



Photo by Oklahoma Conservation Commission

AMERICAN FARMLAND TRUST SOIL HEALTH CASE STUDY SERIES

PROJECT DESCRIPTION

Soil health management practices like no-till farming, cover crops, and nutrient management, can provide a wide range of environmental and climate benefits, while also improving farmers' bottom line. However, until recently, very little has been done to quantify these benefits. [American Farmland Trust's Soil Health Economic Case Studies](#) profile the real-world experience of row crop farmers or almond growers who have adopted soil health management practices with an in-depth partial budget analysis of producers' experienced costs, benefits, and return-on-investment of implementing these practices. AFT's Excel-based row crop and almond Retrospective Soil Health Economic Calculator (R-SHEC) Tools and associated questionnaires are used to gather data and conduct the analysis.

OBJECTIVES

- Conduct partial budget analysis of already adopted soil health practices and quantify their water quality and climate change mitigation benefits using USDA's Nutrient Tracking Tool and COMET-Farm or COMET-Planner Tools.
- Disperse the case studies and related tools widely to on-the-ground partners to educate other farmers and encourage further adoption of these practices.

PATHWAYS FOR SCALING



Educate farmers about federal and state resources for implementing soil health management practices, and encourage peer-to-peer learning between farmers to highlighting examples of successful adoption.



Increase the capacity of programs like [EQIP](#) and [CSP](#) to enroll more farmers, supporting broader scale implementation of climate-smart practices like no-till farming, cover cropping, and nutrient management.

LOCATION

California, Idaho, Illinois, New York, Ohio, Oklahoma, Pennsylvania

FUNDING AMOUNT AND SOURCES

Originally funded by the USDA Conservation Innovation Grant program with continued support through a NRCS Cooperative Agreement. Additional support from state conservation & agriculture agencies.

PROGRAM PARTNERS

USDA Natural Resources Conservation Service, state conservation & agriculture agencies, & university economists.

KEY SUCCESSES TO DATE



Completed 17 case studies in 7 states, providing real world evidence that implementation of soil health management practices leads to improved yields, increased income, and benefits for water quality and climate.



Improved methodology to estimate the economic and environmental costs and benefits of adopting soil health management practices.

For more information about this and other innovative and scalable projects implementing Natural Climate Solutions in the U.S., please visit www.usnature4climate.org/building-ambition/.