USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Natural Resource Concerns

Identify and Get Help with Conservation Issues

Overview

The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) provides financial and technical assistance to private landowners, Tribes and tribal entities, agricultural producers, farmers, ranchers, forest owners, and others to address natural resource concerns on private lands. This fact sheet provides a general summary of the various NRCS natural resource concerns that may be addressed through NRCS assistance.

What is a natural resource concern?

A natural resource concern is a problem or issue that impairs the sustainability or intended use of that resource. For example, soil compaction is a natural resource concern that occurs when soil particles become compressed. This can cause the soil to become overly dense, which can impact the rate of water drainage and saturation, and can make it difficult for roots to effectively penetrate the soil. If left untreated, too much soil compaction can hinder the ability to grow certain crops.

SWAPAE+H Soil, Water, Air, Plants, Animals, Energy, Human

NRCS identifies natural resource concerns under seven broad categories. The acronym "SWAPAE+H" is commonly used to refer to them: **Soil, Water, Air, Plants, Animals, Energy, and Human.**

Each broad category contains sub-categories that further identify the specific resource concern.

What is a conservation practice?

A conservation practice is an action you take on the property to address a natural resource concern. Conservation practices can be structural activities, such as building a fence. They can be engineering projects, such as designing and installing an irrigation system. They can be vegetative activities, such as planting trees or shrubs. They also can be management activities that require you to change the way you operate the land, such as changing the crops you plant in certain areas each year (crop rotation) or rotating livestock to graze in specific areas for a limited duration (rotational grazing).

Pictured: Insufficient aquatic habitat for fish due to undersized culverts.

How do I fix a natural resource concern?

NRCS helps private landowners identify natural resource concerns and recommends solutions to address them, through development of a conservation plan. NRCS offers financial assistance to install or perform conservation practices identified in the conservation plan.

Conservation Concerns Tool

Learn about different types of conservation issues that might impact the productivity or natural resources on your land by exploring the Conservation Concerns Tool on Farmers.gov.

This tool provides photos and videos of resource concerns and allows you to build a list of concerns to discuss with a local NRCS conservation planner.

FARMERS.GOV

Scan the Code or Visit: www.farmers.gov/conservation/concerns-tool

NRCS Resource Concerns

SWAPAE+H	CATEGORY	SUB-CATEGORY	RESOURCE CONCERN
SOIL	Soil Erosion	Wind and water erosion	• Sheet and rill erosion • Wind erosion
		Concentrated erosion	• Ephemeral gully erosion • Classic gully erosion • Bank erosion from streams, shorelines or water conveyance channels
	Soil Health	Soil quality limitations	• Subsidence • Compaction • Organic matter depletion • Concentration of salts or other chemicals • Soil organism habitat loss or degradation • Aggregate instability
WATER	Excess Water	Weather resilience	• Ponding and flooding • Seasonal high water table • Seeps • Drifted snow • Naturally available moisture use
	Insufficient Water	Source water depletion	• Surface water depletion • Groundwater depletion • Inefficient irrigation water use
	Water Quality	Field sediment, nutrient and pathogen loss	• Nutrients transported to surface water • Nutrients transported to groundwater • Pathogens and chemicals from manure, biosolids or compost applications transported to surface water • Sediment transported to surface water • Elevated water temperature
		Field pesticide loss	• Pesticides transported to surface water • Pesticides transported to groundwater
		Storage and handling of pollutants	• Nutrients transported to surface water • Nutrients transported to ground water • Petroleum, heavy metals, and other pollutants transported to surface water • Petroleum, heavy metals, and other pollutants transported to groundwater
		Salt losses to water	• Salts transported to surface water • Salts transported to ground water
AIR	Air Quality	Air quality emissions	• Emissions of particulate matter (PM) and PM precursors • Emissions of greenhouse gases - GHGs • Emissions of ozone precursors • Objectionable odor • Emissions of airborne reactive nitrogen

NRCS Resource Concerns (continued from page 2)

SWAPAE+H	CATEGORY	SUB-CATEGORY	RESOURCE CONCERN
PLANT	Plant Condition	Pest pressure Degraded plant condition Fire management	• Plant pest pressure • Plant productivity and health • Plant structure and composition • Wildfire hazard from biomass accumulation
ANIMAL	Livestock Production	Livestock production limitation	• Feed and forage balance • Inadequate livestock shelter • Inadequate livestock water quantity, quality and distribution
	Habitat for Fish and Wildlife	Terrestrial habitat Aquatic habitat	• Terrestrial habitat for wildlife and invertebrates • Aquatic habitat for fish and other organisms • Elevated water temperature
ENERGY	Energy Efficiency	Inefficient energy use	• Energy efficiency of equipment and facilities • Energy efficiency of farming/ranching practices and field operations
HUMAN	Land use, labor, capital, management level, profitability, risk, public health and safety, or others. Note: Human concerns are considered in the NRCS planning process, but a human concern by itself it not eligible for financial assistance from NRCS.		

Contact NRCS

North Team
District Conservationist: Elizabeth Bezinque
Email: Elizabeth.Bezinque@usda.gov

- Fairbanks: 907-251-9227
- Delta Junction: 907-895-4241

West Team
District Conservationist: Meg Mueller
Email: Meg.Mueller@usda.gov

- Kenai: 907-283-8732
- Homer: 907-235-8177
- Kodiak: 907-486-5598

Central Team
District Conservationist: Troy Hildreth
Email: Troy.Hildreth@usda.gov

- Wasilla: 907-373-6492

Southeast Team
District Conservationist: Samia Savell
Email: Samia.Savell@usda.gov

- Juneau: 907-586-7220