



De-Risking Adoption of Soil Carbon Practices

Recommendations for the upcoming Farm Bill

TITLE II: CONSERVATION

Agricultural soils remain an untapped opportunity to mitigate climate change and bolster the resilience of agricultural operations.

Farmers and ranchers lack critical information about the costs and benefits of soil carbon storage, so they often hesitate to adopt practices that can increase yields, improve resilience, and provide new revenue streams. By de-risking innovative agricultural practices that store carbon, real-world demonstration trials can build farmer and rancher confidence, demonstrate regionally relevant practices for soil carbon storage, facilitate peer-to-peer producer learning networks, and elevate the work of early adopters.

SOIL CARBON DEMONSTRATION CHALLENGES

- The costs and benefits of soil carbon practices have not been adequately conveyed to farmers and ranchers.
- Risks, both real and perceived, hinder soil carbon practice implementation.
- Producers often lack a knowledge-sharing community around soil carbon.

THE FARM BILL OPPORTUNITY

- Develop a network of soil carbon demonstration trials to help farmers and ranchers confidently adopt practices.
- Test soil carbon practices across the diversity of agricultural lands and operations.
- Highlight the innovative work of early adopters.

Establish a network of real-world demonstration trials to de-risk and facilitate adoption of practices that store carbon across the diversity of US agriculture.

Demonstration projects provide the on-the-ground proof farmers and ranchers need to comfortably implement new agricultural practices and maintain them long-term. These trials showcase which practices work best for different regions, empower farmers to make informed decisions, and spur early

adoption of innovative agricultural practices.

Congress should develop existing USDA on-farm demonstration trials to fill knowledge gaps, recognize early adopters, and enable peer-to-peer learning of regional best practices.

The CIG On-Farm Trials

The Conservation Innovation Grants (CIG) On-Farm Trials were authorized in the 2018 Farm Bill. Housed under the Environmental Quality

Incentives Program, On-Farm Trials seek to expand innovative conservation practices. Specifically, they provide funding to partners who offer technical

and financial assistance for producers who implement practices that are currently narrowly adopted. The 2018 Farm Bill also created the Soil Health Demonstration Trials (SHD) as part of the On-Farm Trials program to focus exclusively on conservation practices and systems that enhance soil health and increase soil carbon, but soil carbon has been an infrequent area of concentration.

- **Increase funding for CIG On-Farm Trials** gradually over five years to \$100 million per year to develop an ambitious network of soil carbon demonstration trials.
- **Set aside 60% of CIG On-Farm Trials funding** for the SHD component.
- **Set aside 50% of SHD funding** for projects focused specifically on increasing soil carbon storage and developing soil carbon monitoring protocols.

- **Extend grant duration** from three years to a minimum of five years for SHD projects.
- **Increase grant set-aside for historically underserved producers** from 10% to 40% over the next five years.
- **Require participants in SHD trials to follow USDA’s best practices** for soil carbon data collection, including using standard soil sampling protocols.
- **Direct USDA to collect and share soil carbon data from demonstration trials** with the Long-Term Agroecosystem Research Network and other USDA programs to strengthen analysis of soil carbon storage and bolster predictive modeling capabilities.

SARE

The Sustainable Agriculture Research and Education (SARE) program offers farmer-driven grassroots grants and education programs. SARE has funded some on-farm soil carbon demonstration trials but requires further investments to expand its geographic reach and impact.

- **Increase SARE funding authorization by \$12 million per year** to expand on-farm soil carbon demonstration trials.

- **Require participants in SARE-funded trials to follow USDA’s best practices** for soil carbon data collection, including using standard soil sampling protocols.
- **Share standardized, high-quality soil carbon data** from SARE-funded trials with other USDA programs to bolster analysis and predictive modeling capabilities.

PROGRAM	2018 FARM BILL AUTHORIZATION	FY22 MANDATORY FUNDING	FY22 DISCRETIONARY FUNDING	RECOMMENDED ANNUAL FUNDING					
				FY24	FY25	FY26	FY27	FY28	RECOMMENDED AUTHORIZATION
CIG On-Farm Trials	\$25,000,000	\$25,000,000	N/A	\$50M	\$60M	\$70M	\$85M	\$100M	
SARE	\$60,000,000	N/A	\$45,000,000						\$72,000,000

For more information on Carbon180’s Farm Bill platform, please visit our [web page](#) and let us know what you think at policy@carbon180.org.

