

# Michigan Winter Maintenance of Roads with Reduced Environmental Impacts

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# Training Development:

Connie Fortin – Fortin Consulting Inc.

# Project Management:

Lois Wolfson, PhD  
Specialist, Michigan State University

Faye Sleeper, Co-Director  
University of Minnesota Water Resources Center

Rebecca Power, Co-Director  
Great Lakes Regional Water Program  
University of Wisconsin-Extension

# Training trials organized by:

Carlos Garcia-Salazar – MSU extension



The project managers for the training development were Rebecca Power of University of Wisconsin - Extension, Faye Sleeper University of Minnesota Water Resource Center and Lois Wolfson Michigan State University.

Connie Fortin of Fortin Consulting Inc. was hired to develop the training under the advisement of the technical expert team.

Carlos Garcia of MSU extension was responsible for organizing the training trials of this program.

## Under the advice of the Technical Expert team:

**Team Leader:** Mark Cornwell – Sustainable Salting Solutions LLC

### **Expert Team:**

Dave Barr, ADC Solutions  
Mark Crouch, Michigan Department of Transportation  
Tim Croze, Michigan Department of Transportation  
Rob Doletzky, Universities-Facilities, University of Michigan  
Dave Drullinger, Michigan Department of Environmental Quality  
Ron Fadoir, Oakland County Water Resources Commission  
Tim Fischer, Michigan Environmental Council  
James Fountain, Knapheide Truck Equipment Company  
Amy Frankmann, Michigan Nursery Landscape Association  
Chuck Fritz, City of Novi MI  
Rob Hayes, City of Novi MI  
Matt Kapp, Michigan Farm Bureau  
Wayne Kukuk, Michigan Department of Environmental Quality  
Ron Lacasse, City of East Lansing MI  
Mike McCann, Snow Plow Group Inc.  
Robert Pigg, Michigan Department of Agriculture and Rural Development  
Matt Pratt, Michigan Department of Transportation  
Mary Schulz, Michigan Local Government Benchmark Consortium  
Dan Sommerville, Michigan Environmental Council  
Ken Stanton, Universities-Facilities, Grand Valley State University  
Roger Thelen, Universities-Facilities, Michigan State University  
Brian Wendling, Drain Commissioner, Saginaw County  
Matt Wiktorowski, City of Novi MI  
Herm Witte, Witte Lawn Maintenance

A winter maintenance technical expert team was assembled to attend the Minnesota version of this training and offer comments on how to improve it and turn it into a Michigan version.

Mark Cornwell of Sustainable Salting Solutions was hired to form and lead a technical advisory team. His role was to gather input and involvement from the industry so that the training would be representative of those working in winter road maintenance in Michigan.

The technical expert team consisted of a variety of professionals working in the winter maintenance industry in Michigan.

**Additional assistance from:**

Andrew Bahrou, Department of Environmental Quality  
Andy Conroy, Department of Environmental Quality  
Matt Goddard, Department of Environmental Quality  
Darryl Heide, Road Commission for Oakland County  
Brad Knight, Road Commission for Oakland County  
Amy Kohlhepp, Department of Environmental Quality  
Dawn Roush, Department of Environmental

**Training:**

This training module was based on the Minnesota Pollution Control Agencies Voluntary Certification program for Winter Maintenance with Reduced Environmental impacts.

[www.pca.state.mn.us/programs/roadsalt.html](http://www.pca.state.mn.us/programs/roadsalt.html)

**Training Demonstration:**

Craig Eldred – City of Waconia, Minnesota  
Connie Fortin – Fortin Consulting Inc.

**Special Thank You:**

For all of your time, attention and extra effort in the production of the training PowerPoint and training manual.

Mark Crouch – MDOT

Tim Croze – MDOT

Dave Drullinger – MDEQ

Matt Pratt - MDOT

For more information on the Minnesota program, on which this training was developed from, please visit:

[www.pca.state.mn.us/programs/roadsalt.html](http://www.pca.state.mn.us/programs/roadsalt.html)

Training Manual:

[www.iwr.msu.edu/miwintermaintenance](http://www.iwr.msu.edu/miwintermaintenance)

Stand  
alone  
resource



This training ppt has been developed to be used with the training manual found on this same website. [www.iwr.msu.edu/miwintermaintenance](http://www.iwr.msu.edu/miwintermaintenance)

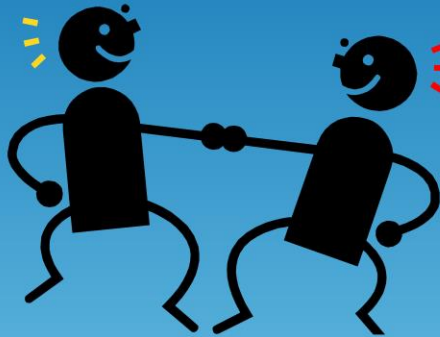


Acknowledge the organization hosting the class and those representatives of that organization present at the training.

Thank the attendees for taking the time out of their busy schedule at attend training.



Your Instructors for todays class:



Each instructor should take a few minutes to introduce themselves and their background.

It is suggested that the class be taught by 2 instructors:  
One instructor well versed on the environment and one well versed in winter maintenance. It gives for a balanced discussion throughout the training on how to obtain clean water and safe roads.

## Goal of the class:

Maintain or  
improve your  
current level of  
service while  
reducing  
environmental  
impacts





Take out your test answer sheet

Write your name and address



By passing the test, your name will be added to the list of others who have successfully completed this course. Go to this website to see the list:  
[www.iwr.msu.edu/miwintermaintenance](http://www.iwr.msu.edu/miwintermaintenance)

You will also be sent a certificate such as the one above. Lois Wolfson from MSU is in charge of that for 2013.

Explain: When filling out the test answer sheet make sure to write your name and address neatly or your name may be spelled wrong on the certificate and it may be mailed to an incorrect address if they cannot read your writing.