

## TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: 3/31/2014

Lead Agency (FHWA or State DOT): Vermont Agency of Transportation

**INSTRUCTIONS:**

*Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.*

<b>Transportation Pooled Fund Program Project #</b> <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i>  TPF-5(222)		<b>Transportation Pooled Fund Program - Report Period:</b> <input checked="" type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> New England Transportation Consortium (VI)			
<b>Name of Project Manager(s):</b> Bill Ahearn		<b>Phone Number:</b> 802-828-2561	
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<b>Lead Agency Project ID:</b> CA0306		<b>Other Project ID (i.e., contract #):</b> NETC 06-4 NETC 07-1 NETC 09-2 NETC 09-3 NETC 10-3	
		<b>Project Start Date:</b> 9/16/13 7/1/13 9/1/13 9/1/13 9/16/13	
<b>Original Project End Date:</b> NETC 06-4 9/15/15 NETC 07-1 3/31/16 NETC 09-2 2/28/16 NETC 09-3 8/31/15 NETC 10-3 9/15/15		<b>Current Project End Date:</b> 9/15/15 3/31/16 2/28/16 8/31/15 9/15/15	
		<b>Number of Extensions:</b> 0 0 0 0 0	

Project schedule status:

- On schedule  
  On revised schedule  
  Ahead of schedule  
  Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
NETC 06-4 \$242,909	\$0	10%
NETC 07-1 \$198,154	\$3,380	15%
NETC 09-2 \$80,000	\$1,083	15%
NETC 09-3 \$165,000	\$39,217	55%
NETC 10-3 \$150,158	\$0	20%

**Quarterly Project Statistics:**

Total Project Expenses and Percentage This Quarter			Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
NETC 06-4	\$0	0%	\$0	27%
NETC 07-1	\$3,380	0%	\$0	26%
NETC 09-2	\$1,083	0.9%	\$683	19%
NETC 09-3	\$39,217	15.4%	\$25,452	27%
NETC 10-3	\$0	0%	\$0	27%

**Project Description:**

- 06-4 Preventative Maintenance and Timing of Applications
- 07-1 In-Place Response Mechanisms of Recycled Layers Due to Temperature and Moisture Variations
- 07-3 Determining Optimum Distance for a Lane Drop Downstream from a Signalized Intersection
- 09-2 Effective Establishment of Native Grasses on Roadsides
- 09-3 Advanced Composite Materials: Prototype Development and Demonstration
- 10-3 Low Temperature and Moisture Susceptibility of RAP Mixtures with Warm Mix Technology

**Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**

06-4, UMass Dartmouth hosted the project Kick-Off Meeting on February 12th, 2014. UMass Dartmouth continued work on the literature review and internet survey.

07-1, The research team has begun testing on the two existing sites in NH. To date, the Warren Flats site has been tested on February 21 and on March 21. On both dates, thermistor data suggests that there was some temporary thawing down to about 5 inches beneath the top of pavement. In between those temporary thawing events, there have been refreezing events. Based upon forecast air temperatures and cumulative thawing indices, it is anticipated that the current thawing event (beginning March 28) is likely to continue with minimal or no refreezing. The first Kancamangus testing will thus likely be during early thaw conditions; frozen conditions will be tested in 2015. Testing of both the Warren Flats and Kancamangus sites will continue through the next quarter, to capture stiffness data during the thaw-weakened period as well as the recovery period. The research team has also been working with the ME DOT to identify an appropriate location for instrumentation on the PMRAP Waterford/Norway project.

09-2, Two investigators – Kuzovkina and Dreyer – attended the Ecological Landscape Symposium: New Directions in the American Landscape on January 9-10, 2014 at the Connecticut College Arboretum to gather relevant information for the Manual and to meet the practitioners in the field of ecological restoration. Kuzovkina and Schulthess conducted the candidate search and interviewing through the American Society for Horticultural Sciences for the Graduate Assistant position to work on this project. February 26, 2014 all co-PIs and candidate for the Graduate Assistant John Campanelli met with the practitioner Larry Weaner at the Connecticut College Arboretum to discuss the selection of native grasses for demonstration sites along Rt. 6 in Connecticut. January-March 2014 all co-PIs conducted the literature search to access all relevant information for the Manual. February-March 2014 – development of the specifications of native grass plantings for the demonstration sites. 5 March, 2014 – phone discussion with Colonial Seed LLC about the plant specifications for the demonstration sites. February-April 2014 communication with Dr. Rebecca Brown from the University of Rhode Island about the project: development of the bluestem ecotype study and discussion of the specifications for the demonstration sites. March 25, 2014 – Kuzovkina visited the University of Delaware to communicate with the colleagues – Susan Barton and Valann Budischak – working on similar DOT project in Delaware. Discussion about saw-dust establishment protocol. March 29-31, 2014 – John Campanelli initiated seed ordering from Ernst Conservation Co.

09-3, Draft specifications have been submitted to committee and vendors for review. Vendors are still providing feedback.

10-3, UMass Dartmouth hosted the project Kick-Off Meeting on February 7th, 2014. UMass Dartmouth conducted two phone meetings with two contractors (Palmer Paving - MA, & Tilcon - CT) who will produce mixtures for this study. Due to plant limitations, the batch plant mixtures may not be produced in 2014, but may be produced in 2015. The remaining mixtures are scheduled to be produced in late April or early May 2014. UMass Dartmouth will be on site during production for sampling and specimen production. A production information sheet was developed (also attached to this report) to be utilized to quantify the critical production parameters related to the mixtures. UMass Dartmouth updated the internet survey based on the comments obtained during the Kick-Off Meeting. Subsequently, UMass Dartmouth began the process of loading the surveys onto the internet system for solicitation of responses.

**Anticipated work next quarter:**

06-4, Continue working on Literature Review and Internet Survey.

07-1, The research team will be conducting tests on the two existing sites during the 2014 spring thaw period. The team will also work to finalize the selection of targeted test sites for installation of instrumentation during the 2014 construction season.

09-2, Continue the literature review, spring plantings of the demonstration plots and research experimental units as described in the proposal. Continue the discussions with the stakeholders to receive sufficient feedback about the project. Outline the precise species composition and establishment techniques. Planting and data collection.

09-3, Completion of approve specifications. Determine list of bridge projects that can be included for demonstrations. Vendor evaluation checklist to be submitted. Host vendor meetings with technical committee. Materials characterization of witness plates.

10-3, Complete Literature Review. Determine Critical Information. Work on WMA Technologies Selection Process, Identify Moisture Susceptibility Test, and Develop a Testing Matrix.

**Significant Results:**

None as of this reporting period.

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

NETC 09-2 and 09-3 contracts were executed 6 weeks after the start date listed in the contract. This should not cause a significant delay in the project.

**Potential Implementation:**

The 5 research projects listed above are fairly new. Implementations of the results of those projects are not anticipated in the near future.