

**State Planning and Research Program
Quarterly Report**

PROJECT TITLE: *Developing a Snow and Ice Control Environmental Best Management Practices Manual*

OBJECTIVES: • Assess and communicate the impacts of different snow and ice control products as well as the current environmental best practices for using chlorides in a responsible and affordable snow and ice control program.

PERIOD COVERED:

October 1, 2014 – December 31, 2014

PARTICIPATING AGENCIES:

Western Transportation Institute, Montana State University

PROJECT MANAGER: Tom Peters

SP&R PROJECT NO:

PROJECT IS:

LEAD AGENCY: Mn/DOT

Planning

Research & Development

PRINCIPAL INVESTIGATOR:

Laura Fay

ANNUAL BUDGET:

\$180,107

PROJECT EXPENDITURES TO DATE:

\$103,532.87

WORK COMPLETED:

Project Management

Project management activities during the quarter were focused on budget and timeline maintenance. To date, the project is on budget and about two months behind schedule. Due to delays in the review process we suggest a no-cost time extension be considered for this project.

Task 1. Literature Search (100% completed)

The researchers completed and submitted the literature search to the Technical Panel for review. The Literature Search focuses on the impacts of chloride based and non-chloride based snow and ice control products and sand, and environmental best practices for snow and ice control. Comments on the Literature Search from the Technical Panel were just received and all requested edits will be completed and incorporated in the Manual (Task 4) and Final Report (Task 5).

Task 2. Survey (100% completed)

The researchers developed a survey and sent it out to Clear Roads to disseminate. The survey targeted Clear Roads member states, as well as U.S. and international winter maintenance professionals to address the identified informational gaps from existing research. The survey remained open for two weeks and received 40 responses. Follow-up interviews will be on conducted as necessary. The survey has been written up and incorporated in the Manual and Final Report. Five follow up interviews were conducted to gather additional information based on preliminary survey responses on: Material Storage (Kansas DOT), Level of Service (Maine DOT), Closed Loop Spreaders (Rhode Island DOT), Pre-wetting and Timing of Attack (City of Grandview, Missouri), and Brine Storage and Retention Ponds (Virginia DOT).

Task 3. Analysis of Tasks 1 & 2 (100% completed)

The researchers will analyze the information gathered in Tasks 1 and 2 to organize the identified impacts and environmental best practices presented in each document and from the survey. This information will further be organized into a table that presents the specific impacts, performance characteristics, and environmental best practices for each snow and ice control product.

Task 4. Development of a Best Management Practices Manual (75% completed)

The researchers have developed an outline for the manual based on information gained in Task 1 and will prepare and submit the developed manual based on information gained and developed in the previous tasks.

Task 5. Final Report and Presentation (25% completed)

The researchers will prepare and submit a final report of the work completed, include an executive summary, introduction, methodology, results for each task, the BMP manual, and conclusions, as well as a power point presentation of the contents of the BMP manual.

Task 6. Final Report to Web Document (0% completed)

The researchers will convert the approved final report into a pdf based web document.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Tasks to be completed in the final quarter of this project include finalizing the Task 4 Draft Manual and submitting it for panel review, and completing and submitting the Task 5 Final Report and Presentation. Once all revisions to Task 4 and 5 have been completed Task 6 Converting the Final Report to a Web Document will be completed.

STATUS AND COMPLETION DATE:

The project is about two months behind schedule. We have been granted a no-cost time extension. The new contract completion date is March 31, 2015.