



SOIL HEALTH INITIATIVE

The Washington State Soil Health Initiative (SHI) provides a win-win-win opportunity for farmers, the environment, and the people of Washington.

- ▶ Maintaining and improving soil health is key to prevent soil depletion and ensure the long-term viability of our agricultural economy, food security, and natural resources.
- ▶ The SHI will fund new soil health research, extension, and demonstration activities that will further evaluate and deliver best management practices for our state's diverse agricultural systems.
- ▶ A network of Long-Term Agroecological Research and Extension sites will be established across the state that will translate best available science on soil health into incentivized, on-the-ground solutions for agricultural producers.

Washington State University, the Washington State Department of Agriculture, and the Washington State Conservation Commission submitted decision packages that support the SHI.



Washington State Soil Health Initiative Decision Packages:

What Does Each Partner Request Fund?

Washington State University (WSU)

- ▶ Creates a soil health network of Long-Term Agroecological Research and Extension (LTARE) sites statewide.
- ▶ Establishes a baseline assessment of statewide soil health and a roadmap to direct future research and education.
- ▶ Supports improved tools to monitor soil health across the diverse agricultural systems in Washington.
- ▶ Builds better understanding of management practices that improve soil health.

Washington State Department of Agriculture (WSDA)

- ▶ Funds a new Soil Health Scientist focused on coordinating soil health research funded under this package as well as under the USDA Specialty Crop Block Grant administered by WSDA. The majority of this work will be conducted on partnering private farms near the planned WSU LTARE network sites. Research on soil health may occur at other research sites, such as WSU's Irrigated Agriculture Research and Extension Center in Prosser.
- ▶ Supports partnered work to complete the state of the soils assessment across the state in years 1-2 of the initiative.
- ▶ Compiles existing information and data gaps associated with the ancillary environmental benefits tied to improved soil health (i.e. positive changes in water quality).

Washington State Conservation Commission (SCC)

(Decision package title: Agricultural Conservation Science Program)

- ▶ Creates a statewide soil health roadmap that establishes metrics and goals and guides further public and private-sector investment.
- ▶ Builds staffing capacity to fill key gaps in research, extension, and implementation/monitoring for the network.
- ▶ Develops outreach materials on the importance of soil health to society and agriculture, including case studies on farmer practices, experiences, and outcomes of improving soil health.

Breakdown of Funding Requested to Establish the Soil Health Initiative

	WSU	WSDA	SCC*
Continuing Funds (Annual)			
Personnel	\$708,750	\$125,000	\$70,200
Operating	\$300,000	\$250,000	\$273,800
Total Annual Continuing Funds Requested	\$1,008,750	\$375,000	\$344,000
One-time Funds			*SCC request not included in the Governor's 19-21 budget proposal
Soil Health Baseline and Road-mapping Process	\$250,000		
Equipment / Instrumentation	\$500,000		
Total One-Time Funds Requested	\$750,000		

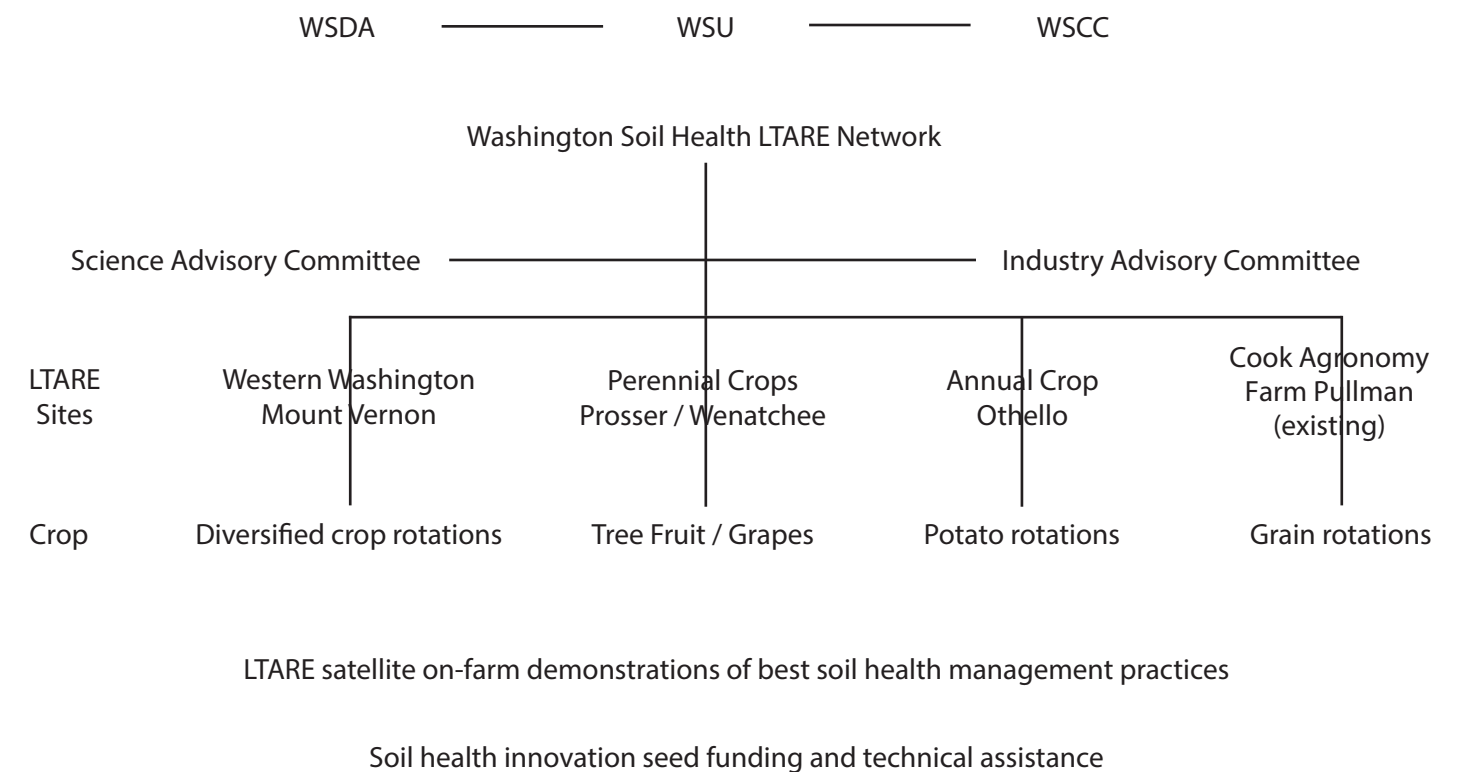
Long-Term Agroecological Research and Extension Sites

Building a Coordinated and Comprehensive Structure

The SHI will establish a soil health network of long-term agroecological research and extension (LTARE) sites across the state. This will add technical capacity across the cooperating agencies to focus on understanding, evaluating, and incentivizing soil health practices across diverse crop production zones.

Communication efforts will be tied closely to the LTAREs to ensure tight coordination between research, translation, education, and demonstration throughout the state.

Conceptual Schematic of the Washington Soil Health LTARE Network



New scientists: Soil / Water Interactions (.5 FTE), Ag Systems Modeler, Soil Microbiome Analysis, WSDA Soil Health Lead

New Technical Staffing: LTARE Network Manager, LTARE Data Manager, Ag Research Techs (3 FTEs), seasonal hourly temporary staffing: soils baseline report and soil health roadmap process

Agronomic Variables: Yield, nutrient supply, soil tilth, disease suppression, increased microbial activity, increased profit

Environmental Quality Variables: Carbon sequestration, reduced sediment and nutrient export to water, reduced greenhouse gases and atmospheric pollutants

Products and Outputs: State of the state's soils report, Soil Health Investment Roadmap, research publications, outreach materials, soil health diagnostic tools, technical assistance for implementing best management practices

Location of Proposed LTARE Network Sites

Proposed LTARE network sites will be located strategically across the diverse crop production zones in Washington and in relation to the existing Cook Agronomy Farm LTAR. Research on soil health may occur at other research sites.



Research on soil health may occur at these and other research sites.

Contacts:

WSU

Colleen Kerr, J.D. (Primary Contact)
Vice President, Office of External Affairs
and Government Relations
colleen.kerr@wsu.edu
509-335-5756

WSU

Chad Kruger (Technical Contact)
Director, Center for Sustaining
Agriculture & Natural Resources
cekruger@wsu.edu
509-335-4605

WSDA

Kelly McLain
Policy Advisor to the Director
kmcclain@agr.wa.gov
360-359-8091 (cell)
360-902-1945 (office)

SCC

Alison Halpern
Policy Assistant
ahalpern@scc.wa.gov
360-280-5556