

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

#### **AN OVERVIEW**

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 water, 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.



## WATER & U.S. SUSTAINABILITY POLICY

Access to clean, abundant water is vital to everything we do, from cooking and cleaning to running businesses and farms.

Growing populations and intensifying industry, agriculture, and urban development have posed serious challenges to water quality and water abundance in the United States over time.

But in 1948, the nation led the way by passing the Federal Water Pollution Control Act (FWPCA) - the first major U.S. law to address water pollution. It was with the landmark amendments of FWPCA in 1972, known as the **Clean Water Act**, that the U.S. first set standards around water pollution and empowered government agencies to enforce them, inspiring similar legislation globally.

In the decades since, federal programs and initiatives have also been established to protect water resources in the United States. These strategies include linking incentives to conservation practices that improve water quality and training and educating agricultural workers on best practices that protect water resources.



#### **KEY EVENTS**

1948

The nation passes its first water pollution policy with the Federal Water Pollution Control Act.

1972

1985

The landmark Clean Water Act of 1972 amends earlier law and marks the first time the U.S. sets pollution standards for water and regulates this pollution through the Environmental Protection Agency (EPA).

The 1985 Farm Bill launches the first ongoing federal incentive programs for farmers using conservation practices, including water conservation.



1987

The Water Quality Act amends the CWA to establish the Section 319 Nonpoint Source Management Program, the first federal program to supply grants to states for programming related to nonpoint source pollution, including from farming.

## KEY U.S. WATER POLICIES AND LAWS

#### THESE ARE AMONG THE MAJOR U.S. LAWS AND POLICIES THAT REGULATE WATER QUALITY AND QUANTITY:

1948

**FEDERAL WATER POLLUTION CONTROL ACT (FWPCA)** is the first federal policy to address water pollution and is significant for establishing federal technical services on water pollution and a grant program to fund water pollution activities. While it signaled federal concern for water pollution, the FWPCA ultimately lacked clear federal mandates on water pollution and enforcement mechanisms.

1972

**CLEAN WATER ACT (CWA)** is the cornerstone of water quality protection in the U.S. It gives the Environmental Protection Agency (EPA) the authority to oversee water pollution control and to set pollution standards for point source pollution (meaning directly from a pipe from, for example, industry or municipal wastewater systems) and it established a permit system to regulate this pollution.

**OCEAN DUMPING ACT (ODA)** is the first federal U.S. law to regulate the disposal or dumping of materials into marine waters within U.S. jurisdiction and a permitting system for other types of waste disposal, like dredged sediment and fish waste. The ODA has been amended several times to be more stringent and to allow states to set higher standards, with the 1988 amendment banning industrial and municipal wastewater dumping altogether.

1974

**SAFE DRINKING WATER ACT (SDWA)** sets standards for the quality of drinking water and regulates the testing, treatment, and distribution of public drinking water supplies. It also empowers the Environmental Protection Agency (EPA) to oversee these regulations.

1987

WATER QUALITY ACT amended the CWA to establish the Section 319 Nonpoint Source Management Program, the first federal program to assist states in dealing specifically with nonpoint source pollution, including sediment, nutrients, bacteria, and chemical runoff that originates on ranches and farms. Section 319 supplies grant money to states, territories, and tribes to support nonpoint source pollution clean-up projects and to track and identify water bodies with water quality issues.

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# CURRENT STATUS OF WATER PROGRAMS AND INITIATIVES



#### WATER QUALITY AND POLLUTION PREVENTION FUNDING AND ASSISTANCE

The U.S. Environmental Protection Agency's (EPA) <u>Clean Water State Revolving Fund</u>
 (CWSRF) program is the largest public source of water quality financing in the country.

As of 2022, the CWSRF has funded over \$700 million in agricultural best management practices (BMPs), such as feedlot runoff control, manure management, conservation tillage, and erosion control. Many of these projects are eligible for assistance because they implement state Clean Water Act (CWA) Section 319 nonpoint source (NPS) management programs.

• The 2012 <u>National Water Quality Initiative</u> (a partnership between the Natural Resources Conservation Service (NRCS), the EPA, and the state water quality agencies) is specifically aimed at reducing runoff of agriculture-related nutrients, sediment, and pathogens to improve water quality in high-priority watersheds in each state.

Funding for these efforts comes from the NRCS Environmental Quality Incentives Program (EQIP), the Clean Water Act Section 319 Program, and other resources.

 Administered by the NRCS, the <u>Conservation Stewardship Program (CSP)</u> is the largest federal conservation program by area enrolled and provides technical and financial assistance to farmers, ranchers, and forest landowners for advanced conservation activities, including those that pertain to water quality, pollution prevention, and wetlands protection.

For example, CSP enhancements include planting forage crops to reduce nutrient runoff from agricultural land, extending filter strips around waterways to capture runoff and sedimentation, encouraging more efficient irrigation systems, and using precision pesticide applications and Integrated Pest Management (IPM) to reduce chemical runoff from agriculture.

 Administered by the NRCS, the <u>Environmental Quality Incentives Program (EQIP)</u> is the largest conservation program for working agricultural land, providing technical and financial assistance to farmers and forest landowners to address specific conservation concerns and projects.

EQIP conservation practices include riparian buffers to protect waterways from runoff, conservation tillage that prevents erosion and sedimentation, and manure storage management to prevent pathogens from entering waterways, among other initiatives. Reducing nonpoint source water pollution in watersheds is one of the national priorities set by the NRCS under EQIP.



#### CONSERVATION PRACTICES AND RETIRING AND RESTORING FARMLAND

- The <u>Conservation Reserve Program (CRP)</u>, a large federal conservation program for farmers and ranchers, is dedicated to removing environmentally sensitive land from agricultural use and converting it to conservation activities. CRP not only improves water quality by preventing the runoff, sedimentation, and erosion linked to farming and ranching, but the program also encourages wetland restoration, riparian buffers, and vegetative buffers, among other practices, which reduce erosion and act as filters to protect waterways from pollution.
- The <u>Regional Conservation Partnership Program</u> (RCPP) takes a partner-led approach to conservation. Administered by the NRCS, it funds innovative solutions to conserve, protect, restore, and promote the sustainable use of natural resources including water on agricultural land. In 2023, <u>more than a quarter of the projects</u> that secured RCPP funding (22 out of 81) focused on water quantity and conservation and received over \$338 million of investment.
- Created in 2014, the <u>Agricultural Conservation Easement Program</u> supports water quality improvement. Also administered by the NRCS, it helps landowners, land trusts, and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through two types of conservation easements, notably:
  - Wetland Reserve Easements, which preserve, restore, and improve wetlands that
    have been previously degraded due to agricultural uses. These easements help boost
    water quality by filtering sediments and chemicals, reducing flooding, and recharging
    groundwater, among other benefits.



#### RESEARCH, EDUCATION, AND TECHNICAL ASSISTANCE

- The <u>Water and Agriculture Information Center</u> (WAIC), established in 1990, supports the U.S. Department of Agriculture (USDA) in mitigating the impacts of agricultural chemicals and waste caused by farming and ranching. WAIC supports scientists, policymakers, economists, engineers, and growers by curating scientific research and tools on agriculture and water quality.
- The <u>National Water and Climate Center</u>, part of the USDA <u>Natural Resources</u>
   Conservation Service (NRCS), administers programs that survey and track precipitation and snowmelt across the United States. It creates data through weekly water and climate reports as well as producing and disseminating water supply forecasts, among other initiatives.
- The NRCS and the Environmental Protection Agency (EPA) provide technical support and education on water quality and conservation. Specifically, the EPA and NRCS have technical guidance on nutrient and sediment management, controlled grazing, Integrated Pest Management (IPM), and efficient irrigation water practices.
- The <u>National Institute of Food and Agriculture (NIFA)</u>, part of the USDA, partners with the nation's 100-plus land-grant universities to offer non-formal education to farmers and rural communities via its Cooperative Extension services. It offers education on technical assistance, emerging science and farming practices, as well as community-building through, its national 4-H youth program.

