

The logo for the US Sustainability Alliance, featuring the letters 'US' in a large, bold, white font. To the right of 'US' are two horizontal white bars. Below these bars, the words 'SUSTAINABILITY' and 'ALLIANCE' are stacked vertically in a smaller, bold, white font, each within its own white rectangular background.

**US**  
**SUSTAINABILITY**  
**ALLIANCE**

A photograph of a waterfall cascading down a rugged, reddish-brown rock face in a canyon. The water is white and frothy as it falls. The surrounding area is lush with green vegetation, including trees and shrubs. The sky is not visible.

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

**BIODIVERSITY**

# 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 biodiversity, 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.

# BIODIVERSITY AND ECOSYSTEMS AND U.S. SUSTAINABILITY POLICY

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Biological diversity and ecosystem management encapsulate the big picture of sustainability.

It requires keeping species, their habitats, and their relationships and connections to one another intact and thriving. Biodiversity in turn supports our food system – some 100 U.S. crops, for example, depend on pollinators, such as bees, to reproduce.

While the term “biodiversity” came into use more recently, the U.S. federal government has long practiced ecosystem protection and fostered wildlife, dating back at least to the founding of Yellowstone National Park in 1872.

Today, an area the [size of California](#) is protected as wilderness in the United States. As of 2022, there are [70 million acres](#) of farmland and forests enrolled in the nation’s largest conservation program, the Conservation Stewardship Program (CSP).

Farmers, fishermen, and forest managers are increasingly doing their part to promote biodiversity by reducing man-made chemicals and fertilizers, sustainably managing fish stocks and forests, preventing pollution of our waterways, and even increasing wetlands and pollinator ecosystems.

# KEY EVENTS

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## 1871

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President Ulysses S. Grant creates the United States Commission of Fish and Fisheries, the first federal agency focused on natural resource conservation.

## 1872

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The first national park was created – Yellowstone National Park - launching a national tradition of conservation of protected lands and wildlife and their habitats.

## 1905

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The U.S. Forest Service was formed to protect the nation's forests and watersheds.

## 1964

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The U.S. pledges to set aside approximately 9 million acres (about 3.6 million hectares) of wilderness for future generations with the passage of the Wilderness Act.

## 1966

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The Endangered Species Preservation Act (ESPA) passes, authorizing the identification of species in threat of extinction. The more comprehensive Endangered Species Act (ESA) of 1973 significantly expands the federal government's role in protecting those species.

# 1972

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The Federal Environmental Pesticide Control Act (FEPCA) amends the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), broadening national pesticide enforcement to include environmental and health issues. The same year, the EPA banned several highly hazardous and persistent pesticides, including DDT, proven harmful to wildlife and humans.

# 1976

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The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) passes, setting standards for sustainable fishery management, the restoration of overfished areas, and the protection of fish habitats.

# 1985

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The Food Security Act (aka the first Farm Bill) establishes the Conservation Reserve Program (CRP), which takes sensitive agricultural land out of production for conservation, and the Wetlands Reserve Program, which restores and protects wetlands.

# 2021

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Under its America the Beautiful Initiative, the U.S. puts significant financial investment towards a national goal of conserving at least 30 percent of U.S. lands and waters by 2030.

# 2022

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The Biden-Harris Administration launches the Opportunities to Accelerate Nature-Based Solutions roadmap, outlining federal policy for funding, research, and training on nature-based solutions to climate change and other sustainability challenges.

# KEY U.S. BIODIVERSITY AND ECOSYSTEM LAWS AND POLICIES

## WILDLIFE

- Under the **Endangered Species Preservation Act (ESPA)** of 1966, species under threat of extinction were identified and first put on a federally managed list. In 1973, the [Endangered Species Act \(ESA\)](#) expanded the law, calling for the protection and rehabilitation of threatened species, including the protection of their habitats. The Marine Mammal Protection Act (MMPA) of 1972 likewise banned the hunting and killing of whales, seals, and dolphins in U.S. waters.
- The **National Wildlife Refuge System (NWRS)**, which includes more than 560 marine and land-based wildlife refuges dedicated to protecting wildlife and their habitats, was formalized with the passage of the [National Wildlife Refuge System Administration Act of 1966](#). This legislation provided a comprehensive framework for the management and protection of the refuges under the U.S. Fish and Wildlife Service.
- With the passage of the **Federal Environmental Pesticide Control Act (FEPCA)** of 1972, the Environmental Protection Agency (EPA) was granted authority to regulate and ban hazardous pesticides, including DDT, which was found particularly harmful to wildlife and ecosystems.

## FORESTS

- The [Forest and Rangeland Renewable Resources Planning Act \(RPA\)](#) of 1974 requires the U.S. Forest Service to monitor the nation's forests and develop long-term plans for resource management, including conservation and sustainability goals. Similarly, the [National Forest Management Act \(NFMA\)](#) of 1976 first developed the framework for sustainably managing national forests on federal lands.

## FARMLAND

- Originally established by the **1985 Farm Bill**, the Conservation Reserve Program (CRP) is created to provide financial incentives to growers to remove environmentally sensitive land from agricultural production and to plant species that will improve environmental health and quality, including pollinator and wildlife habitat.

## MULTI-SECTOR POLICIES

- The Biden-Harris Administration's 2022 [Nature-Based Solutions Roadmap](#) outlines federal policy for nature-based solutions, including quantifying nature in national balance sheets, updating policies on flood-plan management to include nature-based solutions, and developing solar projects that have pollinator habitat benefits, among many other initiatives.
- The [Bipartisan Infrastructure Law](#) of 2023 sets aside \$20 million to fund 30 research studies to develop new technologies and data to restore degraded forests, grasslands, and watersheds via the USDA's Forest Service.

# U.S. BIODIVERSITY AND ECOSYSTEM PROGRAMS AND STRATEGIES



## INCENTIVES AND ASSISTANCE FOR AGRICULTURAL PRODUCERS

As the stewards of over half the nation's land, agricultural producers play a key role in biodiversity and ecosystem health. Through the USDA NRCS's conservation programs EQIP, CSP, and CSR, growers are protecting biodiversity through practices such as cover cropping, which provides a temporary habitat and food source for species, vegetated buffers along rivers and streams, which create habitats, and reduced and targeted pesticide use, which protects beneficial insects and non-target organisms and marine ecosystems impacted by agricultural run-off.



## SPECIES AND HABITAT PROTECTION

The United States has numerous federal policies and agencies in place that protect species and their habitats and outline the sustainable management of our lands and waterways, protecting ecosystems as a result.

Some of the first policies to enshrine species protection into regulation include the Endangered Species Act (1966), the [Marine Mammal Protection Act](#) (1972), the [Magnuson-Stevens Fishery Conservation and Management Act](#) (1976), and the Forest and [Rangeland Renewable Resources Planning Act \(RPA\)](#) of 1974. The extensive National Parks systems protect valuable habitats. Likewise, federal policy protects wetlands, forests, and wilderness, among other protected areas that foster biodiversity.



The nation's premier wildlife protection program is the **National Wildlife Refuge System (NWRS)**, which includes more than 560 wildlife refuges such as coastal areas, forests, and wetlands dedicated to protecting wildlife and their habitats. The NWRS fosters biodiversity by creating refuges that serve as key breeding and migratory grounds and endangered special protection areas and as a basis for scientific research.

## PROTECTION OF POLLINATORS

Federal policies protect pollinators such as bees, as they play a key role in crop production and ecosystem functioning. [The Pollinator Protection Initiative](#) under the EPA aims to better address the risk to pollinators posed by pesticides via better research, labeling, and registration; the Endangered Species Act (ESA) includes protections for some pollinator species; and the USDA's CRP and EQIP programs for growers provide incentives for farmers to establish pollinator-friendly habitats.

# U.S. BIODIVERSITY AND ECOSYSTEM PROGRAMS AND STRATEGIES



## REDUCED AND TARGETED PESTICIDE USAGE

The U.S. has moved towards the more responsible use of pesticides to protect human health, as well as wildlife and ecosystems. Namely, the passage of the FEPCA in 1972 empowered the EPA to study, identify, regulate, and ban pesticides that harm wildlife and ecosystems.

The Organic Foods Production Act mandated the development of national standards for organic products made without any man-made pesticides, which is now a huge market. The USDA also routinely works with growers and links incentives to the targeted and reduced use of pesticides.

## RESEARCH, EDUCATION, AND TECHNICAL ASSISTANCE

The U.S. government focuses on increasing biodiversity on agricultural and productive lands via research, education, and technical assistance, with a focus on soil health, pollinator protection, and reduced pesticide usage. Here is an overview of some of these initiatives:

- The USDA NRCS operates 25 [Plant Materials Centers \(PMCs\)](#) across the United States to research, identify, develop, and provide growers with plants identified as “conservation plants.”
- The PMCs have played a vital role in restoring and enhancing biodiversity on national farmland for 80 years, including releasing wildflowers and legumes that create habitats for butterflies, bees, hummingbirds, and other important pollinators.
- The USDA maintains the [U.S. National Plant Germplasm System \(NPGS\)](#), which is a bank for agriculturally important plants. The NPGS serves to safeguard the genetic diversity in crops, which is in turn essential not just for agriculture but biodiversity more generally.
- The [Sustainable Agriculture Research and Education \(SARE\)](#) program, supported by the USDA, funds research and education projects that support sustainable agriculture practices, including those that enhance biodiversity. SARE, for example, focuses on educational grants that enable organic production, which can enhance biodiversity by eliminating pesticides and increasing crop rotation.
- The USDA's [National Resources Inventory \(NRI\)](#) monitors and releases annual information on the status and condition of land, water, and soil resources on non-federal land in 49 states. Its aim in doing so is to understand the effectiveness of conservation techniques and develop better ways to enhance ecosystems and biodiversity across the United States.

