NHDOT SPR2 PROGRAM
RESEARCH PROGRESS REPORT

Project # **SPR 42372H**		**Report Period** Year 2022 ☐ Q1 (Jan-Mar) X Q2 (Apr-Jun) ☐ Q3 (Jul-Sep) ☐ 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 ☐ Ahead of schedule ☐ 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 April through June 2022, conductivity data was downloaded periodically from the real-time, instream sensors remaining at the site. These real time monitoring locations include: the stream above the rest stop, immediately downstream of the rest stop, and downstream across I-89. Readings are downloaded monthly. As the site is not yet under construction, pre-stormwater management data is being collected. The site has been closed to traffic since winter 2022.

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.