target is 95%, set for 2024)

Annex 2: Road organizations that have reported under the Code of practice for winter 2023 to 2024

Federal organizations

- Cape Breton Road Salts
- Fundy Road Salts
- Gros Morne National Park
- Kouchibouguac Road Salts (Parks Canada)
- Parks Canada Agency
- Prince Albert Road Salts
- Public Works and Government Services Canada
- Riding Mountain National Park
- Terra Nova Road Salts
- The Seaway International Bridge Corporation Ltd.
- Waterton Lakes Road Salts

Provincial and Territorial Organizations:

- Alberta Transportation
- BC Ministry of Transportation & Infrastructure
- Newfoundland and Labrador Department of Transportation and Works
- Manitoba Infrastructure & Transportation
- New Brunswick Department of Transportation and Infrastructure
- Ontario Ministry of Transportation
- PEI Department of Transportation, Infrastructure and Energy
- Province of Nova Scotia
- Saskatchewan Ministry of Highways and Infrastructure
- Yukon Territorial Government

Municipal Organizations:

- **Alberta**
  - City of Airdrie
  - City of Calgary
  - City of Cold Lake
  - City of Edmonton - Roadway Maintenance
  - City of Grande Prairie
  - City of Lacombe
  - City of Lethbridge

- City of Medicine Hat
- City of Red Deer
- City of St. Albert
- Clearwater County
- County of St. Paul No. 19
- County of Warner No. 5
- Cypress County
- Lac La Biche County
- Lacombe County
- Lamont County
- Leduc County
- M.D. of Willow Creek No. 26
- Mackenzie County
- Municipal District of Foothills No.31
- Municipal District of Greenview No. 16
- Municipal District of Pincher Creek No. 9
- Municipal District of Wainwright
- Northern Sunrise County
- Red Deer County
- Regional Municipality of Wood Buffalo
- Rocky View County
- Strathcona County
- Town of Cochrane
- Town of Okotoks
- Westlock County

- **British Columbia**

  - City of Chilliwack
  - City of Kamloops
  - City of Kelowna
  - City of Maple Ridge
  - City of Nanaimo
  - City of New Westminster
  - City of Penticton
  - City of Port Alberni
  - City of Port Moody
  - City of Powell River
  - City of Prince George
  - City of Richmond

- City of Surrey
- City of Vancouver
- City of West Kelowna
- City of Williams Lake
- Corporation of the City of Cranbrook
- Corporation of the District of North Cowichan
- District of North Vancouver
- District of West Vancouver
- The Corporation of the Village of Burns Lake
- Village of Lumby

- **Manitoba**

  - City of Winnipeg, Water & Waste Department

- **New Brunswick**

  - Caraquet
  - City of Bathurst
  - City of Dieppe
  - City of Fredericton
  - City of Saint John
  - Edmundston
  - Municipal District of St. Stephen
  - Town of Dalhousie
  - Town of Grand Bay-Westfield
  - Town Of Hampton
  - Town of Oromocto
  - Town of Quispsmsis
  - Town of Riverview
  - Town of Shediac
  - Town of Sussex

- **Newfoundland and Labrador**

  - City of Corner Brook
  - City of Mount Pearl
  - City of St. John's
  - Conception Bay South
  - Town of Clarenville

- Town of Gander
- Town of Grand Falls-Windsor
- Town of Marystown
- Town of Paradise
- Town of Portugal Cove – St. Philip's

- **Nova Scotia**

  - Cape Breton Regional
  - Halifax Regional Municipality (HRM)
  - Municipality of the County of Colchester
  - Region of Queens Municipality
  - Town of Amherst
  - Town of Bridgewater
  - Town of Lunenburg
  - Town of Pictou
  - West Hants Regional Municipality

- **Ontario**

  - City of Brockville (Corporation of the)
  - City of Greater Sudbury
  - City of Hamilton
  - City of Kawartha Lakes
  - City of Markham
  - City of Mississauga
  - City of Ottawa
  - City of Owen Sound
  - City of Peterborough
  - City of Pickering
  - City of Sarnia
  - City of Temiskaming Shores
  - City of Toronto
  - City of Vaughan
  - City of Woodstock
  - Clarington
  - Corporation of the City of Timmins
  - Corporation of the County of Dufferin
  - Corporation of Loyalist Township
  - Corporation of the City of Cornwall

- Corporation of the City of Guelph
- Corporation of the City of London
- Corporation of the County of Bruce
- Corporation of the County of Essex
- Corporation of the County of Huron
- Corporation of the County of Lambton
- Corporation of the County of Wellington
- Corporation of the Municipality of Halton Hills
- Corporation of the Town of Collingwood
- Corporation of the Town of Espanola
- Corporation of the Town of Gravenhurst
- Corporation of the Town of Hawkesbury
- Corporation of the Town of Iroquois Falls
- Corporation of the Town of Newmarket
- Corporation of the Town of Petawawa
- Corporation of the Town of Tecumseh
- Corporation of The Town of The Blue Mountains
- Corporation of the Town of Tillsonburg
- Corporation of the Township of Russell
- Corporation of the Township of South Stormont
- Corporation of the Township of St Clair
- Corporation of the Township of Whitewater Region
- Corporation of the United Counties of Prescott and Russell
- Corporation of the United Counties of SDG
- Corporation of the Town of Bracebridge
- Corporation of the City of Cambridge
- County of Elgin
- County of Haliburton
- County of Simcoe
- Grey County Transportation Services Department
- Municipality of Chatham-Kent
- Municipality of Middlesex Centre
- Municipality of Mississippi Mills
- Municipality of North Perth
- Municipality of South Dundas
- Municipality of Thames Centre
- Municipality of the Town of Perth
- Oxford County
- Region of Peel
- Regional Municipality of Durham

- Regional Municipality of Niagara
- Regional Municipality of Waterloo
- South Frontenac Township
- The City of Richmond Hill
- The Corporation of the City of Barrie
- The Corporation of the City of Belleville
- The Corporation of the City of Brantford
- The Corporation of the City of Kitchener
- The Corporation of the City of North Bay
- The Corporation of the City of Orillia
- The Corporation of the City of Oshawa
- The Corporation of the City of Port Colborne
- The Corporation of the City of Sault Ste. Marie
- The Corporation of the City of St. Catharines
- The Corporation of the City of St. Thomas
- The Corporation of the City of Waterloo
- The Corporation of the City of Windsor
- The Corporation of the County of Northumberland
- The Corporation of the Municipality of Central Elgin
- The Corporation of the Municipality of Kincardine
- The Corporation of the Municipality of North Grenville
- The Corporation of the Municipality of Oliver Paipoonge
- The Corporation of the Municipality of Port Hope
- The Corporation of the Municipality of Trent Hills
- The Corporation of the Town of Bradford West Gwillimbury
- The Corporation of The Town of Caledon
- The Corporation of the Town of Essex
- The Corporation of the Town of Fort Erie
- The Corporation of the Town of Goderich
- The Corporation of the Town of LaSalle
- The Corporation of the Town of Minto
- The Corporation of the Town of New Tecumseth
- The Corporation of the Town of Pelham
- The Corporation of the Town of Penetanguishene
- The Corporation of the Township of Addington Highlands
- The Corporation of the Township of Central Frontenac
- The Corporation of the Township of Centre Wellington
- The Corporation of the Township of East Hawkesbury
- The Corporation of the Township of Perth South
- The Corporation of The Township of Stone Mills

- The Corporation of the United Counties of Leeds and Grenville
- The Regional Municipality of York
- The Town of Aurora
- Town of Ajax
- Town of Arnprior
- Town of Carleton Place
- Town of East Gwillimbury
- Town of Greater Napanee
- Town of Grimsby
- Town of Ingersoll
- Town of Kingsville
- Town of Niagara-on-the-Lake
- Town of Orangeville
- Town of Renfrew
- Town of South Bruce Peninsula
- Town of Whitby
- Town of Whitchurch-Stouffville
- Township of Bonnechere Valley
- Township of Essa
- Township of King
- Township of North Dumfries
- Township of North Dundas
- Township of Puslinch
- Township of Selwyn
- Township of Sioux Narrows-Nestor Falls
- Township of South Glengarry
- Township of Springwater
- Township of Stirling-Rawdon
- Township of Tiny
- Township of Uxbridge
- Township of West Lincoln
- Tyendinaga Township

- **Prince Edward Island**

  - City of Summerside

- **Saskatchewan**

  - City of Regina

- City of Saskatoon

- **Yukon**

  - City of Whitehorse

Private Organizations:

- Brun-Way Highways Operations Inc.
- Chinook Highway Operations Inc.
- Gateway Operations
- MRDC Operations Corporation

Annex 3: Reported road salt usage data

Public road organizations participating in the Code also report to ECCC on the total quantity of road salts, abrasives, and liquids used by the organization in the winter maintenance season. In addition, road organizations report to ECCC the length of roads salted by their organization. The total quantity by province of each material used and the total road length salted reported for all road organizations that reported for this winter maintenance season is summarized in Table 3. This represents the total material used and salted road length for road organizations reporting to ECCC. It does not represent the total quantity of deicing materials used or the total length of salted roads in Canada because the Code:

a) is voluntary
b) does not apply to road salts used for domestic purposes, or for private or institutional uses
c) targets organizations that use more than 500 tonnes of road salts per year (although some organizations using less than 500 tonnes also report); and
d) is not implemented in Quebec since it has its own Strategy for the Environmental Management of Road Salts

Table 3: Number of organizations that reported total salt, liquids, and abrasives quantities as well as total salted road length under the Code for winter 2023 to 2024

Province	Number of organizations that reported	Total salt use (tonnes)	Total liquids use (litres)	Total abrasives use (tonnes)	Total road length salted (km)
Alberta	35	311 870	9 050 128	728 881	65 284
British Columbia	24	823 532	45 196 268	729 609	160 658
Manitoba	3	131 210	374 964	94 535	14 580
New Brunswick	21	248 213	2 651 818	237 621	23 428
Newfoundland & Labrador	13	288 142	2 224 952	161 309	3 111
Nova Scotia	11	236 123	15 397 714	34 784	17 496
Ontario	135	1,679,395	36,198,084	791,365	104,187
Prince Edward Island	2	31 116	1 183 000	85 041	4 559
Saskatchewan	4	174 133	918 115	39 609	22 037
Yukon	2	7 416	0	74 300	3 000
Other federal organizations	N/A	N/A	N/A	N/A	N/A
Total	250	3,939,881	113,195,043	2,977,054	418,331

Table 4: Number of organizations that reported total salt, liquids, and abrasives quantities as well as total salted road length under the Code for winter 2022 to 2023

Province	Number of organizations that reported	Total salt use (tonnes)	Total liquids use (litres)	Total abrasives use (tonnes)	Total road length salted (km)
Alberta	33	370 571	9 305 908	827 752	56 579
British Columbia	27	1 292 635	71 983 490	914 369	14 355
Manitoba	3	90 852	777 544	93 412	794
New Brunswick	18	96 886	2 614 035	13 336	7 408
Newfoundland & Labrador	12	265 331	1 703 104	153 710	25 346
Nova Scotia	12	240 100	26 449 567	28 035	24 256
Ontario	138	2 985 873	41 202 872	975 901	158 156
Prince Edward Island	1	30 517	2 088 977	86 950	1 224
Saskatchewan	4	130 886	1 207 192	69 451	1 877
Yukon	2	6 762	N/A	65 200	1 810
Other federal organizations	N/A	N/A	N/A	N/A	N/A
Total	250	5 510 413	157 332 689	3 228 116	291 804

Table 5: Number of organizations that reported total salt, liquids, and abrasives quantities as well as total salted road length under the Code for winter 2021 to 2022

Province	Number of organizations that reported	Total salt use (tonnes)	Total liquids use (litres)	Total abrasives use (tonnes)	Total road length salted (km)
Alberta	24	417 394	13 089 162	823 810	61 576
British Columbia	26	889 055	58 302 838	781 204	50 559
Manitoba	2	148 421	379 000	113 536	1 916
New Brunswick	17	219 783	3 065 613	369 331	21 297
Newfoundland & Labrador	6	60 247	1 233 991	10 375	2 422
Nova Scotia	11	294 690	24 740 324	42 022	19 628
Ontario	134	2 539 786	39 297 104	1 111 353	124 012
Prince Edward Island	1	2 750	N/A	N/A	118
Saskatchewan	4	137 402	1 084 608	85 555	22 799
Yukon	2	3 491	N/A	69 300	2 900
Other federal organizations	N/A	N/A	N/A	N/A	N/A
Total	227	4 713 019	141 192 640	3 406 486	307 227

Table 6: Number of organizations that reported total salt, liquids, and abrasives quantities as well as total salted road length under the Code for winter 2020 to 2021

Province	Number of organizations that reported	Total salt use (tonnes)	Total liquids use (litres)	Total abrasives use (tonnes)	Total road length salted (km)
Alberta	26	1 116 360	11 395 525	713 916	61 955
British Columbia	25	831 242	57 353 512	785 918	53 482
Manitoba	3	113 273	1 217 533	88 489	17 297
New Brunswick	15	190 196	3 783 672	231 949	21 471
Newfoundland & Labrador	8	63 262	1 496 378	9 376	2 892
Nova Scotia	9	177 435	22 058 402	32 329	17 197
Ontario	128	2 088 323	39 784 058	788 150	103 784
Prince Edward Island	N/A	N/A	N/A	N/A	N/A
Saskatchewan	3	113 654	413 857	52 453	20 481
Yukon	2	6 099	N/A	66 100	3 000
Other federal organizations	N/A	N/A	N/A	N/A	N/A
Total	219	4 699 843	137 502 937	2 768 680	301 559

Table 7: Number of organizations that reported total salt, liquids, and abrasives quantities as well as total salted road length under the Code for winter 2019 to 2020

Province	Number of organizations that reported	Total salt use (tonnes)	Total liquids use (litres)	Total abrasives use (tonnes)	Total road length salted (km)
Alberta	26	1 170 953	9 942 475	743 339	62 201
British Columbia	26	1 021 173	55 816 117	929 456	55 991
Manitoba	3	93 834	1 777 676	139 878	14 531
New Brunswick	17	279 878	4 112 349	334 335	21 678
Newfoundland & Labrador	8	63 428	1 597 655	8 496	2 290
Nova Scotia	10	295 277	24 329 908	57 541	17 125
Ontario	121	2 781 677	44 790 766	1 024 543	105 392
Prince Edward Island	1	35 469	1 400 000	96 960	4 444
Saskatchewan	4	123 685	504 642	51 525	21 206
Yukon	2	10 793	N/A	94 110	2 540
Other federal organizations	N/A	N/A	N/A	N/A	N/A
Total	218	5 876 167	144 271 588	3 480 183	307 397

Additional information can be obtained at:

Environment and Climate Change Canada
Public Information Centre
Place Vincent Massey building
351 St-Joseph boulevard
Gatineau Quebec K1A 0H3
Toll free: 1-800-668-6767
Email: enviroinfo@ec.gc.ca