

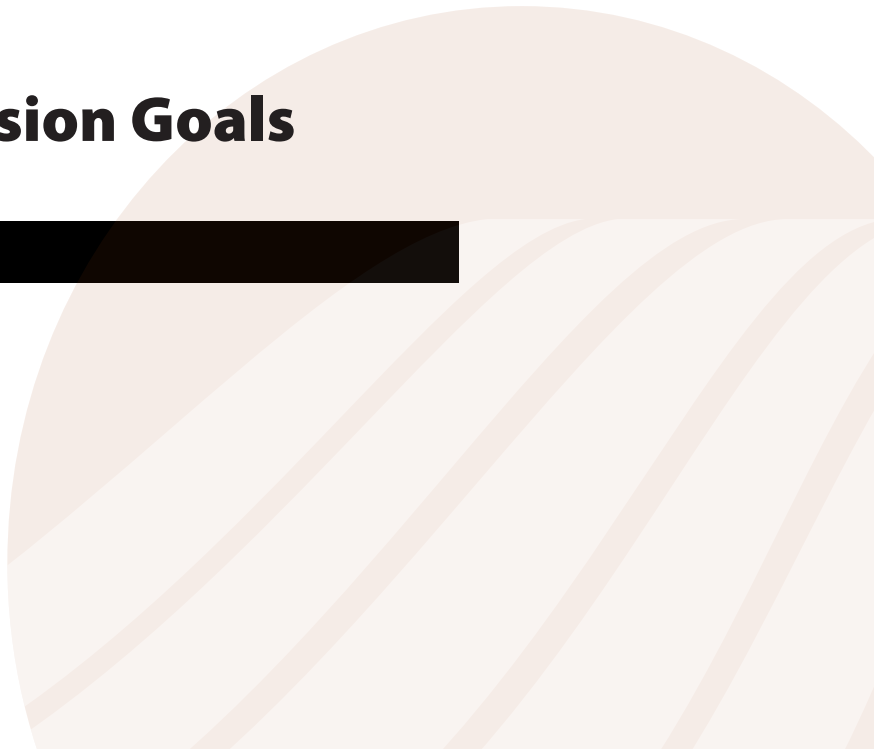


**Mission Goals**





## **Mission Goals**





## Introduction



**M**ission Goals and natural resource outcomes in this plan articulate in broad terms the benefits that the Nation expects to derive from our activities and programs. Taken together, our mission goals describe the landscape that Americans want. This is a landscape in which:

- Soils are protected against damage by erosion and other forms of degradation.
- Water is protected against contamination and is managed efficiently to serve many uses.
- The air is clear and free of harmful substances.
- Agricultural crops and livestock are healthy and well managed.
- Natural plant communities are vigorous and varied and shelter healthy and complex communities of animals.



*Productive soils are a long-standing NRCS Mission Goal.*

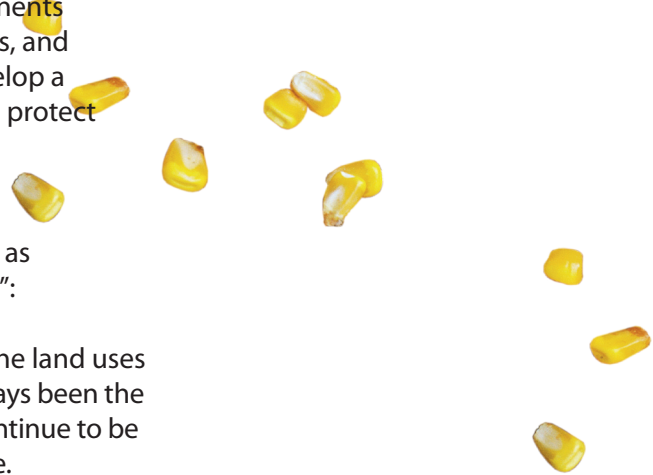
Our Mission Goals are not time-bound; they are not conditions to be achieved at a specific point in time. Rather, they define the essential natural resource setting needed to sustain a high standard of living for a dynamic society. Outcome statements expand on the concise Mission Goal title.

The objectives for each natural resource outcome described in this plan relate to separate resource conditions that authorizing legislation directs our programs to help people address. Objectives define measurable targets against which our long-term effectiveness can be evaluated.

Although identifying clearly differentiated objectives is essential to reaching agreement on the priorities of public programs, resources don't exist independently in the landscape. Everything is connected to everything else. NRCS conservation planners help people assess all components of the landscape—soil, water, air, plants, and animals—and encourage them to develop a resource management system that will protect the resource base while meeting economic objectives.

In this plan, Mission Goals are grouped as “Foundation Goals” and “Venture Goals”:

- Foundation Goals include goals for the land uses and resource concerns that have always been the primary focus of our activities and continue to be the foundation of a healthy landscape.
- Venture Goals address resource issues that are growing in importance as a result of current economic and demographic trends.







## Foundation Goals

**T**he three Mission Goals in this section address the natural resources that have been a major focus of NRCS work from the beginning:

- High-quality, Productive Soils;
- Clean and Abundant Water; and
- Healthy Plant and Animal Communities.

High-quality productive soils and abundant supplies of clean water are the essential building blocks for production agriculture and life. The native plant communities of grasslands, rangelands, and forests, as well as the varied wildlife communities that inhabit the Nation's land and waters, are also national assets that must be sustained.

The NRCS has decades of experience in helping farmers and ranchers apply conservation practices to prevent soil erosion and protect soil quality, improve their management of water resources, protect watersheds against flood damages, improve the condition of grazing land, and enhance wildlife habitat. We have assessed the condition of these resources over time, and can measure progress toward the outcomes for these goals. This plan identifies long-term, measurable objectives for each outcome.

Conservation applied to achieve these objectives will contribute to progress on Venture Goals as well.

**Foundation Goals:**

High-quality, Productive **Soils**



A<sub>p</sub>

A<sub>1</sub>

A<sub>2</sub>

B<sub>2h</sub>

C



## Introduction

**A** healthy land begins with healthy soils. Soil quality describes the capacity of a soil to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation. High-quality soils are the foundation of productive croplands, forest lands, and grasslands, and a vibrant and productive agriculture.

**Outcome:** *The quality of intensively used soils is maintained or enhanced to enable sustained production of a safe, healthy and abundant food supply.*

**Objective:** *By 2010, farmers will manage 70 percent of cropland under systems that maintain or improve soil condition and increase soil carbon.*

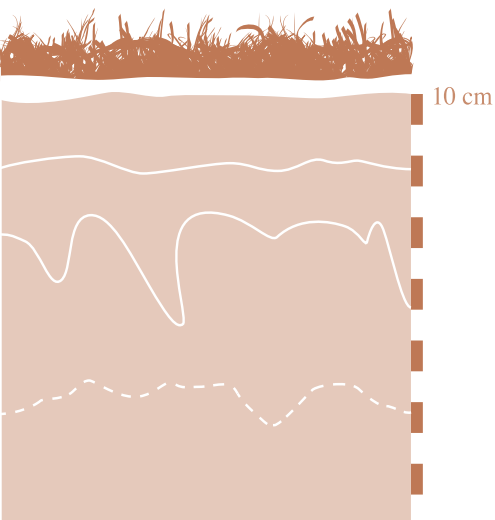
**Baseline:** *In 2003, 60 percent of cropland was managed under systems that maintained or improved soil condition and increased soil carbon.*

The dynamic nature of soil properties means that soil quality is affected by management. Controlling erosion, minimizing soil disturbance and compaction, and managing plants and soil organic matter are all essential to maximizing soil quality and function for agricultural and environmental benefits.

**Soil Quality—People have different ideas of what quality soil is.**

**For example:**

- For production agriculture, it may mean highly productive land, sustaining or enhancing productivity, maximizing profits, or maintaining the soil resource for future generations;
- For consumers, it may mean plentiful, healthful, and inexpensive food for present and future generations;
- For naturalists, it may mean soil in harmony with the landscape and its surroundings;
- For environmentalists, it may mean soil functioning at its potential to maintain or enhance biodiversity, water quality, nutrient cycling, and biomass production.





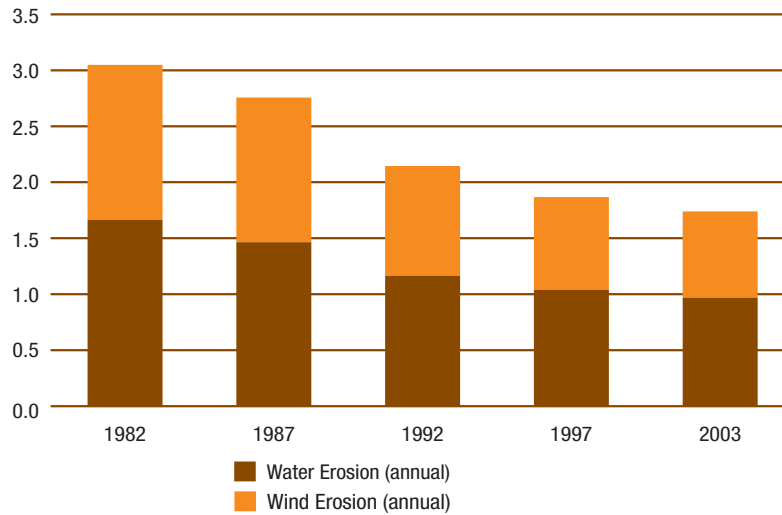
## Situation

Key indicators of the quality of cropland and pastureland soils are erosion rates and organic content of the soil. Many practices that reduce erosion also maintain or increase soil organic matter. Soil organic matter improves soil structure and overall capacity to hold water and nutrients. Increasing soil organic matter content also can reduce atmospheric carbon dioxide levels.

Grazing land soil quality is also affected by grazing management. Proper grazing management can minimize erosion potential and soil compaction, and promote healthy plant growth to foster soil organic matter accumulation. Diversified plant communities can provide good forage, extend grazing seasons, and offer resilience during dry periods and drought.

Protecting soil quality also includes management that addresses salinity, which impairs plant productivity and can render the land unsuitable for agriculture. Some soils are saline because of natural factors such as

**Figure 1. Erosion on Cropland and CRP Land, Billions of Tons Per Year.**



Source: NRCS, National Resources Inventory, 2003

underlying geology and water flow patterns. However, salinity problems also can arise from poor irrigation management or landscape alterations that affect natural vegetation or hydrology.

## Key Tasks

For 70 years, NRCS has been assisting farmers, ranchers, and other land managers to understand their soils and apply soil conserving systems and practices. In the period covered by this strategic plan, our current conservation efforts will be continued, as will our partnerships with Federal and State agencies,

Tribes, and local governments and organizations. Strategic emphases will accelerate progress toward our goals.

## Current Conservation Management

NRCS works with producers to plan and apply conservation systems to protect and improve their soils.

Conservation practices, such as residue management, cover crops, and crop rotations, as well as range, pasture, and forest land management, have helped reduce erosion and improved soil condition.

In addition, NRCS helps producers reduce the potential





for farming operations to degrade soil quality. Examples include providing assistance for:

- Farming practices that optimize the use of equipment and reduce soil compaction;
- Adoption of diversified cropping systems;
- Improving irrigation water management to avoid salinity and reduce irrigation-induced erosion; and
- Planning and implementing compliance plans for highly erodible lands.

### Strategic Emphases

To help producers increasingly manage for soil quality, NRCS will:

1. Expand the focus of technical assistance and program activities to emphasize management for soil quality. Actions will include:

- Providing technical information to carry out watershed-wide environmental education and awareness initiatives on the environmental benefits of enhanced soil quality and on practices that improve soil condition;

- Revising technical guidance and training Agency and partners' employees;
- Emphasizing soil condition criteria, such as organic matter, in program guidance; and
- Encouraging participants in USDA programs to adopt resource management techniques that manage for soil quality rather than erosion alone.

2. Develop data and analytical tools to support soil quality protection and improvement. Actions will include:

- Accelerating soil surveys and soil survey updates in areas of the country where better or more current information is needed to support efforts to focus on soil quality;
- Monitoring soil quality and validating soil quality improvements. Current tools allow estimates of soil carbon trends on cropland and pastureland; we will continue research aimed at providing tools to address indicators for additional soil properties and for additional land uses; and
- Developing field-scale tools to enable producers to assess costs and benefits associated with various soil-enhancing practices.



*NRCS field employees assess soil condition on a banana plantation near Hilo, Hawaii.*



3. Cooperate in the development of innovative technologies that enhance soil quality and help achieve other environmental goals, such as reducing atmospheric carbon, through:

- Agreements with Federal, Tribal, State, local, and private entities to engage in research to develop basic science;
- Grants for pilot testing and adapting new technology for on-farm use.

4. Accelerate understanding and adoption of precision farming technology through:

- Partnering with private sector entities, such as equipment manufacturers, to provide information and demonstrate the soil quality benefits of precision farming and reduced tillage; and
- Encouraging the private sector to develop precision farming technology for small equipment and small operations.

### Soils Information Enables Cooperative Action

Soils information is an important decision-making tool for planning across the landscape, not just on agricultural land. Engineers, zoning commissions, homeowners, developers, and others use our information to help make good land management decisions.

NRCS leads the National Cooperative Soil Survey (NCSS)—a nationwide partnership of Federal, regional, Tribal, State, and local agencies and institutions. This partnership works cooperatively to investigate, inventory, document, classify, and interpret soils and to disseminate and promote the use of information about the soils of the United States and its Trust Territories.

NRCS provides the scientific expertise to enable the NCSS to develop and maintain a uniform system for mapping and assessing soil resources, so that soil information from different locations can be shared easily.



