

GSR Solutions, Burlington, VT, Project Abstract

An on-farm innovative conservation approach for water quality improvement, sustaining farm productivity, and supporting healthy watershed.

This project addresses both water quality and soil health priorities of the State of Vermont. Management of excessive waste nutrients is a long-standing environmental problem, in particular, the nutrient runoff from livestock manure is affecting water quality in the state of Vermont. The overall long-term goal of this project is to develop and implement a market-based innovative and sustainable farmer-friendly conservation practice that would allow dairy farmers to convert their unmanageable excessive manure nutrient load and carbon emissions into soil fertility amendments for crop production as well as assess the benefits for farms located in the most environmentally sensitive watershed. EQUIP qualified Vermont based farms and growers along with farmer stakeholders will contribute to this project for evaluating high nutrient recovery potential, conducting field trials of soil amendments. the main project deliverables and anticipated project results are as follows:

- Quantify environmental and economic benefits for facilitating improved implementation of NRCS water quality measures by conducting nutrient recovery trials and projecting nutrient recovery benefits for multiple farms for replicating the process in Vermont in the future.
- Quantify soil-health benefits as well as carbon sequestration from nutrient recovery process through field trials of the new organic soil amendments produced from the innovative conservation practice by using the established methods.
- Deliver outreach about the new conservation practice and soil fertility amendments to farmers and stakeholders through field days, workshops, webinars, publications, and other outreach activities.