



# U.S. SUSTAINABLE AGRICULTURE: LAWS, POLICIES, AND PROGRAMS



SOIL HEALTH

# AN OVERVIEW

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The U.S. Sustainability Alliance has created a series of essential guides to the laws, policies, and programs that govern and guide U.S. sustainable agriculture.

These reports outline the key dates and events, regulatory developments, and government funding and assistance programs in four key areas: soil health, water, climate change, and biodiversity. This report focuses on soil health, while the full series and a consolidated report covering all four areas are available on the [USSA website](#).

American agricultural producers, including farmers, ranchers, fishers, and forest managers, are stewards of half the landmass in the United States and many of its waterways. These growers provide the nation and much of the world with an abundant supply of food, fiber, paper, and many other products – and provide employment to nearly 20 million people. It's a reality that's only possible through the sustainable and long-term management of natural resources.

Despite common misconceptions of U.S. agriculture as being uniformly large, corporate, and environmentally damaging - supported by a government that's behind the curve on sustainability - the U.S. government and its farmers, fishermen, and forest managers have led conservation and natural resource protection for well over a century and have done so mostly on family farms.

In fact, the first federal agency dedicated to natural resource conservation dates back to 1871 and the creation of the U.S. Commission of Fish and Fisheries - the predecessor to today's U.S. Fish and Wildlife Service. Its goal was to study declining food fish populations in the United States and recommend ways to reverse the trend.

Today, the U.S. Department of Agriculture (USDA), through a number of agencies and initiatives, provides a range of incentives, education, research, technical assistance, and regulations to support growers in state-of-the-art conservation and pollution management strategies.

In fact, the nation's agricultural growers take part in the U.S. federal government's largest conservation programs - worth billions of dollars each year and protecting millions of acres.

As scientific understanding has evolved and society's environmental awareness and standard of living grow, U.S. federal policies have expanded to include water pollution controls, species and habitat protection, climate-smart agriculture, and biodiversity incentives, cementing the United States as a leader in natural resource protection and sustaining the nation well into the future.

# SOIL & U.S. SUSTAINABILITY POLICY

Far more than just the ground beneath our feet, the soil is the foundation of a healthy and thriving agricultural sector, society, and planet, as the microorganisms found in soil sustain life on Earth.

Soil is also essential for purifying water, building biodiversity, storing carbon, and mitigating the effects of climate change. Because of its key role in ecosystem support and climate action, conserving soil and promoting soil health is fundamental to the success of U.S. agricultural sustainability.

The U.S. government has prioritized soil health for nearly a century. Following the devastating impacts of the 1930s Dust Bowl, caused in part by soil erosion due to unsustainable farming practices, the U.S. passed its first national soil conservation policy in 1935. It established the Soil Conservation Service, now known as the [Natural Resources Conservation Service \(NRCS\)](#).

## CURRENT STATUS

Since the 1930s, the U.S. government has prioritized research, education, and financial and technical assistance programs to support soil conservation and soil health. Thanks in no small part to government-backed research, we now know that soil is not only the cornerstone of agricultural productivity, but it is also vital to other crucial environmental and social goals, including biodiversity, water quality, and carbon sequestration.

In recent years, the United States has pursued policy initiatives that use soil carbon management as a method of removing carbon from the atmosphere as an important part of its climate change strategy.

## U.S. POLICY AIMS TO IMPROVE SOIL HEALTH BY DEVELOPING POLICIES, PROGRAMS, AND INCENTIVES BUILT AROUND FOUR PRINCIPLES:

MINIMIZE SOIL DISTURBANCE

MAXIMIZE SOIL COVER

MAXIMIZE BIODIVERSITY

MAXIMIZE THE PRESENCE OF LIVING PLANTS AND ROOTS

# KEY EVENTS

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## 1930

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Triggered by soil erosion, drought, and high winds, the Dust Bowl begins, underscoring the urgent need for a federal soil conservation policy.

## 1935

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The Soil Conservation Service (SCS) is established - renamed the Natural Resources Conservation Service (NRCS) in 1994 - and with it the first agency devoted to soil conservation.

## 1985

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The Farm Security Act (aka the Farm Bill) mandates, for the first time, a requirement that farmers and ranchers adopt soil conservation practices on highly erodible land and protect wetlands as a condition to access government programs and assistance.

## 2018

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The 2018 Farm Bill designates soil health as a priority in managing the Conservation Stewardship Program (CSP), the largest federal conservation program.

## 2022

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The Inflation Reduction Act includes a historic increase in funding for soil health activities related to carbon sequestration and reducing soil carbon loss.

# KEY U.S. SOIL HEALTH AND SUSTAINABILITY POLICIES AND LAWS

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THESE ARE AMONG THE MAJOR U.S. LAWS AND POLICIES THAT PROTECT SOIL HEALTH AND REDUCE EROSION:

1935

**SOIL CONSERVATION ACT** established the U.S. Department of Agriculture's Soil Conservation Service (SCS) – renamed the Natural Resources Conservation Service (NRCS) in 1994 – and SCS's Conservation Technical Assistance (CTA) program. The Act authorized SCS to aid farmers in planning and implementing approved conservation measures to protect agricultural land from soil erosion. The CTA program was followed in 1936 by the creation of the Agricultural Conservation Program (ACP), a voluntary program that provided cost-sharing assistance to farmers and forest managers for implementing soil conservation practices.

1956

**AGRICULTURAL ACT** established a two-part Soil Bank, which included a program to reduce surplus commodity crops and took 29 million acres out of production. The Soil Bank led to the creation of the Conservation Reserve Program (CRP) in 1985, which provides long-term contracts to farmers to retire unproductive farmland in exchange for payments and assistance in covering the ground with vegetation, helping to promote soil health and biodiversity.

1985

**FOOD SECURITY ACT (AKA THE FARM BILL)** This comprehensive piece of legislation, typically renewed every five years, outlines – among other things – funding for growers and landowners for conservation practices, including soil health and erosion prevention. The 1985 Farm Bill mandated that landowners have a farm-level conservation plan on highly erodible land in order to access agricultural financial assistance, such as crop insurance, encouraging sustainable land management. It also established the Conservation Reserve Program (CRP) to prevent crop surpluses and address conservation issues.

# U.S. SOIL HEALTH AND SUSTAINABILITY PROGRAMS

Often enabled by the above laws and policies, these are the four main areas of U.S. federal soil health programming:

## SOIL CONSERVATION FUNDING AND ASSISTANCE

Among the tools the U.S. government uses to encourage sustainability, it provides financing to farmers, ranchers, and forest managers for conservation programs, including protecting soil, and links financial benefits to conservation practices. Here are some of the key financial programs:

- Federal agricultural policy has long included conservation compliance provisions for growers on highly erodible land or those who have wetlands. These require growers who receive certain federal benefits, such as crop insurance or commodity subsidies, to implement conservation measures that protect soil health, wetlands, and other natural resources.
- Administered by the NRCS, the [Conservation Stewardship Program \(CSP\)](#) is the largest federal conservation program by area enrolled, with [70 million acres](#) (28.3 million hectares) of productive farmland and forests currently enrolled as of 2022. CSP provides technical and financial assistance in five-year contracts to farmers, ranchers, and forest landowners for conservation activities, including those that pertain to soil health and erosion protection, such as cover cropping, crop rotation, and rotational grazing.
- A pilot initiative launched in 2018 under CRP and renewed in 2021, the [Soil Health and Income Protection Program \(SHIPP\)](#) enables farmers to enroll environmentally sensitive land in short-term conservation contracts in the prairie pothole states of Iowa, Minnesota, Montana, North Dakota, or South Dakota. Farmers adopting soil health practices, such as cover cropping, are eligible for payments through this program.
- Administered by the NRCS, the [Environmental Quality Incentives Program \(EQIP\)](#) is the largest conservation program for working agricultural land. It provides technical and financial assistance to farmers, ranchers, and forest landowners for land under active agricultural production to address conservation concerns, including working to reduce soil erosion and improve soil health. Some examples of EQIP initiatives related to soil health include:
  - EQIP funds some cover crop initiatives in the Midwest that allow farmers who practice row cropping to grow crops like winter rye, clover, and radishes between growing seasons to prevent erosion, improve organic matter, and nutrient retention.
  - In California, EQIP funded the planting of native grass on some land impacted by wildfires, protecting the exposed soil from further erosion.





## RETIRING AND RESTORING LAND

Another tool for restoring and protecting soil is taking land out of productive use and covering it with vegetation. Here are the key federal programs that support land retirement:

- The [Conservation Reserve Program \(CRP\)](#) is the largest land conservation program administered by the Farm Service Agency (FSA). Under CRP, growers remove environmentally sensitive land from agricultural production under 10-to-15-year contracts and replant the land with protective vegetation in exchange for rental payments. [More than five million acres entered CRP in 2023](#). The long-term goal of the program is to re-establish valuable land cover to help prevent soil erosion as well as to improve water quality and reduce the loss of wildlife habitat.
- One example of how CRP protects soil health, Mississippi farmers enrolled highly erodible land along the Upper Mississippi River Basin into the CRP, establishing grass buffers and wetlands, which helped to stabilize the soil and prevent sediment from entering the river.



## SOIL HEALTH EDUCATION AND TECHNICAL ASSISTANCE

Education and technical assistance form the basis of soil health. Much of the U.S.'s soil health education is advanced by the Natural Resources Conservation Service (NRCS) and its Soil Health Division. The USDA and NRCS provide soil health education through:

- Lesson plans, educator guides, soil quality test kits, peer-reviewed soil research, soil health posters, and other educational resources about soil health on their website.
- In-person and online workshops, webinars, conferences, courses, and training sessions on soil health and soil management, some organized through local USDA Service Centers.
- The USDA's ["Unlock the Secrets in the Soil"](#) initiative is a series of 41 mostly short videos that aim to increase awareness of soil health issues, promote the adoption of soil health practices, and include numerous farmer profiles of soil health techniques.

## RESEARCH AND DATA

The U.S. dedicates significant resources to scientific research into soil health, agricultural productivity, and sustainability. This research informs policymakers and land managers about best practices to improve soil health and reduce soil erosion.

- Under the USDA's [Agricultural Research Service \(ARS\)](#), there are currently over 200 individual research projects on soil health and more than two dozen labs studying soil health around the United States. Areas of research include crop rotation and cover cropping, conservation tillage, including no-till farming, and soil carbon sequestration techniques.
- The [National Cooperative Soil Survey \(NCSS\)](#), managed by the NRCS, classifies and maps soils across the United States. There is also a [Web Soil Survey](#) that provides agricultural producers, researchers, and other stakeholders access to soil and related information.

