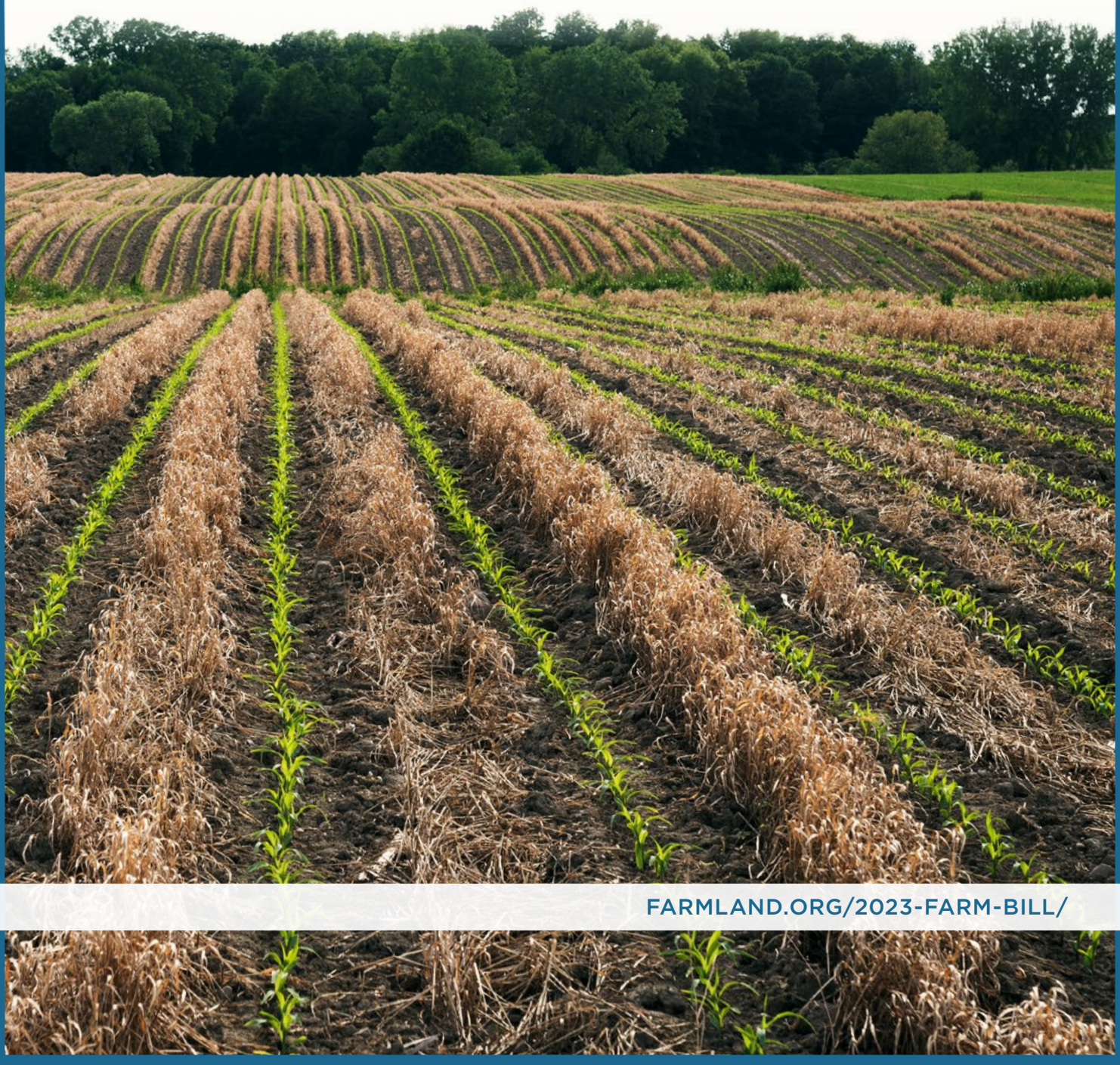
American Farmland Trust

# Creating a Federal Match for State and Tribal Soil Health Programs in the Next Farm Bill



FARMLAND.ORG/2023-FARM-BILL/

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## ABOUT AMERICAN FARMLAND TRUST

Founded in 1980, American Farmland Trust (AFT) is the only national organization that takes a holistic approach to agriculture, focusing on the land itself, the agricultural practices used on that land, and the farmers and ranchers who do the work. AFT has extensive experience with Farm Bill advocacy and played a leading role in championing many of today's conservation programs. AFT also works in close partnership with the Natural Resources Conservation Service (NRCS) to help farmers adopt conservation practices across the nation.

## ABOUT AFT'S FARM BILL PROCESS

To support the development of AFT's 2023 Farm Bill agenda, AFT held 16 regional workshops across the U.S. to hear from farmers and ranchers, service providers, farm and environmental groups, land trusts, state departments of agriculture, researchers, and more about opportunities for the next Farm Bill. In the 8 conservation and climate-focused workshops, attendees discussed their experiences with extreme weather and their challenges overcoming barriers to conservation practice adoption. These conversations also explored what could be done in the next Farm Bill to support increased, long-term adoption of conservation practices that will build resilience to, and address, climate change while also improving soil health, water quality, and profitability.

Using these conversations as a foundation, AFT created a series of whitepapers to make recommendations for the next Farm Bill. To see the rest of the whitepapers, and learn more about AFT's Farm Bill platform, please visit us at www.farmland.org/2023-farm-bill.

Thank you to the Walton Family Foundation for supporting this work.

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COVER PHOTO: Kevin Keenan

Updated August 2023

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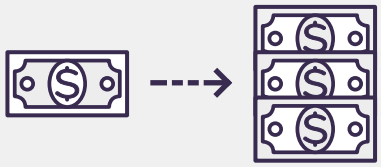
Photo by Kevin Keenan

# Executive Summary

Climate change is fueling extreme and unpredictable weather, including droughts, floods, intense heatwaves, and shifting seasons, costing farmers and ranchers time and money. A new AFT report found that these events will continue even if greenhouse gas (GHG) emissions are reduced—though they will accelerate if GHG emissions continue at their current rate. **Helping farmers adapt and build resilience to this new normal is critical, and soil health can play an important role.**

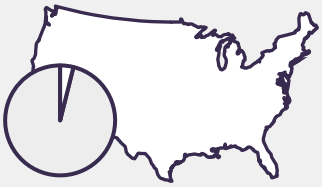
Improved soil health is a win-win for farmers and for their communities. Farmers benefit through greater resilience to drought, heat, and flooding—reducing yield and revenue losses and leading to more viable operations. Communities benefit through improved food security and water quality as well as climate change mitigation through carbon sequestration. Healthy soils even have the potential to reduce projected future crop insurance program costs.



ADOPTING SOIL HEALTH PRACTICES CAN INCREASE YIELD AND REDUCE INPUT COSTS, LEADING TO A RETURN ON INVESTMENT OF

**$3 for every $1 spent**

But national adoption of soil health practices is currently very limited. For example, as of 2017, cover crops were only planted on 6% of eligible acres.[a] USDA's Natural Resources Conservation Service (NRCS) programs are the main form of support for adoption of soil health practices. However, these popular programs are highly oversubscribed, address a wide range of resource concerns beyond soil health,[b] do not meet the needs of all producers, and are unable to promote more innovative approaches. For instance, they do not support mobile equipment purchases—a main barrier to soil health practice adoption. *There is an urgent need to supplement NRCS's important work to increase soil health practice adoption.*



COVER CROPS HAVE ONLY BEEN

**adopted on 6%**

OF US HARVESTED ANNUAL CROPLAND

**Since the last Farm Bill, states have been leading the way, creating new policies and programs that help producers advance soil health.** These programs have many elements in common:

- They build on and supplement NRCS support, allowing for innovations not possible through NRCS alone,
- They are locally-led and developed to meet the unique needs of producers in the state,
- They are popular among producers, and most are oversubscribed, and
- They provide a testing ground for ideas that can be adopted at the federal level if they are successful and popular.

These locally-designed programs complement NRCS by investing in additional supplementary technical and financial assistance, demonstration projects, peer to peer learning, equipment purchase, and more to improve

a This number is derived by dividing cover crop acres (2017 census of agriculture table 47) by total cropland minus land in orchards and land in forage (2017 census of agriculture table 1).

b A 2020 analysis found that only 17–27% of EQIP funding went to soil health practices between 2007 and 2018.

water quality, address climate change, support farm viability, or meet other key locally-defined goals. State programs build off NRCS support in the following critical ways:

- **Purchasing Equipment:** While NRCS programs do not support purchase of the "mobile equipment" producers need to adopt soil health practices, state soil health programs— like in Pennsylvania, California, Minnesota, Vermont, and New York—fill this critical gap.
- **Flexibility:** States can offer more options to help achieve practice adoption. For instance, New York's soil health program takes advantage of NRCS protocols to provide greater flexibility to producers on cover crop planting dates and termination standards. New Mexico's soil health program uses NRCS conservation planning as a basis but offers flexibility in implementation to meet the needs of the state's producers.
- **Equity:** California's soil health program pays for 100% of the cost of soil health practice adoption for historically underserved producers, and New Mexico's program funds not only conservation districts, but also acequias, land grants, Pueblos, Nations, and Tribes to work with producers.
- **Streamlined Process:** Whereas enrolling in EQIP may require multiple trips to the NRCS office, the Maryland cover crops program only requires one office visit. Furthermore, there can be significant backlogs in receiving NRCS support, leading to long wait times. In Virginia, producers pointed out that they hear back from the state within a month—and receive 95% cost share, as opposed to 50% from NRCS.

**Creating a program in the next Farm Bill to provide matching grants to state and Tribal soil health programs (henceforth called the "Match Program") would be a bold yet achievable way to provide the support farmers need to increase adoption of soil health practices.** This Match Program would also:

- **Leverage Federal Funding for Conservation:** In order to be eligible, the state or Tribe would dedicate their own funding as match, resulting in greater support for producers and increased soil health, and co-benefits, using fewer federal dollars.
- **Help States and Tribes Create New Programs:** While many are interested in soil health, finding funding for new programs can be difficult. The Match Program would provide an incentive for states and Tribes to launch their own programs that will have a greater impact than if it were funded by their own dollars alone.
- **Recognize and Build Upon Grassroots Leadership and Innovation:** In recent years, many states have created innovative soil health programs that respond directly to local needs and interests.

**This program concept already enjoys broad and bipartisan support.** Members of Congress from both sides of the aisle have supported the idea,[c] and there is also broad support amongst stakeholders for the policy. AFT organized a memo of support in March of 2023 which was signed by more than 120 organizations from the farm, food, public health, environment, research, labor, and environmental justice sectors. This included signatures from state agencies in Pennsylvania, Illinois, Washington, and Vermont; 9 conservation district associations; and two state Farm Bureaus. The Food and Agriculture Climate Alliance[d] also included this policy in their 2023 Farm Bill priorities.

In order to be successful, this program should attract and support a wide range of quality applicants. AFT talked with numerous farm and conservation groups, as well as staff at state departments of agriculture, to

c Senator Heinrich (D-NM) and Representative Pingree (D-ME) included a proposal in the Agriculture Resilience Act, and former Representative Davis (R-Ill), included a proposal in the NO EMITs act.

d FACA brings together farm, environmental, conservation, and agribusiness organizations, including American Farm Bureau Federation, National Farmers Union, the National Association of State Departments of Agriculture, and the Nature Conservancy.

hear their priorities and concerns related to creating this program. Thanks to this input, AFT was able to identify three principles to guide the creation of a successful Match Program:

1. **Flexible Design:** Applicants will have varying resources, programs, climates, and agricultural economies from which to build soil health programs. A flexibly designed Match Program would provide support both for soil health planning with stakeholders (for applicants that want it),[e] and for implementation of new and existing soil health programs. Also, allowing in-kind work to count towards match alongside cash match would enable a wider variety of applicants.
2. **Streamlined Implementation:** Applicants with limited available administrative time need to be able to seek funding without overly burdensome or time-consuming processes.
3. **Durable Funding:** The Match Program should provide longer-term implementation grants to support state and Tribal programs and give farmers and ranchers the longer-term, yet time-bound, support they need.

**AFT recommends funding the Match Program at $100 million annually.** Currently roughly 10 states fund soil health-specific programs, but many more have water quality programs supporting soil health practice adoption that could be adapted to this purpose. Generally, soil health programs start with modest funding levels, and many states have struggled to grow appropriations for these programs over time even when demand outpaces funding available. For example, Illinois followed in Iowa's footsteps in 2019 by dedicating $330,000 to create a program offering a $5/acre crop insurance premium discount for planting cover crops. By year three program funding had tripled, but the first come-first-served funding was still exhausted within hours, leaving 20,000 acres of applications unfulfilled. Minnesota started a soil health pilot program with nearly $500,000 in appropriations in fiscal year 2023 to invest in equipment purchases—and within a week they had double the requests for support than funding available.

Most states begin with modest appropriations for their soil health programs—generally less than $2 million. While these programs may grow over time, many are unable to match the pace of funding requests because of state budget limitations. **At $100 million per year, the Match Program would be able to double funding for many programs at a modest cost while still supporting a wide variety and number of applicants seeking match**.[f] If there was a need to control program costs, funding allocations could begin lower and ramp up annually to allow time for more applicants to develop plans and/or enact programs to match federal dollars. For example, the Agriculture Resilience Act (S.1016/H.R.1840) proposes initially funding the Match Program at $60 million before increasing to $100 million annually by the end of the Farm Bill.[g]

In conclusion, supporting producers in adopting practices and systems that build soil health is critical not only for the sustainability and resilience of farms and ranches, but also to improve water and air quality, water quantity, and to best leverage the power of working lands to fight climate change. **Congress now has an opportunity to build on grassroots momentum by creating a program in the next Farm Bill to provide matching funding for state and Tribal soil health programs.** This would bolster existing oversubscribed programs, spur creation of new locally-adapted programs, and incentivize conservation innovation. In this way, Congress can best leverage limited federal Farm Bill funding to rebuild soil health across the country for our sustainability, food security, and economic wellbeing.

e There are only a few examples of states with soil health plans, and much of the state-level planning that has occurred has been led by land grant universities or stakeholders rather than state agencies.

f AFT supports requiring lower match levels for Tribes than for states.

g The No EMITs Act proposes dedicating $100 million per year at the outset.

# Introduction

In 1937, President Franklin Delano Roosevelt famously stated, "the nation that destroys its soil destroys itself." And yet, we are coming to realize that for nearly a century, we have too often viewed soil as a medium to be tilled and amended to maximize crop and livestock productivity rather than the very thing that sustains life. The result has been decades of erosion, leaving much of the nation with dry, compacted soil that is low in organic matter and unable to hold water. This, in turn, limits productivity, reduces farm profitability, impacts water and air quality, and leaves farms and ranches less resilient to increasing droughts and floods.

Now, as the Green Revolution of agricultural industrialization gives way to an era of deeper understanding of soil biology, scientists and farmers alike are recognizing how living organisms in the soil work together to support plant, animal, and human health; farm viability; sustainable production; resilience; water quality; and climate mitigation. **Helping farmers and ranchers produce food and crops in ways that improve and support soil health is critical to the future of farming and food security.**

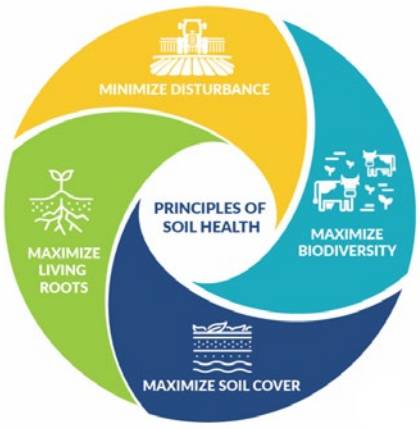
## What is Soil Health?

The importance of caring for the soil is not a new concept. Some farmers and ranchers have been raising crops and livestock in ways that improve soil health for decades—while many Indigenous communities have been doing the same for millennia. The United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) describes "soil health" as the "continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans, [giving us] clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes." Healthy soil delivers these benefits by:

- Providing the nutrients necessary to sustain plant and animal life,
- Increasing water holding capacity for greater resilience to both droughts and floods,[h]
- Filtering and buffering potential pollutants, including industrial and municipal byproducts and atmospheric deposits,
- Recycling nutrients, and
- Providing physical stability and support for plants.

According to USDA, there are four key principles farmers and ranchers should follow to improve soil function and health: (1) maximize the presence of living roots (e.g., planting perennials, planting cover crops between cash crops), (2) minimize disturbance (e.g., reducing tillage), (3) maximize soil cover (e.g., cover cropping, mulching), and (4) maximize biodiversity (e.g., conservation crop rotation, cover cropping, managed grazing, intercropping, double cropping).[1] As seen in Figure 1, it is the adherence to *all* of these principles together, applied through a combination of practices, that makes up a holistic farming system that supports and improves soil health.

**Figure 1: Soil Health Principles**

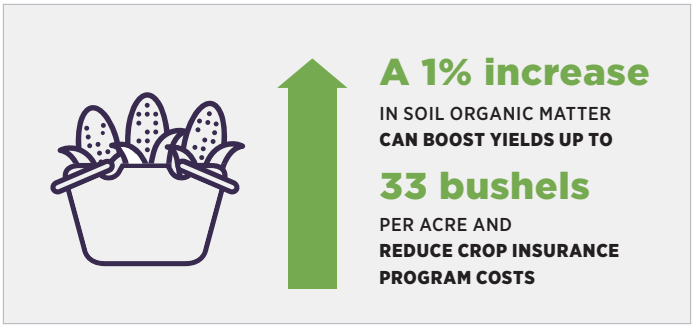



Source: USDA-NRCS

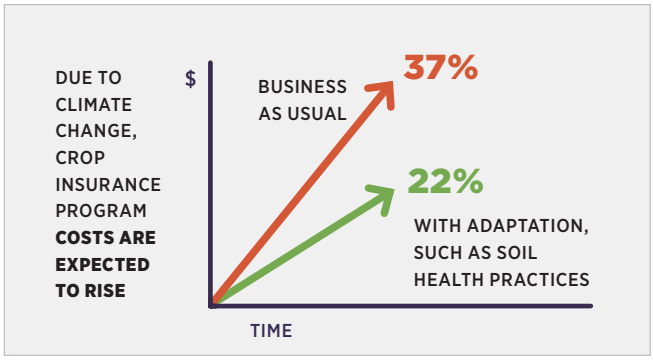
h Improved water holding capacity also helps to control where rain, snowmelt, and irrigation water goes.

## The Benefits of Soil Health

**Recent research shows that improving soil health benefits farmers and ranchers by increasing profitability, reducing inputs, and generating yield stability over time.** This is because healthy soils are more resilient to pest and disease pressures, erosion, and extreme weather, like increasingly common droughts and floods. AFT's 2019 soil health case studies show how farmers can financially benefit from the adoption of soil health practices: eight out of the ten profiled row crop farmers attributed an increase in yield to their soil health practices. These increases were valued from $14 to $151 per acre. In addition, **all ten of the row crop farmers saw an average 3:1 positive return on investment, ranging from 7% to 343%.**[2] Similarly, a 2021 study performed by the Soil Health Institute and Cargill, which interviewed 100 farmers in nine states,[i] found that long-term adoption of just two soil health practices (cover crops and no-till) had significant financial benefits: soy farmers saw increased net income of $45/acre and corn farmers saw increased net income of $52/acre.[3]




Improved soil health can also reduce the costs of the crop insurance program. Using 17 years of corn yield data from 754 U.S. counties, *Kane et. al* (2021) found that counties with higher soil organic matter were associated with greater yields and lower rates of crop insurance payouts during drought years. Under severe drought, **a 1% increase in soil organic matter translated into a boost in yield of 33 bushels per acre as well as a reduction (36% reduction in the mean proportion of liabilities paid) in crop insurance payouts under drought conditions**.[4] In 2019, unusually wet weather prevented planting[j] on nearly 20 million acres, resulting in over $4 billion in prevented planting claims. However, a recent study of 2019 prevent plant data across a 6-state region found that **consistent use of cover crops and conservation tillage resulted in a 24% reduction in the odds ratio of prevent-plant loss.**[5] This is also the case when projecting into the future. A 2019 USDA Economic Research Service (ERS) predicted that adopting climate adaptation practices, such as those that improve soil health, could **reduce expected cost increases of the crop insurance program by 7–15% this century.**[6]




**In addition to the benefits to individual farm and ranch operations, improving soil health also provides environmental benefits for society at large**. These include climate mitigation—healthy soils may store more carbon[7]—and improved water quality due to greater infiltration and soil water holding capacity leading to reduced runoff from fields. For example, every 1% increase in soil organic matter results in as much as 25,000 gallons of available soil water per acre,[8]

i Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, Ohio, South Dakota, Tennessee.

j When farmers cannot plant a crop—generally due to excessively wet field conditions—they can make a prevented planting insurance claim.

reducing the amount of water carrying topsoil, sediment, inputs, and other debris from fields into nearby waterways. This can also reduce flood damage in surrounding communities.

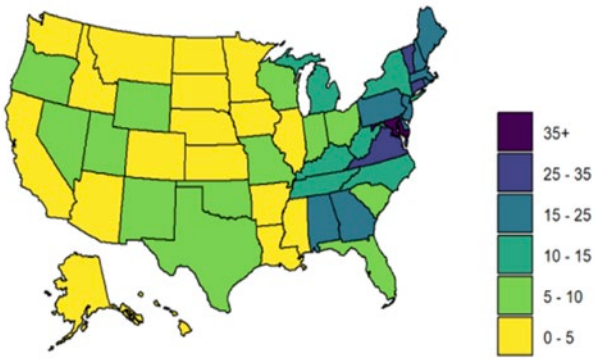
However, it is important to note that these returns and wider benefits accumulate gradually over time—most farmers experience a 5–10 year transition period before new practices are comfortably incorporated into the farm's management system and benefits are fully realized. **This underlines the importance of financial and technical assistance to both overcome adoption barriers and to minimize risk during the transition period.**

## Soil Health Practice Adoption Is Increasing, but Not Yet Widespread

Due to limited data, it is challenging to get an accurate picture of the current state of soil health practice and system adoption.[k] But, the limited information available makes it clear that while adoption of soil health practices has increased in recent years, they are still not widespread.

According to the 2017 census, cover crop acreage grew by 50% between 2012 and 2017, increasing from 10.3 million acres to 15.4 million.[9] While this progress deserves to be celebrated, it still amounts to only 6% of eligible U.S. acres[m] (Figure 2). By contrast, conservation tillage has been successfully adopted on nearly two-thirds of U.S. cropland due to decades of concerted efforts by researchers, service providers, and industry working to support farmers in decreasing soil disturbance, which also provides an immediate benefit to the farm's bottom line.[10, 11]

**Figure 2: Percent of Available Cropland Planted to Cover Crops in 2017[l]**




Source: Soil Health Institute

While progress has been made, there is still room for improvement to help farmers and ranchers rebuild and restore their most critical resource–their soil. Unfortunately, producers face many barriers to adopting soil health practices, including:

1. Cost, in time and money,
2. Risk of revenue loss (both perceived and real), especially during the 5–10 year transition period,
3. Insecure land tenure disincentivizing long-term investment,
4. Lack of access to the right equipment, and
5. Insufficient knowledge or support to make operational changes.[12]

k We need better, and more, data to inform our understanding of soil health on farms and ranches. Every five years the National Agriculture Statistics Service surveys farmers to self-report information, but the survey only asks about a few conservation practices (which are not applicable for all regions or operations). Spatial data taken by satellites only captures those practices that can be seen. This limited data also does not reveal whether or not practices are being adopted together in holistic systems—a suggested best practice for improving soil health. More data is also needed to understand the soil quality and other soil health metrics across the country, and the potential for improvement in different climates and for different operations.

l Map explanation: cropland planted to cover crops based on 2017 census reporting with "available cropland" equaling total cropland reported minus pastured cropland, hayland, haylage acres, and CRP/WRP acres. Winter wheat was excluded on the presumption that winter annual cover crops would not be used where winter wheat was grown, which may have undercounted percentages where summer cover follows winter wheat.

m This number is derived by dividing cover crop acres (2017 census of agriculture table 47) by total cropland minus land in orchards and land in forage (2017 census of agriculture table 1).

# Policies and Programs That Support Soil Health

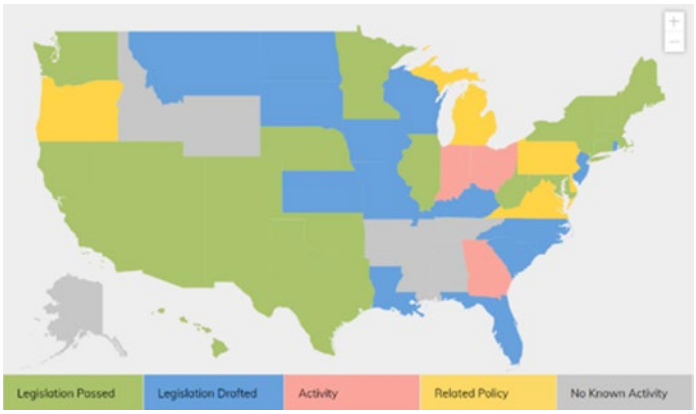
**Because soil health not only benefits individual farmers and ranchers, but also environmental and human health,[13] federal, state, and local policymakers have begun ramping up investments into policies and programs that help producers overcome these barriers.** While USDA has only had an official soil health division since 2014, it has worked to support adoption of soil health practices for decades through Farm Bill conservation programs, including the Environmental Quality Incentives Program (EQIP), the Conservation Stewardship Program (CSP), the Regional Conservation Partnership Program (RCPP), and the Conservation Reserve Program (CRP). But these programs, most of which are oversubscribed, fund practices addressing a wide range of important resource concerns. As a result, soil health practices may receive less support and attention than is needed or requested by producers. According to a 2020 paper by Basche *et. al.,* between 2009 and 2018, EQIP investments in practices with the greatest potential to improve soil health outcomes (e.g., cover cropping, conservation crop rotation, prescribed grazing, rangeland planting) fluctuated between 17–27% of total spending. They also found that the largest percentage of EQIP dollars (51%) were dedicated to the facility category (e.g., sprinklers, waste storage, fencing, irrigation), meaning half of funding awards were not directly applicable to any soil health outcomes.[14, n] While such structural investments are often critical to many farms and ranches, this analysis emphasizes a greater need for supporting soil health practice adoption.

FROM 2009 TO 2018, PRACTICES WITH THE GREATEST POTENTIAL TO IMPROVE SOIL HEALTH ONLY RECEIVED

**17% to 27%**

OF **EQIP FUNDING**

## Figure 3: States with Soil Health Legislation




Source: Nerds for Earth. Accessed Feb 2023

Historically, investments in soil health practices at the local, state, and federal level have been driven by water quality programs, particularly to reduce nutrient runoff into waterways. But, **as understanding of soil health benefits has grown, states across the nation have begun leading the way, passing legislation and funding programs that help farmers and ranchers improve soil health for its own sake**.

Many of these policy efforts have been led by farmers and ranchers in partnership with NGOs (including AFT), researchers, and technical service providers. According to an online, crowd-sourced legislative tracker, 20 state legislatures—which together represent nearly half of U.S. farm acreage[o]—have passed soil health resolutions or legislation as of February 2022 (Figure 3).[15] Most of these bills establish a legal definition of soil health based on NRCS's definition, many instruct state agencies to provide financial incentives or technical assistance to help farmers and ranchers build soil health, and a few even initiate processes to build a soil health inventory to

n It should be noted that this may be changing—for years, the practice in EQIP that received the most funding was fencing; today, it is cover crops.

o Based on data from the 2017 census. For more information see https://nerdsforearth.com/state-healthy-soils-policy/.

fill data gaps or set soil health standards and goals.[p] But not all of these bills result in financial investment into programs that will reduce practice adoption barriers.

## Examples of Innovative State Approaches to Improving Soil Health

Every state is at a different stage in building its own soil health programs; some have well-funded, established soil health programs, while others are still determining how best to support their producers. For those states providing financial support to producers, sources vary and include general state funding (e.g., Illinois), real estate transfer taxes (e.g., New York), cap-and-trade proceeds (e.g., California), and grants from public and private sources (e.g., Indiana). In some places where state-level policies do not yet exist, farmer-led organizations, NGOs, land grant universities, and/or other agricultural colleges have soil health initiatives underway to conduct research, encourage farmer-to-farmer learning and support, and even provide financial and technical assistance to producers. To better understand how states are approaching soil health, below are a few examples of those with advanced or unique soil health policies and programs. Additional examples can be found in Appendix A of this document, and in the recording of a webinar hosted by AFT in March of 2023.

One of the main barriers that farmers face to adopting soil health practices is not having the right equipment. Since 2007, **Pennsylvania's** Resource Enhancement and Protection Program (REAP) has allowed farmers to earn state tax credits in exchange for the implementation of conservation Best Management Practices (BMPs), including equipment purchases. Since its inception, more than half of REAP tax credits have been issued for purchases of no-till and cover crop equipment. Since 2019, approximately 55% of the state's $13 million allocation has been awarded for purchases of conservation equipment. In addition, the program was amended in 2019 to allow farmers to earn a 90% REAP tax credit for planting multi-species cover crops, purchasing a cover crop roller/crimper, or to conduct soil health testing. Demand for the program has outpaced the $13 million annual funding allocation as the Commission receives significantly more applications than it can fund each year.[16, 17]

**New York** also has a well-established and growing program that supports soil health. In 2015, the state began funding the Climate Resilient Farming Grants (CRF) program. This program provides funding to the state's 58 county Soil and Water Conservation Districts (SWCDs) to help farmers adopt soil health practices,[q] including providing a per-acre reimbursement for expenses like seed purchase, or directly covering a portion of costs for soil health equipment like no-till drills or interseeders. Over the years, funding for this program has increased: since 2015, the New York State Department of Agriculture and Markets has been able to award $20 million to nearly 300 farms, supporting numerous soil health practices, including planting of over 44,000 acres of cover crops.[18, 19] But while funding for this program has increased, it has not kept pace with demand. In its most recent funding round, 69 applications were submitted requesting a total of $13 million in funding–but unfortunately the program only had $8 million to award.[r]

**Illinois** has taken an innovative approach to supporting farmers in adopting soil health practices with its Fall Covers for Spring Savings program (FCSS). FCSS is an example of a water quality-motivated program that supports adoption of soil health practices. This successful, user-friendly, and cost-effective program follows a model first piloted in **Iowa,** providing a $5 rebate per acre on crop insurance premiums for farmers

p For example, in 2021 the New York legislature passed the Soil Health and Climate Resiliency Act (S4722 A. Hinchey/A5386 A. Lupardo), an effort led by AFT and signed into law by Governor Hochul in 2021. This legislation established a soil health initiative and instructed Cornell University, a national soil health leader, to develop a soil health inventory and goals for regions across the state.

q This program also provides cost share to install cover and flare systems to reduce methane emissions from manure pits, and to improve water management and resilience in the face of flooding and drought. Cover and flare often receives the most funding.

r New York also funds standalone water quality and technical assistance programs in support of SWCDs, and a soil health initiative at Cornell University, all of which help farmers adopt soil health practices.

who plant cover crops, while requiring almost no state agency overhead in its implementation. The program was created in 2019 with support from a coalition led by AFT, which sought a means to reward farmers planting cover crops and address compatibility concerns between soil health practices and crop insurance, all within the context of a limited state budget.[20] Funding for this annual program began in 2019 at a modest $330,000, covering 50,000 acres. Due to its popularity, funding was doubled in 2021 to $660,000 to reach 100,000 acres. In 2022, Illinois added an additional 60,000 acres to the program to keep pace with growing demand, but still had over 20,000 acres unfunded.[21] This limited funding is in high demand—each year, the funding has been obligated *within hours of enrollment opening*. Programs that provide a $5/acre crop insurance discounts for cover crops are now available in **Indiana** (in one watershed) and in **Wisconsin.**[s]

The crop insurance discount model provides a perfect example of an innovative, state-tested idea that was so successful and popular, that it was brought to the federal level. In 2020, USDA implemented a national version of this program called the Pandemic Cover Crop Program (PCCP). In 2021 and 2022, the PCCP supported 10–12 million acres of cover crops at a total low cost of $50–59.4 million each year.[22] Even in states with their own crop insurance discount programs, enrollment in the PCCP far outpaced available state funding. **Iowa and Illinois saw nearly 5 times as many acres submitted to the federal program as their state programs could support, and in Indiana it was 129 times as many.**[23]

**Minnesota** state agencies and lawmakers have also been hard at work. With the help of private funding, the Minnesota Board of Water and Soil Resources (BWSR) has undertaken a two-year, multi-stakeholder, soil health action framework planning process. This has allowed them to identify the greatest opportunities for Minnesota state agencies to help producers overcome practice adoption barriers. BWSR also received funding from the state legislature in 2021 to administer a soil health grant program through SWCDs to increase adoption of soil health practices that benefit water quality. Meanwhile, in 2022, the state legislature appropriated nearly $500,000 in funding to the Minnesota Department of Agriculture to create a Soil Health Grant Pilot program. Like many other states, the Department has identified equipment purchase as a roadblock to adoption and the state is targeting the new funding to meet this need. Within a week of opening the request for applications, the department received over $1 million in funding requests for this new program—double what they had to offer. The legislature also directed the Department to identify acreage goals for practice adoption. These parallel processes are being coordinated with a focus on people, broader public and private partnerships, and establishing the infrastructure needed to support longer-term management changes on the farm.

Many other states have created,[t] or have shown interest in creating, soil health policies and programs. Some even have existing program infrastructure, but lack the state funding to implement them. Several years ago, **Maine** included soil health in its climate action plan, and a soil health program was established in statute to be implemented by the Maine Department of Agriculture in consultation with Tribes and other stakeholders. However, while there was a staff person available to administer this program, it was not until May of 2023 that the program received its first state funding allocation. Similarly, in **Oregon**, although there is a new soil health specialist at the Department of Agriculture as well as stakeholder interest in creating a program, the specialist is not a permanent position and there is not yet funding for a coordinated state soil health program.[u] But these are promising first steps that could lead to more programs and efforts that increase adoption of soil health practices in ways that meet the unique needs of producers in these states.

s In Indiana the state agency implements the program but it is entirely funded by a private donor and only available in targeted watersheds.

t See Appendix A for more state soil health program examples.

u Oregon advocates are currently seeking $4 million in state funding for a program modelled off Washington state's soil health program.

# Farm Bill Recommendation: Create a Federal Match for State and Tribal Soil Health Programs in the Next Farm Bill

Building soil health is urgent not only because it provides myriad benefits to producers' businesses, but also because it helps to meet broader goals around food security, rural vitality, clean water and air, and climate change. State level programs and efforts designed to build soil health have many elements in common:

1. They build on and supplement NRCS support,
2. They allow for innovations not possible through NRCS programs alone,
3. They are locally-led and developed to meet the unique needs of producers in the state,
4. They are popular, and most are oversubscribed, and
5. They provide a testing ground for ideas that can be adopted at the federal level if they are successful and popular.

**For these reasons, AFT recommends that Congress create a new program in the next Farm Bill to provide matching funds for state and Tribal soil health programs.** This will not only leverage federal dollars to enable existing state programs to help more producers and increase their impact, it will also incentivize the creation of new locally-tailored programs in states and Tribal nations interested in building soil health efforts of their own.

## Locally-Designed Programs Help Producers Overcome Practice Adoption Barriers

In the winter of 2022, AFT held eight conservation and climate workshops to help inform the development of its Farm Bill recommendations. Farmers who attended the workshops shared that NRCS conservation programs provide vital support for conservation activities. However, they cited gaps in NRCS services and noted that federal programs can, at times, be inflexible to regional needs. State programs, on the other hand, build on NRCS programs to fill these gaps and more flexibly promote innovative approaches that meet the needs of producers in the following ways:

- **Supporting Equipment Purchase:** Access to proper equipment is one of the main barriers producers face, but NRCS programs do not support purchase of the mobile equipment they need. Recognizing this, many state soil health programs—including those in Pennsylvania, California, Vermont, Washington, Minnesota, and New York—fill this critical gap.
- **Flexible Implementation:** In EQIP, practices may require producers to follow specific criteria (e.g., cover crop planting and termination) that may not always be adapted to producer needs or regional climates. But state programs can provide this flexibility—for example, New York's CRF program works within the flexibility afforded by NRCS protocol to empower SWCD and Certified Crop Advisors to make determinations on cover crop planting and termination to increase ease of use for farmers. New Mexico's soil health program also provides this flexibility, using NRCS conservation planning as a foundation from which producers and service providers can determine what works for each unique operation.
- **Streamlined Assistance:** Many AFT Farm Bill policy workshop attendees pointed to issues with burdensome application processes and long wait times when using federal programs. Some remarked that many producers in rural areas prefer to work with, and may even have greater trust in, state programs. Producers using Maryland's programs appreciated that they were refreshingly streamlined, with one producer saying, "lots of the EQIP programs require two or three trips into the office to sign papers. With the Maryland cover crops program it only requires one."

- **Promoting Equity:** Historically marginalized[v] and under-resourced producers may not be able to provide their portion of the cost share required by NRCS programs like EQIP, but California's soil health program pays 100% of the adoption cost for these producers. New Mexico's program funds not only conservation districts, but also acequias, land grants, Pueblos, Nations, and Tribes to work with producers.
- **Providing Longer-Term Support to Transition:** While EQIP only allows producers to receive support for a practice once, Maryland and Vermont producers can receive cover crop cost share every year, enabling continued implementation through the transition period until a practice takes hold and pays for itself.
- **Offering Payment Rates that Work for Producers:** In Virginia, one attendee pointed out that while it can take a year and a half to hear back from NRCS, they hear back from the state within a month—and receive 95% cost share, as opposed to 50% from NRCS.

## Broad National and Bipartisan Support for this Policy in the Next Farm Bill

State-level advocates and those who work for state departments of agriculture—including Michigan, Pennsylvania, Vermont, Oregon, Kentucky, New York, Massachusetts, Illinois, Minnesota, Wisconsin, Washington, Hawaii, Maryland, and Rhode Island—all have shared that a well-designed federal match would help them build more successful and innovative soil health programs. In addition, a March 2023 memo organized by AFT highlighted broad support for this policy: more than 120 organizations from the farm, food, public health, environment, research, labor, and environmental justice sectors signed on. This included signatures from state agencies in Pennsylvania, Illinois, Washington, New Mexico, and Vermont; nine conservation district associations; and two state Farm Bureau chapters (see Appendix B for the full list of endorsers). The Food and Agriculture Climate Alliance[w] also included this policy in their 2023 Farm Bill priorities.

The idea for a federal match for state soil health programs is not new. In fact, legislation on this topic has been introduced from both sides of the aisle. Senator Heinrich (D-NM) and Representative Pingree (D-ME), as well as Representatives Gallagher (R-WI) and Huffman (D-CA) introduced legislation supporting this idea in the Agricultural Resilience Act (S.1016/H.R.1840) and the NO EMITs Act (H.R. 4163), respectively. Each of these bills contains a slightly different approach to supporting state and Tribal soil health efforts. The Agricultural Resilience Act (ARA) proposes providing competitive grants of up to $1 million to develop state and tribal soil health plans, and up to $5 million to implement approved plans. The NO EMITs Act included the same basic framework as that of the ARA, but removed the planning requirement. Instead, it proposed to supply competitive grants of up to $5 million to simply supplement and support soil health programs.

A program administered by the U.S. Fish and Wildlife Service (USFWS) offers another potential model. USFWS provides automatic funding to states that have developed an approved wildlife conservation plan to protect species beyond those that are hunted or fished. This model could be applied to soil health programs; once the state or Tribe developed a soil health plan approved by USDA, the state would become *automatically* eligible for funding to implement that plan.

v The term "historically marginalized producers" is used here to mean those that have been marginalized in society and from government support based on race and ethnicity, namely Black, Indigenous, and other producers of color (BIPOC). AFT uses this term to recognize that, though there are other producers marginalized in the U.S., racism in this country has perpetuated disadvantages for BIPOC producers and landowners in particular because of their race and ethnicity, and that important systemic work and changes are needed to address these inequities.

w FACA brings together farm, environmental, conservation, and agribusiness organizations, including American Farm Bureau Federation, National Farmers Union, the National Association of State Departments of Agriculture, and the Nature Conservancy.

## Suggestions to Build a Successful and Streamlined Match Program

In order to be successful, a new Match Program should attract and support a wide range of quality applicants who quickly receive funding for implementation. To develop goals, principles, and guidelines for a federal soil health match program, AFT convened discussions with its soil health scientists, state and regional policy experts, and conservation program managers who work directly with farmers and ranchers. AFT also spoke to partners at national environmental and agricultural organizations as well as employees at state departments of agriculture across the nation. As a result of these conversations, AFT has developed goals and principles for a federal soil health match program, detailed below.

**The goal of a Match Program should be to incentivize the adoption and maintenance of conservation practices as quickly as possible.** Eligible applicants for this program should include states, Tribal governments, and U.S. territories (hereafter referred to as "applicants"). Because each of these applicants are unique, as are the needs of the producers they serve, the federal program must be flexible in order to efficiently foster innovation and enable applicants to fill NRCS program gaps. To help guide Congress in designing such a program, AFT recommends the following:

1. **The Match Program's requirements, standards, and application ranking and contracting processes should be streamlined, efficient, and simple.** The more federal requirements that applicants are asked to meet, the more steps they will have to take before becoming eligible, thereby dampening interest in this new program as well as lengthening the time it takes to help producers realize urgently needed soil health improvements.
2. **Program eligibility and other requirements should encourage continued program innovation, attract broad participation, and support applicants at a variety of stages in soil health program development.** Given that many applicants are at different stages in developing their programs, the Match Program should support a wide range of phases, including both planning and implementation of current and/or future programs. How to best use funding to improve soil health should be proposed by the applicant. Uses could include providing cost share, ramping up technical assistance capacity, creating on-farm demonstration pilots, funding data collection or long-term research sites, increasing peer-to-peer networking, or a combination of strategies.
3. **Administrative time and in-kind work should count toward the applicant's match.** State budgets are often constrained and, though the existence of a federal match may help to secure funding for soil health programs, creating and funding new programs is challenging. Allowing for in-kind as well as cash match will increase applicant access to this program.
4. **Federal funding should be regular, dependable, and provide long-term program support to allow applicants to undergo planning, expand program implementation, and/or set and achieve goals that will support on-the-ground improvements.** Inconsistent or short-term funding, and/or funding that requires multiple processes to access, will reduce interest from applicants, absorb limited applicant staff time, and diminish the ability of applicants to build sustainable, long-standing programs that producers can rely on to yield results.
5. **If the Match Program awards funding on a competitive basis (rather than providing automatic funding for applicants with approved plans), then soil health plans should NOT be required to access match funding.** Only a handful of states have created soil health plans, and much of this planning has been led by land grant universities or stakeholders rather than state agencies. Therefore, AFT recommends Congress direct USDA to give applicants with approved soil health plans additional benefits (e.g., priority consideration, increased funding, longer-term funding) rather than requiring plans as a prerequisite for accessing implementation funding.

6. **Criteria for a qualification should be broad, with the exception that applicants must engage with and address the needs of historically marginalized producers.** Furthermore, Congress should empower USDA to consider how other existing plans (e.g., water quality, nutrient loss, climate) that relate to soil health may be adapted and built on for this purpose.

Designing and directing implementation of a Match Program by the above principles will enable applicants to augment the services they provide to farmers and ranchers—whether their programs are nascent or robust—to help rebuild the nation's soil.

## Suggested Program Funding: $100 Million Per Year

Currently, roughly 10 states fund soil health-specific programs, but many more have water quality programs supporting soil health practice adoption that could be adapted to this purpose. Generally, soil health programs start with modest funding levels, and many states have struggled to grow appropriations for these programs over time, even when demand outpaces funding available. For example, as mentioned above, Illinois appropriated $330,000 to create a program offering a $5/acre crop insurance premium discount for planting cover crops. By year three, program funding had tripled but the Illinois Agriculture Department still exhausted available funding within hours, and left 20,000 acres of demand unfulfilled.

Most states begin with modest appropriations for new soil health programs—generally less than $2 million. While these programs may grow over time, many are unable to match the pace of funding requests because of state budget limitations. **At $100 million per year, the Match Program would be able to double funding for many programs at a modest cost while still supporting a wide variety and number of applicants' programs**.[x] If there was a need to control program costs, funding allocations could begin lower and ramp up annually to allow time for more applicants to develop plans and/or enact programs to match federal dollars. For example, the Agriculture Resilience Act proposes initially funding the Match Program at $60 million before increasing to $100 million annually by the end of the Farm Bill.[y]

# Conclusion

Supporting producers in adopting practices and systems that build soil health is critical not only for the sustainability and resilience of farms and ranches, but also to improve water and air quality, water quantity, and to best leverage the power of working lands to fight climate change. While longstanding water quality efforts often support soil health practice adoption, new information about the benefits of soil health have spurred interest in state legislatures across the nation—with many states passing soil health legislation or starting new programs since the passage of the 2018 Farm Bill.

**Congress now has an opportunity to build on this momentum by creating a program in the next Farm Bill to provide match funding for state and Tribal soil health programs.** Combining the broad financial support from the federal government with locally-developed and managed programs will maximize the ability for governments to improve soil health and conservation across the nation by complementing oversubscribed NRCS programs, spurring new soil health programs, and incentivizing conservation innovation. In this way, Congress can best leverage limited federal Farm Bill funding with contributions from states, tribes, and producers to rebuild soil health across the country for our sustainability, food security, and economic wellbeing.

x AFT supports requiring lower match levels for Tribes than for states.

y The NO EMITs Act proposed dedicating $100 million per year at the outset.

# Appendices

## Appendix A: Additional State Approaches to Improving Soil Health

This white paper included examples of state soil health and water quality programs that help producers adopt practices that improve their soil health. Below are more examples of innovative approaches from states that are dedicating funding to improve soil health.

### CALIFORNIA

In 2015, California launched a Healthy Soils Initiative (HSI), which instructed seven state agencies to address different aspects of soil health on public and private lands. Then, in 2016, the California legislature began funding a Healthy Soils Program administered by the California Department of Food and Agriculture that invests cap-and-trade proceeds, and other state proposition and general funds, to help farmers adopt greenhouse gas (GHG) reducing soil health practices.[z] This program now funds demonstration projects and trials, provides financial assistance at 100 percent of the cost of adoption, and conducts outreach and education activities with a quarter of the funding set aside for socially disadvantaged producers.[aa] Since its launch in 2017, the program has invested $98 million in 1,513 projects with historic funding levels approved in the state budget for FY 2021–2022 at $85 million. This popular program is highly oversubscribed—in 2021, the California Department of Food and Agriculture received 1,328 applications requesting over $90 million but was only able to award 940 incentive projects totaling over $66 million in funding.[24]

### COLORADO

In Colorado, years of inclusive grassroots stakeholder engagement has resulted in the establishment of exciting new soil health programs and initiatives. The passage of HB21-1181 "Agricultural Soil Health Program" in 2021 authorized the Colorado Department of Agriculture to run the Colorado Soil Health Program, while SB21-235 provided funding to the program the following year. Funding also comes from a Section 319 grant through the Colorado Department of Public Health and the Environment, a Water Plan grant from the Colorado Water Conservation Board, a Conservation Partners Program grant from the National Fish and Wildlife Foundation, and a Federal EQIP Conservation Innovation Grant (CIG) from NRCS. In total, the Colorado Department of Agriculture awarded $3.4 million for soil health grants in 2021.

### MARYLAND

Maryland has a robust history of supporting soil health practices through water quality programs that provide cost share to producers. For example, Maryland's water quality program pays an average of $55 per acre for farmers to plant cover crops, a much higher per-acre payment than EQIP provides.[25] This very popular program has contributed to raising the number of farmland acres in Maryland planted in cover crops to 41%, well above the national average.[26] Recent recognition that this successful program could be improved upon led the state legislature to pass a soil health program in 2017, but without funding attached. To design this program, the Maryland Department of Agriculture (MDA) convened an advisory group that recommended establishing a competitive grant program to incentivize soil health practice adoption and suggested improvements to strengthen the cover crop program. A combination of private and state funding will now allow MDA to make annual investments through its soil health program to help producers continue to build soil health across the state.

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z Practices include cover cropping, conservation tillage, mulching, compost application, conservation plantings, and planting of windbreaks

aa Socially disadvantaged groups, as defined in AB 1348, are African Americans, Native Indians, Alaskan Natives, Hispanic, Latino/a, Asian Americans and Native Hawaiians and Pacific Islander groups. Other historically underserved groups of farmers include urban, veteran, women, and LGBTQIA+ farmers.

## MASSACHUSETTS

In Massachusetts, the Department of Agricultural Resources (MDAR), the Massachusetts chapter of the Northeast Organic Farming Association (NOFA-Mass), and AFT recently partnered to establish the Massachusetts Coordinated Soil Health Program. The program incentivizes conventional and organic farmers alike to adopt soil health practices with the ultimate goals of improving resilience to climate change and farm viability. It provides financial assistance, including no-cost soil health assessments, free technical assistance, and on-farm learning events to share information on no-till and cover crop benefits. The Massachusetts Soil Health Advisory Committee, comprised of farmers, service providers, and state officials, meets regularly to guide the development of project resources and activities.

## MICHIGAN

The Michigan Agricultural Environmental Assurance Program (MAEAP) was created in 2001 as a way to help farmers implement water quality practices, give them public recognition for their environmental work, and support them in staying compliant with state and federal environmental regulations. Getting verified by the program includes attending educational workshops, working with a technician from the local conservation district to create a farm risk assessment, and then having a third-party audit by Michigan Department of Agriculture and Rural Development (MDARD) staff to ensure the farmer has implemented environmentally-sound practices. Once completed, farmers are "MAEAP-Verified," at which point they receive a sign and may advertise their verification as assurance that environmental practices are implemented on their operation. Verified farmers receive extra EQIP cost-share points and are eligible for insurance discounts, among other financial incentives. The program's annual budget is $6.6 million, of which $4.1 million goes to technician grants. From FY 2018–2022, the program covered over one million acres – or 12% of Michigan farmland.

## NEBRASKA

Nebraska's Soil and Water Conservation Program was established to provide financial assistance to private landowners for installation of soil and water conservation practices. The work is carried out primarily through the state's Natural Resource Districts – farmers submit applications to their district office, and then eligible practices are reviewed by a District or NRCS technician. After the review, farmers receive a cost-share payment of up to 75% of the cost of the project. The Nebraska Natural Resources Commission determines the list of eligible practices and allocates funds to the 23 Natural Resource Districts. The program is funded by the Nebraska Soil and Water Conservation Fund which was established by the Nebraska Soil and Water Conservation Act of 1977. In 2016, the program allocated $2.4 million for 19 practices, mostly focused on structural practices but also including grazing and pastureland planting. Since 1977, the program has allocated $96 million.

## NEW MEXICO

The New Mexico Department of Agriculture (NMDA) created the Healthy Soil Program after the Healthy Soil Act was enacted in 2019. The purpose of the program is "to promote and support farming and ranching systems and other forms of land management that increase soil organic matter, aggregate stability, microbiology and water retention to improve the health, yield and profitability of the soils of the state." The program has dedicated state funding annually, receives federal matching funds from NRCS-New Mexico through an existing contribution agreement, and also receives a small amount of supplemental funding from optional tax refund contributions. The primary parties that can apply for Healthy Soil Program grants to improve their soil health are Eligible Entities, defined in the Healthy Soil Act as "local governmental [entities] with proven land management capacity to support healthy soil." Eligible Entities

include Pueblos, Tribes, and Nations; acequias; land grants; soil and water conservation districts; New Mexico State University—Cooperative Extension Service; and other local governmental bodies in the state meeting the Eligible Entity definition. A second category of applicants called Individual Applicants can also seek grant funds to improve their soil health. Individual Applicants are nongovernmental parties (i.e., individuals, businesses, and nonprofits) that are directly engaged in farming, ranching, or another form of land management. Individual Applicants are required to complete conservation planning with NRCS. They submit applications to NMDA with project sponsorship from either their soil and water conservation district; or their Pueblo, Tribe, or Nation. No matter the applicant type, NMDA provides grants to cover the cost of the practice, with a requirement to provide matching/in-kind contributions (labor, other funds, seed gifted by a neighbor, etc.). Some of the top funded practices are cover crops, compost application, and pasture planting. In FY 2023, the program awarded approximately $1.1 million in grant funding to 13 Eligible Entities and 37 Individual Applicants.

## VERMONT

Through Act 64 of 2015 – which has come to be known as "Vermont's Clean Water Act" – a definition of "Healthy Soils" was established and has marked a concept central to agricultural water quality efforts in Vermont. This focus on improving soil health on farms in Vermont is recognized as congruent with accelerating environmental outcomes for both agriculture water quality and climate change goals. A definition of "Regenerative Farming" and the creation of a working group to develop a Payment for Ecosystem Services and Soil Health Program were both established in 2019. Since 2015, Vermont farmers have led water quality cleanup efforts through the implementation of conservation practices, which improve soil health and water quality outcomes. $41 million has been invested in agricultural water quality programs through the Vermont Agency of Agriculture, Food & Markets (VAAFM) which has resulted in over 215,000 acres of conservation practice implementation. A total of 40% of all VAAFM funding has gone to payments for cover cropping . As a result, cover crop adoption rates have risen from 7% in 2014 to 48% in 2021 on eligible cropland in Vermont. Vermont's Payment for Ecosystem Services and Soil Health Program will be recommended to the Legislature in a January 2023 report.

## WASHINGTON

The Washington Soil Health Initiative, referred to as WaSHI, is a partnership between the Washington State Department of Agriculture, Washington State University, and the State Conservation Commission. WaSHI establishes a coordinated approach to healthy soil in Washington through research, outreach and extension, technical assistance, policy support, and funding opportunities. WaSHI partners work towards improved soil health through multiple projects, including: a statewide grower needs assessment called the Washington Soil Health Roadmap; a statewide soil monitoring and evaluation program called the State of the Soils Assessment; the creation of a network of Long-term Agroecological Research and Extension (LTARE) Sites, in which the impact of conservation practices on soil health, soil carbon, and farm profitability is measured across time and space; and Sustainable Farms and Fields (SFF), a new grant program which incentivizes growers to reduce greenhouse gas (GHG) emissions and sequester carbon. Through SFF, farmers and ranchers may receive free services—such as on-farm consultations, climate-smart farm plans, and other technical expertise—and financial assistance to help cover the cost of eligible projects, equipment, cover crop seeds, and other expenses. The SFF program launched in 2022. During the first round of funding, SFF received 51 applications requesting $2.1 million, which exceeded the $1.8 million available. This oversubscription is expected to increase as SFF becomes more well-known throughout Washington.

## Appendix B: Organizational Endorsements for Creating a Federal Match for State and Tribal Soil Health Programs in the Next Farm Bill

The policy described above has broad support from across the country. In March 2023, AFT organized a memo of support that was signed by 6 state agencies, 9 conservation district associations, and stakeholders from 29 states, including from the farm, food, environment, conservation, public health, research, education, and environmental justice sectors. The full memo can be found here. The Food and Agriculture Climate Alliance (FACA) also supported this policy in their 2023 Farm Bill Recommendations.

## NATIONAL ORGANIZATIONS

American Farmland Trust
American Seed Trade Association
Carbon Cycle Institute
Danone North America
Earth Justice
FACT
Green America
Healthcare Without Harm
Izaak Walton League of America
Kiss the Ground
National Young Farmers Coalition
National Sustainable Agriculture Coalition
Pesticide Action Network
Soil Science Society of America
STAR Initiative
Wild Farm Alliance

## STATE AGENCIES

Illinois Department of Agriculture
New Mexico Department of Agriculture
Pennsylvania Department of Agriculture
Pennsylvania Soil Conservation Commission
Vermont Agency of Agriculture, Food, and Markets
Washington State Department of Agriculture

## SOIL AND WATER CONSERVATION DISTRICTS

California Association of Resource Conservation Districts
Cheshire County Conservation District (NH)
Connecticut Resource Conservation and Development
Massachusetts Association of Conservation Districts
Northern Rhode Island Conservation District
Oregon Association of Conservation Districts
Soil and Water Conservation Society
Thurston Conservation District (WA)
Virginia Association of Soil and Water Conservation Districts

## NORTHEAST ORGANIZATIONS AND BUSINESSES

Atlas Farm (MA)
Berkshire Agricultural Ventures (MA)
Coastal Enterprises, Inc (ME)
Community Involved in Sustaining Agriculture (MA)
CowPots, LLC (CT)
Dirt Rich Farm (NY)
Farm Sanctuary (NY)
Farm to Institution New England
Fridgeport (CT)
Genesee Land Trust (NY)
Green Village Initiative (CT)
Grow Food Northhampton (MA)
GrowSmart Maine
Hanover Co-op Food Stores and Auto Service Centers of NH and VT
HaR Go Farms (NY)
Jones Family Farm (CT)
Big Dream Farm (NY)
Land for Good
Laughing Earth Farm (NY)
Maine Farmland Trust
Massachusetts Food Systems Collaborative
New CT Farmer Alliance
New York Corn and Soybean Growers Association
New York Farm Bureau
Northeast Farmers of Color Land Trust
Northeast Organic Farming Association of NY
Northeast Organic Farming Association of MA
Northeast Organic Farming Association of VT
Orinoco Cattle Products & Farms (NY)
PASA Sustainable Agriculture (PA)
Pennsylvania Farm Bureau
Red Fire Farm (MA)
Rockland Farm Alliance (NY)
Seeds of Solidarity (MA)
The Evangelical Environmental Network (PA)
The Hickories (MA)
The Trustees of Reservations (MA)

## MIDWEST ORGANIZATIONS AND BUSINESSES

Chicago Food Policy Action Council
Illinois Land Improvement Contractors Association
Illinois Soybean Association
Illinois Stewardship Alliance
Land Stewardship Project (MN)
Michael Fields Agricultural Institute (WI)
Michigan Agriculture Advancement
Ohio Ecological Food and Farm Association
Practical Farmers of Iowa

Prairie State Conservation Coalition (IL)
Sand County Foundation (WI)

## MID-ATLANTIC ORGANIZATIONS AND BUSINESSES

7 Directions of Service
Chesapeake Bay Foundation
Cultivate Charlottesville (VA)
Down East Coal Ash Environmental and Social Justice Coalition (NC)
Johns Hopkins Center for a Livable Future (MD)
Lakota Ranch (VA)
Sustainable Chesapeake
Toxic Free NC
Virginia Association for Biological Farming
Virginia Free Farm
Waterkeepers Chesapeake-Fair Farms Initiative

## SOUTHEAST ORGANIZATIONS AND BUSINESSES

Black Family Land Trust, Inc
Community Farm Alliance (KY)
Georgia Organics
Home Place Pastures (MS)
Missouri Coalition for the Environment
Red Devon USA (GA)
Sprout NOLA (LA)
Tennessee Cattlemen's Association
West Organizations and Businesses

350 Seattle
Berkeley Student Farms
BT Loftus Ranches, Inc. (WA)
Bullseye Farms, LLC (CA)
California Climate & Agriculture Network
California Nurses for Environmental Health and Justice
California Tomato Research Institute
First Light Farm and Learning Center (WA)
Harmony Fields (WA)
Hawaii Farmers Union United
Helsing Junction Farm (WA)
Living Soil and Sustainable Gardening Service (MT)
Matheson Farms, LLC (WA)
New Mexico Healthy Soil Working Group
Northern Plains Resource Council (MO)
Northwest Agriculture Business Center (WA)
Oregon Climate & Agriculture Network
Oregon Organic Coalition
Oregon Tilth
Organic Farming Research Foundation (CA)
Othering and Belonging Institute, UC Berkeley
Roots of Change (CA)
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Tilth Alliance (WA)
Washington Red Raspberry Commission
Washington State Potato Commission

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