

2019 Additional Materials Distribution

Date Completed	Title	Target Audience	Subject/Messages	Initial Distribution	Additional Distribution/Follow Up Requests (to; number; date)
1/17/2029	Snow & Ice Control BMPs for Parking Lots, Sidewalks Roads	Private winter maintenance contractors	Issues with over salting; BMPs to protect the environment, maintain safety and save money	Cover letter and brochures were sent to 112 private contractors; copies were also sent to MS4 clerks for distribution at municipal buildings.	
12/1/2019	4 MS4 Stormwater Training Videos	Various municipal staff with MS4 compliance responsibilities	Stormwater Pollution Prevention for MS4s; Concrete Washout training ; Non-Emergency HazMat Spill Response; Stormwater Pollution Prevention for Construction Sites	One set of four (4) training videos was sent to designated representatives from each CNY Stormwater Coalition member.. Included evaluation materials and discussion starters for use at in-house staff training sessions	

**Want to learn more without leaving your home or office? Check out these resources:**

Minnesota Snow & Ice Control Field Handbook for Snowplow Operators, 2012  
<http://www.mnltap.umn.edu/publications/handbooks/documents/snowice.pdf>

Winter Parking Lot and Sidewalk Maintenance Manual, 2015  
<https://www.pca.state.mn.us/sites/default/files/p-tr1-10.pdf>

Sand Salt Spreader Calibration—You Tube Video  
<https://www.youtube.com/watch?v=zz3JHC9ZhsA>

**This brochure was prepared & funded by:**

- \* CNY Regional Planning & Development Board
- \* Onondaga County Soil & Water Conservation District
- \* Skaneateles Lake Watershed Agricultural Program

**Additional support was provided by:**

- \* CNY Stormwater Coalition
- \* Onondaga County Water Authority

**Special thanks to:**

- \* NYS Department of Transportation Region 3 for their continued support!



**IF YOU DON'T MEASURE IT,  
YOU CAN'T MANAGE IT.**



## **SNOW & ICE CONTROL BEST MANAGEMENT PRACTICES FOR PARKING LOTS, SIDEWALKS, ROADS**



Use less! About one teaspoon of salt can contaminate five gallons of water!



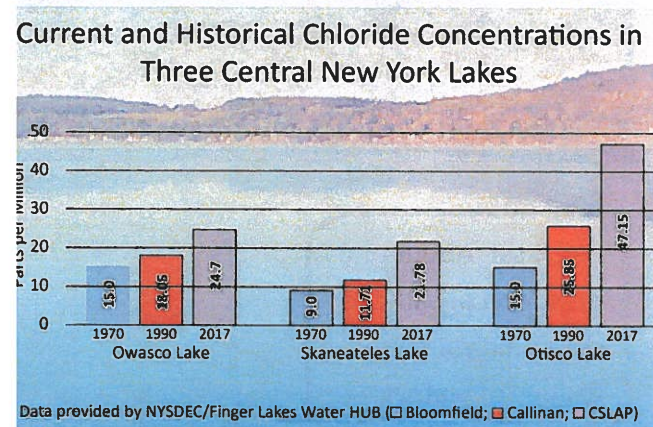
**Help Protect Our Lakes, Streams, Wetlands,  
and Drinking Water Sources by  
Using Best Management Practices for Winter  
Maintenance.**

## IMPACT OF DE-ICING SALT ON WATER QUALITY IN CENTRAL NY

Road salt (sodium chloride) can enter water resources as surface runoff from rain and melting snow or through storm drains. Once discharged into surface waters it cannot be treated or filtered. Only dilution can reduce its concentration. The accumulation and persistence of salt poses a risk to water quality and the plants, animals, and humans who depend upon it.

Salt contamination inhibits lake turnover. As a result, dissolved oxygen in the upper waters is unable to mix with the lower waters. Fish and other aquatic life cannot survive. Salt in drinking water is a health concern for people with high blood pressure or hypertension.

The following chart illustrates recent trends in chloride concentrations in three CNY Finger Lakes.



## WHAT ARE THE BOTTOM LINE BENEFITS OF FOLLOWING BEST MANAGEMENT PRACTICES ?

- Improved level of service and customer satisfaction: Providing a knowledgeable, well-planned & executed winter maintenance program reduces mistakes and lessens the chance for icy surfaces.
- Improved safety: Understanding materials, weather, and application rates helps minimize icy surfaces while avoiding over application.
- Improved Water Quality: A healthy environment is important to your customers. The less material you use, the better for our lakes, economy and customers.
- Save money: Knowing how to use the right amount of material at the right time and temperature saves you money and time.

## WINTER PARKING LOT AND SIDEWALK MAINTENANCE

### Key Tips for Optimal Winter Maintenance

- \* De-icers melt snow and ice. They provide no traction on top of snow and ice.
- \* De-icing works best if you plow before applying material.
- \* Anti-icing prevents the bond from forming between pavement and ice.
- \* Anti-icing chemicals must be applied prior to snow fall.
- \* Select the right material for the temperature of the pavement.
- \* Sand only works on top of snow as traction. It provides no melting.
- \* NaCl (road salt) does not work on cold days when temperatures are less than 15° F.

### Melt Times for Salt (NaCl) at Different

Pavement Temp. °F	One pound of Salt (NaCl) melts	Melt Times
30°	46.3 lbs. of ice	5 min.
25°	14.4 lbs. of ice	10 min.
20°	8.6 lbs. of ice	20 min.
15°	6.3 lbs. of ice	1 hour
10°	4.9 lbs. of ice	Dry salt is ineffective and will blow away before it melts anything

### Variables Affecting Application Rates

Increase rate:	Decrease rate:
Compaction occurs and cannot be removed mechanically	Light snow or light freezing rain
There is a lot of snow left behind	Pavement temperature is rising
	Subsequent applications

## BEST MANAGEMENT PRACTICES (BMPs) TO PROTECT OUR WATER AND IMPROVE YOUR

### PERFORMANCE:

- \* Cover all salt and sand piles.
- \* Use road salt (NaCl) only if the pavement temperature is over 15°F.
- \* Use road salt treated with magnesium chloride or calcium chloride to improve melting power.
- \* Find ways to wet your salt. You can use 30% less material if it is wet.
- \* Wet salt works faster than dry salt and stays in place better.
- \* Plow, shovel, blow, or use any mechanical means of snow and ice control prior to using any chemical control. There will be less dilution of the salt and you can use less.
- \* Do not mix salt and sand. Salt is a de-icer; sand is an abrasive for traction on top of ice. They work against each other.
- \* A liquid salt applied before the storm will prevent ice from bonding to the pavement. This is anti-icing. Much less work and material is required to anti-ice than to de-ice.

### No-Cost Training and Information is Available.

To schedule a training near you contact the CNY Regional Planning & Development Board at 315-422-8276 Ext. 1208

Don't be left behind. Join the list of municipal highway departments and private contractors that are benefitting from winter road maintenance and calibration training jointly presented by NYS DOT Region 3, Onondaga County Soil & Water Conservation District, the CNY Regional Planning & Development Board, and the CNY Stormwater Coalition.





Central New York Regional Planning & Development Board  
126 N. Salina Street, Suite 200, Syracuse, New York 13202 • Tel. (315) 422-8276 • Fax: (315) 422-9051  
Paul W. Pinckney, Chairman David V. Bottar, Executive Director

December 3, 2019

MEMORANDUM

TO: CNY Stormwater Coalition Representatives  
FROM: Kathleen Bertuch, CNY RPDB Environmental Management Program Manager  
RE: MS4 Stormwater Training Videos

As authorized by the CNY Stormwater Coalition Executive Committee and ratified at the August 6, 2019 Stormwater Coalition meeting, four (4) stormwater training videos have been purchased to help participating MS4s comply with MS4 stormwater regulations including training requirements. Video titles, descriptions and running times are provided below to help you target appropriate staff and structure training opportunities:

**1. Rain Check" - Stormwater Pollution Prevention for MS4s**

Regulated municipalities and other municipal separate storm sewer system (MS4) operators must prevent pollutants from entering their storm drainage systems. One element of this requirement is preventing stormwater pollution by municipal facilities such as fleet maintenance shops, bus barns, sanitation facilities, parks and street sweeping operations. This program shows employees how to practice good housekeeping, spill response, materials management, vehicle fueling and washing and the other BMPs profiled in the "National Menu". {Program versions run between: 19 -and up to- 31 minutes}

**2. Concrete Wash-Out Video Training "Building for a Cleaner Environment" (revised - 2017)**

Concrete Washout "Building for a Cleaner Environment" This employee training video focuses on vehicle and equipment washout at construction sites. Mixer truck, concrete pump trucks, and concrete finishing tools must be washed at job sites to prevent road hazards and for continued use of the equipment. Employees and contractors need to be aware of the potential impact that the wastes from the washout can have on the environment if it is allowed to runoff from construction sites. This video instructs employees on how to locate job-site washout locations, proper washout techniques, and working at difficult job sites. (13 minutes)

**3. Spills & Skills" Non-Emergency HazMat Spill Response**

This 18:30 minute training kit is designed to help train non-HAZWOPER employees on dealing with a hazardous material (or hazardous waste) spill, leak or release. What to do if you discover a hazmat release? How to determine if a release requires HAZWOPER-trained responders. If it is a hazmat emergency release (HAZWOPER event), what to do then? If it's non-HAZWOPER event (an 'incidental release'), the program reviews the discreet steps involved in clean-up.

**4. Ground Control: Stormwater Pollution Prevention for Construction Sites**

This employee training kit is designed to show employees how erosion, sediments and other potential surface water pollutants are controlled at construction sites. The program focuses on Best Management Practices (BMPs) that are widely used at most construction sites including: silt fence, stabilized entrances/exits, drop inlet protectors and others. The program illustrates how these BMPs work and how they can fail. (14:30 minutes)

Each video comes with a trainer guide, quiz and answer key, quiz generator, instructions for running the video, documentation for attendees and a PowerPoint. You are encouraged to utilize these materials to conduct in-house trainings for appropriate MS4 staff.

Retain documentation of trainings as part of your compliance records so that they are available in the event your MS4 is audited by the NYS DEC or the U.S. EPA.

These materials are for your training purposes and should not be shared outside of your MS4 or otherwise made publically available.

Please work with the appropriate municipal department heads to encourage use of the training guides and videos. Follow up quiz questions can be used informally to generate discussion and reinforce specific topics.

Thank you.

KMB

**EXCAL VISUAL**<sup>INC</sup>  
 Training for EH&S Compliance

PO Box 4463  
 Avon, CO 81620

# Invoice

Date	Invoice #
10/10/2019	2078

Accounting: 303-413-0847    accounting@excalvisual.com

Bill To

CNY REGIONAL PLANNING & DEV BOARD  
 KATHLEEN BERTUCH  
 126 NORTH SALINA ST  
 SYRACUSE, NY 13202

Ship To

CNY REGIONAL PLANNING & DEV BOARD  
 KATHLEEN BERTUCH  
 126 NORTH SALINA ST  
 SYRACUSE, NY 13202

P.O. Number	Terms	Rep	Ship	S.O. No.	Pymt Method
319347	Net 15	BD	10/10/2019		Sample

Quantity	Item Code	Description	Price Each	Amount
1	2110L	Stormwater 'Storm Warnings' USB Flash Drive Kit	495.00	495.00
1	2H107	Non-Emergency HazMat Spill Response "Spills & Skills" USB Flash Drive Kit	495.00	495.00
1	30008	USB Flash Drive Kit for Concrete Washout	395.00	395.00
1	21124	Stormwater MS4 Rain Check USB Flash Drive Kit	595.00	595.00
1	Shipping & Handling	Shipping and Handling	20.75	20.75

Receive 20% off your next purchase of a full priced kit or licence when you go to our BBB page & give us a review. We appreciate your business!

<b>Total</b>	\$2,000.75
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