

## State Planning and Research Program Quarterly Report

**PROJECT TITLE:** *Review and Summary of Pre-Wet Methods and Procedures*

**OBJECTIVES:** The goal of this research is to “to compile a summary of pre-wetting practices, including equipment, materials, methods, and application rates and identify the history of successes and failures that have contributed to the current practices.”

**PERIOD COVERED:**

Oct. 1, 2020 – Dec. 31, 2020

**PARTICIPATING AGENCIES:**

Washington State University – Prime  
Monte Vista Associates LLC – Subcontractor  
Ice and Snow Technologies, Inc. - Subcontractor

**PROJECT MANAGER:**

Debbie Sinclair / Tom Peters

**LEAD AGENCY:** MnDOT

**PRINCIPAL INVESTIGATOR:**

Xianming Shi, Ph.D., P.E.  
Washington State University

**SP&R PROJECT NO:**

MnDOT Contact No.  
1031544

Federal Project No.  
TPF-5(353)

**PROJECT IS:**

Planning  
 Research & Development

**ANNUAL BUDGET:**

\$74,722

**PROJECT EXPENDITURES TO DATE:**

\$17,555

**WORK COMPLETED:**

*Project Management*

A no-cost time extension of six months was submitted by WSU in Oct. 2020 to the Minnesota DOT and was approved during the last quarter.

Task 1. Literature review (100% complete). The panel review comments were received and then the revised literature review was submitted in June 2020. This task is considered complete now.

Task 2. Survey questions (95% complete). The survey results were summarized in May 2020 and submitted to the panel for review. The panel review comments were received and then the summary of survey results was submitted in June 2020. In the last quarter, the summary of survey results was revised to address panel review comments and there are one minor detail to be finalized once we learn more from Task 3 case studies.

Task 3. Interviews and case studies (50% complete) We have interviewed seven of the nine survey respondents identified from Task 2 for more in-depth case studies.

Task 4. Outreach to manufacturers (20% complete) In the last quarter, we have reached out to the eight identified equipment manufacturers for the outreach.

Task 5. Final synthesis report (0% complete)

**SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:**

Work in the coming quarter will consist of project management as well as the completion of Task 2 and the interviews/outreach of Tasks 3 and 4.

**STATUS AND COMPLETION DATE:**

The revised project timeline (with the approved no-cost time extension) is shown as follows. We anticipate some difficulties in collecting all the valid responses from case studies (Task 3) and manufacturer outreach (Task 4), in light of the COVID-19 pandemic.

<b>Task</b>	<b>Current Task Start Date</b>	<b>Current End Date for Task Approval</b>	<b>Revised Task Start Date</b>	<b>Revised Due Date to Submit Draft Deliverables</b>	<b>Revised End Date for Task Approval</b>
<b>1</b>	<b>10/01/2019</b>	<b>2/28/2020</b>	<b>10/01/2019</b>	<b>1/31/2020</b>	<b>6/30/2020</b>
<b>2</b>	<b>12/1/2019</b>	<b>4/30/2020</b>	<b>12/1/2019</b>	<b>5/30/2020</b>	<b>11/15/2020</b>
<b>3</b>	<b>3/1/2020</b>	<b>8/31/2020</b>	<b>8/1/2020</b>	<b>1/30/2021</b>	<b>2/28/2021</b>
<b>4</b>	<b>4/1/2020</b>	<b>9/30/2020</b>	<b>8/1/2020</b>	<b>2/28/2021</b>	<b>3/30/2021</b>
<b>5</b>	<b>7/1/2020</b>	<b>12/31/2020</b>	<b>2/1/2021</b>	<b>4/30/2021</b>	<b>6/30/2021</b>