

NHDOT SPR2 PROGRAM

RESEARCH PROGRESS REPORT

Project # SPR 42372H		Report Period Year 2022 X Q1 (Jan-Mar) <input type="checkbox"/> Q2 (Apr-Jun) <input type="checkbox"/> Q3 (Jul-Sep) <input type="checkbox"/> Q4 (Oct-Dec)	
Project Title: Water Quality Test Site and Public Outreach at the I-89 Sutton Rest Area			
Project Investigator: Tom Ballestero Phone: 603.862.1405		E-mail: tom.ballestero@unh.edu	
Project Start Date: 5/5/2021	Project End Date: 1/31/2024	Project schedule status: X On schedule <input type="checkbox"/> Ahead of schedule <input type="checkbox"/> Behind schedule	

Brief Project Description:

NHDOT has been and will continue to construct water quality best management practices to meet stormwater runoff quality regulations. The size of the measures required often extend beyond the available right-of-way (ROW) and require the acquisition of private property. These measures also require maintenance to remain effective. NHDOT would benefit from solutions that require less space, that can be constructed in our linear ROWs, and be very low or zero maintenance. The current construction project, Sutton 42419, will explore the design, construction, efficiency, and monitoring of smaller, linear water quality measures that will require very little to no maintenance.

Another potential component to this project is public outreach. Due to the location of this test site there is an opportunity to share this research with the public who stop to use the rest area. This outreach may help the public understand the reason NHDOT constructs these features along the highways and may influence others to think about storm runoff and the impact it can have on the environment.

Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

During the months of January through March, 2022, conductivity data was downloaded periodically from the real-time, instream sensors remaining at the site over the winter. These sites include: stream above the rest stop, immediately downstream of the rest stop, and downstream across I-89. Readings are downloaded monthly.

Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, et):

Nothing at this time. When construction is scheduled, we need to be apprised in order to remove monitoring equipment.

Anticipated research next three (3) months:

During the Summer 2022 months, downloading the real-time conductivity data will continue. No water sampling equipment will be deployed until construction is completed and the site stabilized.

Circumstances affecting project:

Nothing outstanding at this time. Construction will affect monitoring, as anticipated.

Tasks (from Work Plan)	Planned % Complete	Actual % Complete
Task 1 Set-up Pre-construction Monitoring equipment and sample	100	100
Task 2 Provide design details for stormwater systems	100	100
Task 3 Set-up Post-construction Monitoring equipment and sample	0	0
Task 4 Assist with development of public outreach materials	0	0
Task 5 TAG Meetings and Quarterly Reports	30	30
Task 6 Final Report	0	0

Barriers or constraints to implementing research results

Nothing to report at this time.