



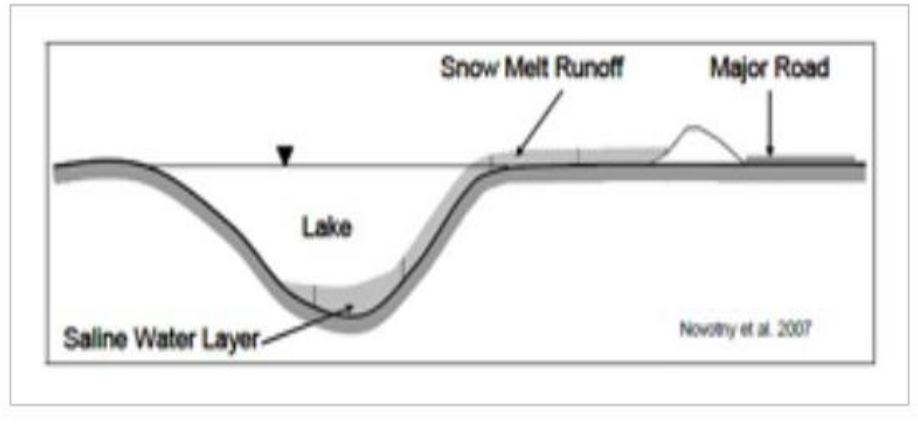
ROAD SALT



ROAD SALT

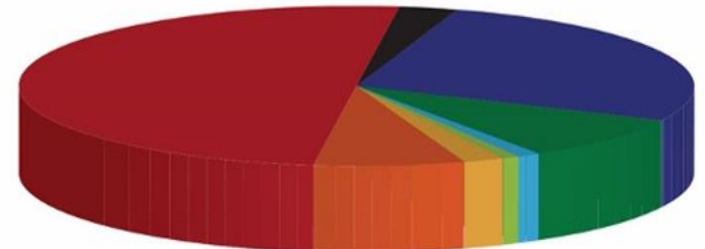
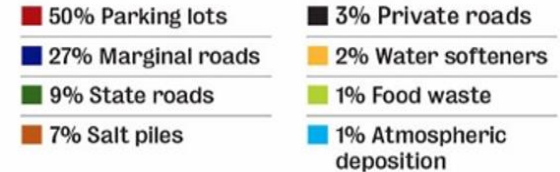
The Problem

- Nonpoint source run off
- Never bio-degrades
- Accumulates in Water
- Permanently pollutes water
- Alters ecosystems
- Damages Infrastructure(s)
- More than ROADS
- Lots, Walks, Driveways
- Wastes money \$\$\$



Total imports:
4,814 tons/yr

Imports divided
by drainage area:
473 tons/sq mile



Chloride loads measured in Policy - Porcupine New Hampshire watershed region (Burak, et al., 2008).

ROAD SALT

It's Everywhere

- Twin Cities, MN – Drinking Water
- Waterloo, ON – Smart About Salt
- New Hampshire – Green Snow Pro
- Virginia – DEQ & DOT (NoVa)
- Maine – Long Creek, Topsham
- Wisconsin – Salt Wise
- New York – LGA Initiative
- + Salt Task Force
- + Clean Water Safe Roads
- + Legislation (Multiple)

BUILDING MOMENTUM

Salt reduction initiatives gain steam as organizations work together to explore chloride impacts and remediation efforts

A more research emerges on the detrimental impact of chloride use in the snow and ice management industry (and other industries, to be fair), SMA, state and provincial entities, and private organizations have begun to take steps to work together to increase dialogue on the topic and to work toward sustainable use policies and standards. While these issues may not be in your backyard, in areas where wildlife, waterways and drinking water are being adversely impacted, momentum to impact change is building. This map showcases some of the areas where work is being done and by whom.

Key resources

- Download SMA's Best Practices Guidelines for Sustainable Salt Use: www.sma.org/bestpractices
- Explore the benefits of participating in the Sustainable Salt Initiative to help benchmark progress in salt reduction: www.mhichloride.com/desirable/salt-reducer
- View the New Hampshire model tied to certified salt applicator training and liability protection: www.com/NOHSDenise
- Learn more about the Sustainable Winter Management (SWM™) program designed to enable property managers and their contractors with a more strategic and cost-effective salting process: www.saltbusters.com/main

NOTE: This list is not exhaustive but a representation of the work being done as research continues to identify patterns and areas of the country where concerning levels of chloride are present. Source: SMA, WI T Advisors

Minnesota

Minnesota has been at the forefront of researching the impact of chlorides in surface water and groundwater for years. Fortin Consulting was hired to develop the state's first Winter Parking Lot and Sidewalk Maintenance Manual to address the issues of salt use application. Several states and municipalities have used this work as a framework to build their own best practices. The Minnesota Pollution Control Agency implemented the Twin Cities Metropolitan Area Chloride Management Plan in February 2016 to develop the framework to assist local partners in measuring chloride use.

Illinois

McHenry County and Lake County watershed groups are developing a set of best practices to support a future salt application certification requirement, and eventual licensing. McHenry County was among the first municipalities to test and eventually fully adopt the use of salt brines and rock salt as a best practice. This work sparked a great deal of municipalities taking action via the Association of Public Works (APW), led by now-retired McHenry County DPW

Ontario

The World Wildlife Fund (WWF) of Canada hosted a Great Lakes Chloride Forum in Toronto, Ontario, in September 2017. It is working with Smart About Salt, Landscape Ontario, WI T Advisors, property managers and other organizations to advocate for sustainable salt policies and education.

New York

A collaboration of The FUND for Lake George, The Lake George Waterkeeper, and the S.A.V.E. Lake George Coalition are working to advance the Sustainable Winter Management (SWM) DPW salt reduction certification by 2020 throughout all municipalities in the watershed. The group has hosted three Salt Reduction Summits since 2015.

New Hampshire

New Hampshire was the first state to attempt to tie salt use efficiency to liability protection. Beginning in 2013, commercial salt applications verified by the state's Department of Environmental Services and the property owners or managers who hire them are granted liability protection against damages arising from snow and ice. In addition to the Green Snow Pro Certification, the University of New Hampshire and SMA have partnered to host four Salt Reduction Symposiums and to provide continuing education training.

Maine

The Long Creek Watershed Management District (Portland, ME) is developing local use regulations that will require private developers/managers within the watershed to follow and maintain Sustainable Winter Management (SWM) certification guidelines as a requirement for maintaining their land use permits.

Massachusetts

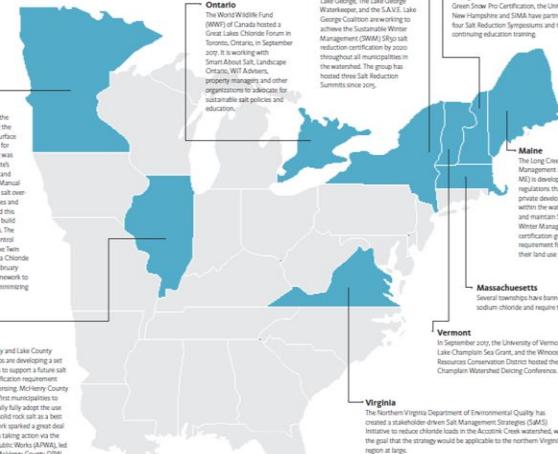
Several townships have banned the use of sodium chloride and require the use of sand.

Vermont

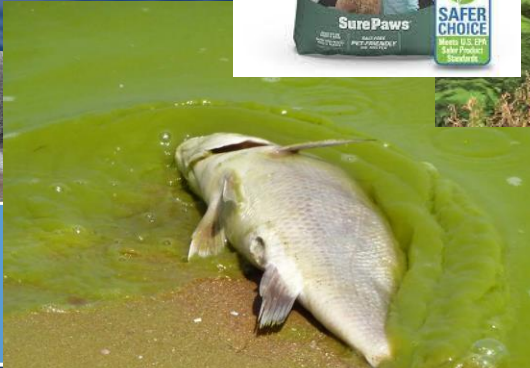
In September 2015, the University of Vermont Extension, Lake Champlain Sea Grant, and the Woodstock Natural Resources Conservation District hosted the first Lake Champlain Watershed Steering Conference.

Virginia

The Northern Virginia Department of Environmental Quality has created a stakeholder-driven Salt Management Strategies (SAMS) Initiative to reduce chloride loads in the Accotink Creek watershed, with the goal that the strategy would be applicable to the northern Virginia region at large.



ROAD SALT Linkages (PESTLE)



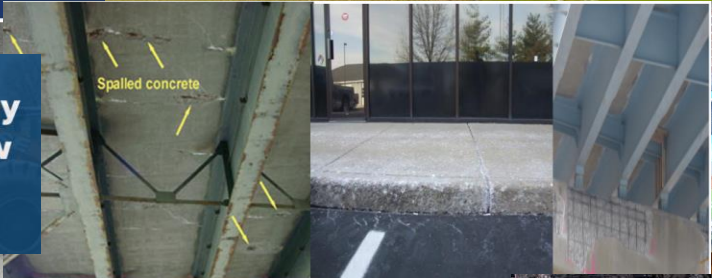
Jim Britenbaugh, of Pennsylvania, likely broke the NYS record for largemouth bass with this 12.35-pound fish he caught and released on Cayuga Lake on Sunday.


 Department of Environmental Conservation | Department of Transportation
Adirondack Road Salt Reduction Task Force Assessment and Recommendations
 2023

Basil Seggos, DEC Commissioner | Marie Therese Dominguez, DOT Commissioner

DECEMBER 22, 2022 | Albany, NY
Governor Hochul Signs Buy American Salt Act into Law to Support New York Jobs and The State's Economy

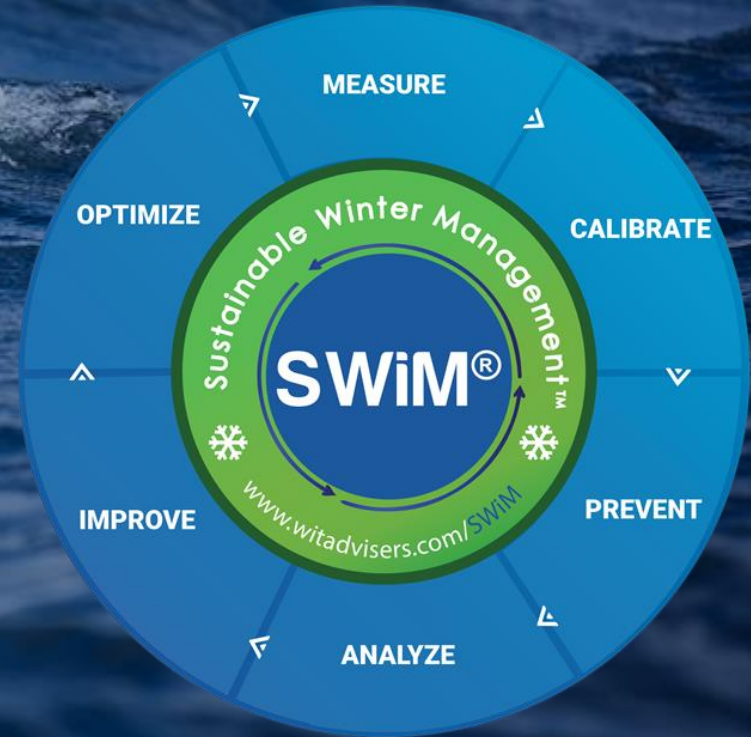
Senate Bill S9658
 2023-2024 Legislative Session
 Establishes the New York road salt reduction council and the New York road salt reduction advisory committee



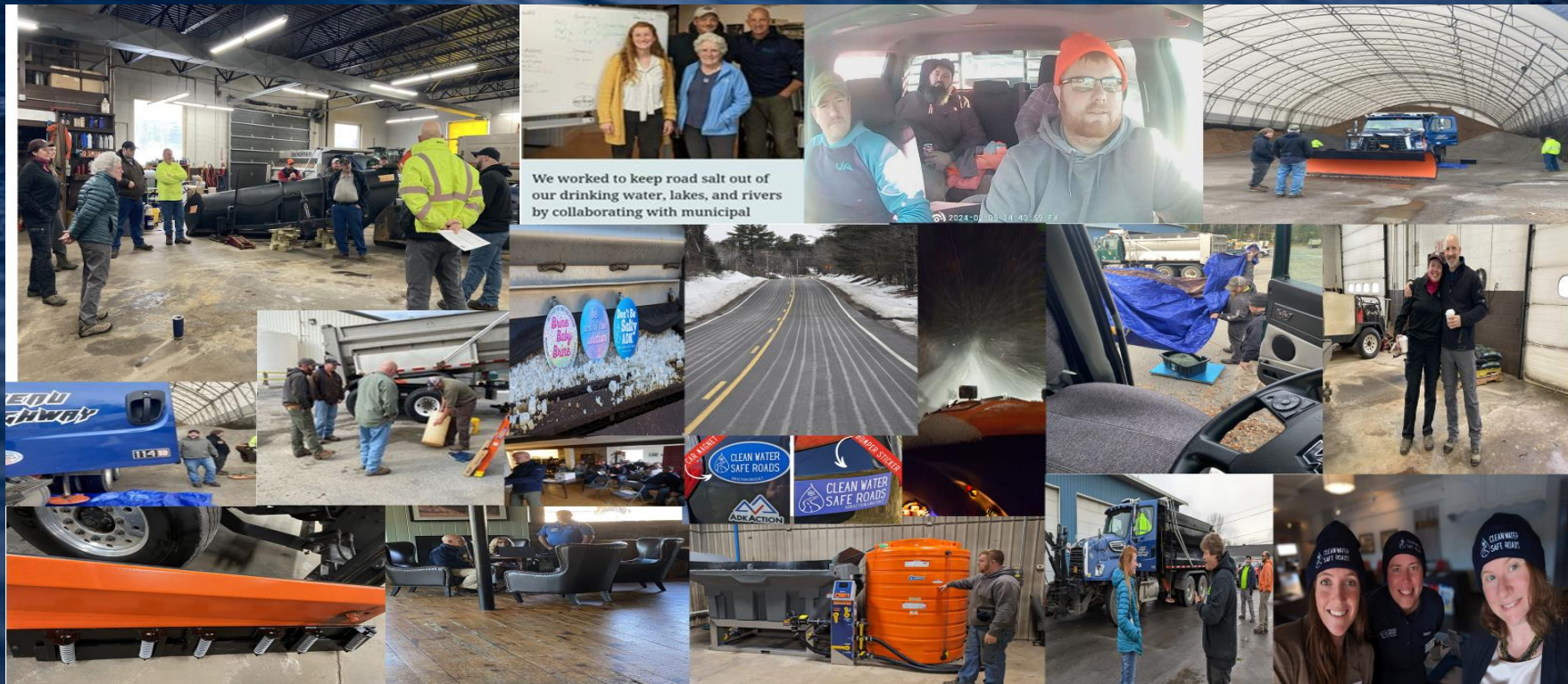
ROAD SALT

Solutions

- MOU Model (Lake George)
- Skin \$ Model (Long Creek)
- SWiM[®] Standards
- Methods
- Technology
- Salt Summit(s)
- Culture (Innovation)
- Collaboration
- Community / Cohorts



ROAD SALT Community



We worked to keep road salt out of our drinking water, lakes, and rivers by collaborating with municipal

CLEAN WATER SAFE ROADS
ADK ACTION
CLEAN WATER SAFE ROADS

CLEAN WATER SAFE ROADS
CLEAN WATER SAFE ROADS
CLEAN WATER SAFE ROADS

ROAD SALT

WIT Advisers / SWiM®



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People | Business | Environment

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We do "WHATEVER IT TAKES" to Develop, Support and Empower sustainable solutions that enable people, businesses, and the environment to thrive.