## NORTHWEST WATER PLANNING ALLIANCE (NWPA)

## SENSIBLE SALTING COMMITTEE

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THERE IS A DIRECT CONNECTION BETWEEN USE OF ROAD SALT & WATER QUALITY





# WE USE LOTS OF SALT! AND IT'S CONTAMINATING OUR WATER

## Road Salt

- Water Softeners
- Fertilizers



- Toxic to Fish & Wildlife
- Kills Vegetation //
- Highly Corrosive
   (metal/Infrastructure)
- Adverse Health Impacts

# WE USE LOTS OF SALT!



There are over 31,000 linear miles of roadway in the Chicago Metropolitan Area

# IT'S NOT JUST ROADS WE SALT!

Parking lots
Driveways
Sidewalks

# CURRENTLY NO VIABLE ALTERNATIVE TO SALT FOR SNOW/ICE MANAGEMENT

BEST OPTION IS TO USE SALT WISELY

## SENSIBLE SALTING

"The use of Best Management Practices for snow and ice management that maintains safety for pedestrians, drivers, vehicles and property while eliminating the <u>unnecessary</u> use of salt to minimize impacts to water and the environment."

## Sensible Salting

- Proper Storage
- Calibrating equipment
- Only applying enough product to be effective
- Tracking Weather
- Applying correct product for road temperature
- Anti-Icing vs. De-Icing
- Using liquid applications before events
- Use of carbohydrates (beet juice)
- Pre-wetting
- Training and Certification

## **TRANSPORTATION - SENSIBLE SALTING**

#### **Cover and Contain**





- Location
- Location
- Location

#### **Calibrate Equipment**



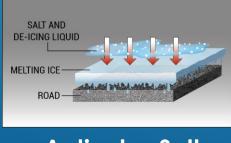
- Can't manage if you don't measure
- Control Application Rate

#### **Anti-Icing**

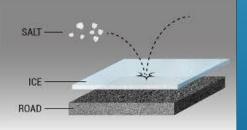


- Apply Liquids Before Storm
- Prevents Ice Formation
- Simplifies Snow Removal
- Less Repeat Applications

#### Pre-Wet Salt



Activates Salt



Reduces Bounce

## **Sensible Salting Training**

#### **Classroom Training**





Hands-On Training

Photos: Scott Kuykendall

# Northwest Water Planning Alliance (NWPA) Sensible Salting Committee

Goal: Protect water quality by reducing <u>unnecessary</u> release of chlorides to water from snow/ice management activities

Findings: Most County's, many municipalities, and other governmental entities working on salt reduction

Private sector has no oversight and actually incentivizes excessive use of salt

Greatest opportunity to influence salt reduction is in private sector

# Northwest Water Planning Alliance (NWPA) Sensible Salting Committee

## Sensible Salting for Parking Lots and Sidewalks

Expanded Sensible Salting Committee with partners throughout Chicago Region

Including:

McHenry County Planning and Development	Salt Smart	Illinois Section American Water Works Association	Engineering Enterprises, Inc.
Kane County Stormwater Management and Permitting	Morris Engineering	Illinois State Water Survey (ISWS)	Midwest Salt
Lake County Stormwater Management Commission	Barrington Area Council of Governments (BACOG)	Chicago Metropolitan Agency for Planning (MCAP)	Cornerstone Fortners
Lake County Health Department	Metropolitan Water Reclamation District of Greater Chicago (MWRDGC)	Des Plaines River Group	Morris Engineering
Village of Aurora	Sea Grant Illinois-Indiana	Illinois State Toll Highway Authority	Acres Groups
Fortin Consulting	Conservation Foundation	Viasala	Good Samaritan Hospital

Northwest Water Planning Alliance (NWPA) Sensible Salting Committee

Sensible Salting for Parking Lots and Sidewalks

Developed a <u>Four Step Plan</u>:

1. Regional Sensible Salting Manual

2. Professional Regional Training & Certification program

3. Local ordinances or policy's requiring "Certified" operators

4. State legislation providing limited liability protection for "Cértified" operators

STEP 1:REGIONAL SENSIBLE SALTING MANUAL

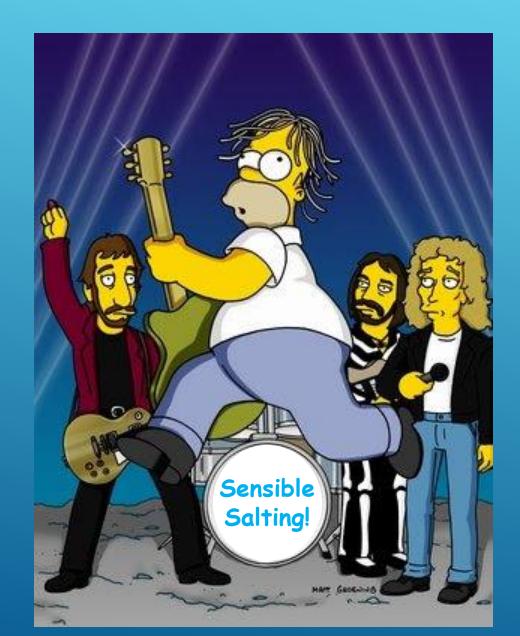
## WE HAVE BEEN SINGING ABOUT SENSIBLE SALTING WITH A SOFT VOICE

#### Sensible Salting Training and Outreach

- Counties
- Trade Organizations
- Environmental Groups



## WHEN WE NEED TO RAISE THE VOLUME TO 11 !!!



### AND SING WITH A LOUD UNIFIED VOICE!

So everyone is aware of the problem



And the solutions!!!

## STEP 1:REGIONAL SENSIBLE SALTING MANUAL

- Empower any stakeholder group to speak with a <u>unified message</u>
- Increase awareness about Sensible Salting throughout Northeastern Illing
- Draft currently going through 2<sup>nd</sup> round of editing
- Due Fall of 2019

## STEP 1:REGIONAL SENSIBLE SALTING MANUAL

- Partner with SALT SMART to provide widespread access to Regional Manual,
- Use Regional Manual to raise interest and funding for STEP 2!



#### STEP 2: REGIONAL TRAINING & CERTIFICATION PROGRAM

- Partner with SALT SMART and other stakeholders
- Use the Regional Manual to raise interest in salt reduction and get funding to <u>develop a Professional Sensible Salting Training & Certification program</u>
- Use Steps 1 & 2 to raise interest and implementation of STEP 3!

# STEP 3:WORK WITH MUNICIPALITIES TO REQUIRE<br/>"CERTIFIED" SNOW/ICE OPERATORS

- Raise awareness of Sensible Salting for property owners and managers
- Increase participation and demand for training and certification
- Begin reducing the amount of chlorides
- Use Steps 1, 2 and 3 to raise interest and implementation of STEP 4!

# STEP 4:STATE LEGISLATION PROVIDING<br/>LIMITED LIABILITY PROTECTION<br/>FOR PROPERTY OWNERS WHO HIRE<br/>"CERTIFIED" OPERATORS

• Uses market forces to drive demand for reduced salt use

#### Billy Bob's



Snow Plow Service

VS.



"CERTIFIED" SNOW PLOW SERVICE WITH LIMITED LIABILITY PROTECTION

#### **STEP 4:**

STATE LEGISLATION PROVIDING LIMITED LIABILITY PROTECTION FOR PROPERTY OWNERS WHO HIRE "CERTIFIED" OPERATORS

• Uses market forces to drive demand for reduced salt use

- Incentivize the use of Sensible Salting practices
- Fundamentally change snow/ice management on commercial properties

Result in reduced water pollution from road salt!

# LEAVE SAFE, SUSTAINABLE WATER FOR FUTURE GENERATIONS



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