

## Practical Soil Health Specialist Training New York State



### WORKSHOP ONE – PROJECT ORIENTATION AND SOIL HEALTH PRINCIPLES SEPTEMBER 24 AND 25, 2018 ● CORTLAND, NY

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## Project Milestones

### PERFORMANCE TARGET

Twenty (20) agricultural service providers trained in advanced soil health principles and practical methods for using crop rotations, cover crops, reduced tillage, nutrient management and other practices on diverse farms across New York will teach 400 farmers operating 80,000 acres about soil health techniques and how to successfully integrate them into their production systems.

Fifty (50) farmers informed by our beneficiaries will conduct a soil health assessment, develop a soil health plan, or implement a soil health practice such as cover cropping, reducing tillage, crop rotation, and/or nutrient management trial or demonstration.

**PROPOSED END DATE:** 2/28/2021

### MILESTONES FROM THE PROPOSAL BY CATEGORY with REQUESTED REVISIONS or CLARIFICATIONS

#### RESOURCE DEVELOPMENT

1. Advisory committee of key members of New York's soil health and agricultural service communities will compile an advanced soil health curriculum specific to New York's agricultural industry, soils, and topography for agricultural service providers. It is our intention for this curriculum to be available beyond the life of this project for use by others seeking to provide soil health training either "right out of the box" or as a template to be adjusted as needed. April 2018 – December 2019

#### RECRUITMENT and PRE-TRAINING ENGAGEMENT

2. 30 agricultural service providers from organizations such as New York Agri-Business Association, NE Region CCA, Cornell Cooperative Extension, NY Soil & Water Conservation Districts, AEM Planner List-serve, NOFA-NY and others respond to recruitment materials that clearly state performance target and outline our expectations for our beneficiaries. The service providers complete the application process which will include a pre-training skills assessment and a requirement to identify interested farmers they currently advise who they can further assist on soil health issues if selected for training program. June 2018.
3. Twenty applicants will be accepted into the training program. Their acceptance notification will repeat our performance target and beneficiary requirements and expectations. Beneficiaries will develop their own training plans on a template provided, integrating the orientation workshop and at least 3 of the 4 workshops and field days into their training plan. Contact information will be provided for assistance in developing training plans. August 2018.

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#### LEARNING DURING EDUCATION PROGRAM

4. Twenty (20) enrolled participants will attend Orientation Workshop #1: Program Orientation and Basic Soil Health Assessment- Orientation to include: project Performance Target, Milestones, Verification, and beneficiary training plans and expectations. Basic Soil Health Assessment to include principles of soil health, soil biology, soil physics, soil health assessment and measurement, and how to use soil health tests to guide recommendations. September 2018
5. The 20 enrolled participants will attend four or more of the remaining workshops:
  - Workshop #2 and Field Day, November 2018: Cropping Systems and Cover Crops- covering crop rotation and the benefits of cover crops; cover crop characteristics and seed mixtures; adapting cover crop management for differing purposes, soils, and types of farms; planting dates and methods; and termination. The field day will cover similar topics at a farm or USDA Big Flats Plant Material Center with farmer and farm advisor participants giving our students the chance to hear questions and experiences from farmers and observe the workshop presentations and demonstrations.
  - Workshop #3 and Field Day, February 2019: Adaptive Nutrient Management for Soil Health- covering nutrient cycling, how soil biology impacts nutrient management, cover crop scavenging of nutrients, sampling and fertilizer recommendations. A field day for farmers and their advisors covering similar topics will give our students the chance to hear questions and experiences from farmers and observe the workshop presentations and demonstrations.
  - Workshop #4 and Field Day, August 2019: Eliminating, Reducing, and Modifying Tillage for Soil Health- covering the benefits of reducing tillage; no-till, planting green, and alternative tillage methods will be discussed with considerations for differing soil types and management schemes. The field day with farmers will focus on tillage and planting equipment potentially in conjunction with Empire Farm Day's soil health programing and demo plots.
  - Workshop #5 and Field Day, November 2019: Covering customizing soil health systems to the farm and farmer, the economics of soil health, and communication skills. An "indoor" field day on honing communication skills, utilizing social media, and helping farmers build their "emotional bank account" will be held for farmers, their advisors and students.

Forty (40) farmers and 100 additional farm advisors will attend the 4 field days associated with workshops. They will gain valuable information and provide real world situations for our students to observe, interact with, and gain experience.

The 20 beneficiaries (and the additional service provider and farmer participants) will complete post workshop and field day surveys/evaluations.

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#### ENGAGEMENT TO SUPPORT ACTION

6. The 20 service provider beneficiaries will develop their own “Teacher Tool Kit” by the end of year 2. The “Tool Kit” will consist of presentations, slides, hand-outs, references, demonstrations, etc. introduced during workshops and field days. Beneficiaries will be encouraged to share what tools and resources they have or discover with each other. The “Tool Kits” will be used by beneficiaries to help prepare for their own soil health educational and technical assistance activities with their clients. Beneficiaries will be strongly encouraged to participate with organizations such as the New York Soil Health Work Group, Western New York Soil Health Alliance or other local/regional organizations promoting soil health to expand their knowledge and resource base. We will provide contact information and meeting dates for these organizations. In addition, we will encourage beneficiaries to consider forming farmer soil health discussion groups, especially in areas without existing organizations. December 2019.
7. 20 Beneficiaries will utilize activity stipends of up to \$300 each on a reimbursement basis to support and/or enhance their local soil health related educational events to include presentations, workshops, field days, tours, demonstrations and on-farm technical assistance. Stipends may be used for, but not necessarily limited to the following: speaker expenses; demonstration materials; transportation for tours; meeting room expenses; portable rest rooms; field analyses/assessments; printing costs for hand-outs/resources, agendas, etc.; signage materials; and digging of soil pits. Beneficiaries will be required to complete a request form prior to their event outlining the activity, expected attendance, what the stipend will be used for with estimated cost. For reimbursement beneficiaries will submit a completion form itemizing expenses incurred with receipts provided, final attendance, a copy of the activity’s agenda, and photographs. February 2020.

#### VERIFICATION

8. The 20 service provider beneficiaries will complete a quarterly progress report template to assess what they have learned, experiences gained, and updates their training needs; and to track and report on their educational and technical assistance activities including: type of event or assistance, number of farmers/service providers attending, types of farms, acres farmed, and if the farmer conducts a soil health assessment, develops a soil health plan, and/or implements a soil health practice. February 2021
9. The 20 service provider beneficiaries complete a program exit survey to assess the impacts of the project on their work with farmers regarding soil health. February 2021