# Conservation Planning with the NRCS

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# Background

- Soil Conservation Service (SCS) was formed from the aftermath of the dustbowl.
- Our Motto: "Helping People Help the Land."
- Our Mission: Deliver conservation solutions so that agricultural producers can protect natural resources and feed a growing world.
- Our Vision: A world of clean and abundant water, healthy soils, resilient landscapes, and thriving agricultural communities through voluntary conservation.

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# **NRCS** Conservation Planning

### PHASE 1 Collection & Analysis Identify Problems Analyze **Determine** Resource **Objectives** Data Inventory Resources

- 1. Identify Problems and Opportunities
- 2. Determine Objectives
- 3. Inventory Resources
- 4. Analyze Resource Data



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# Typical timeline – Phase 1

#### Contact NRCS

 Identify objectives, existing conditions, and resource concerns with field staff.

#### Site visit

- Address concerns as discussed and additional concerns seen in the field.
- Resource Management System
  - Identifying and evaluating all resource concerns present on site.
- May pull in other specialties if needed:
  - Engineering, biology/wildlife, forestry, soils, agronomy, etc.

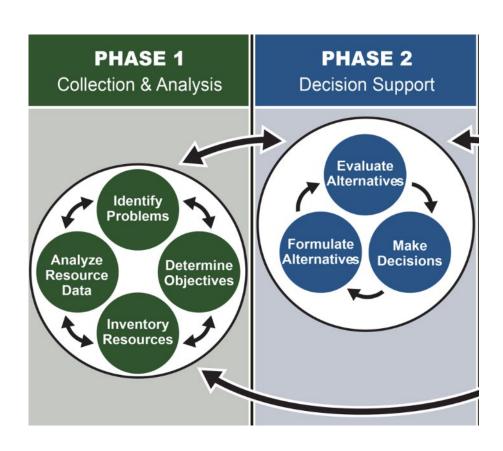








# **NRCS Conservation Planning**



- 5. Formulate Alternatives
- 6. Evaluate Alternatives
- 7. Make Decisions



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# Typical timeline – Phase 2

- Develop alternatives
  - · Meet core objectives and resource concerns
  - May pull in other specialties if needed:
    - Engineering, biology/wildlife, forestry, soils, agronomy, etc.
- Present alternatives
  - Resource Management System
    - Present alternatives that address all resource concerns, select options that are feasible
  - Evaluate alternatives in context of feasibility and/or effect on other resource concerns
    - NEPA/Cultural Resources
    - Permits
  - Deliver draft plan map, plant lists, engineering designs, estimated project cost, etc.

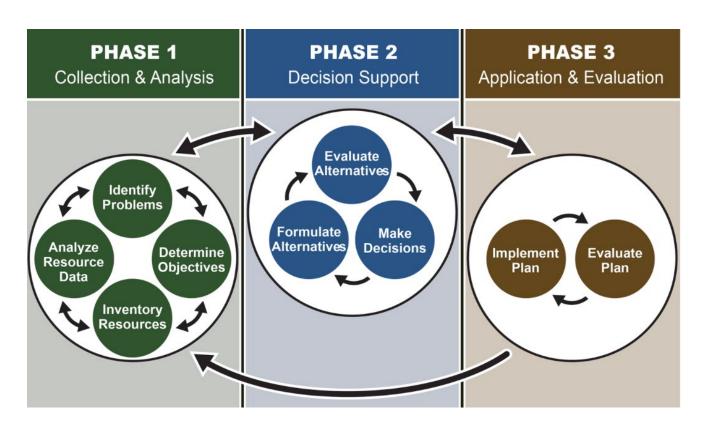




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# **NRCS** Conservation Planning



- 8. Implement Plan
- 9. Evaluate Plan

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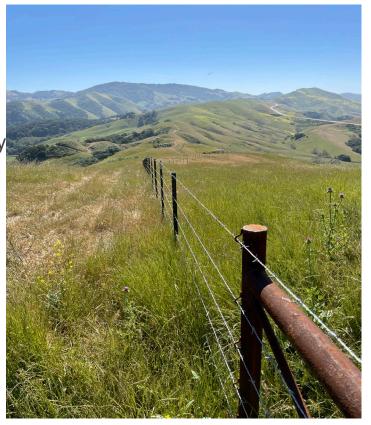
# Typical timeline – Phase 3

#### Implement plan

- NRCS provides completed designs and implementation requirements (i.e. practice specifications).
- Client is responsible for obtaining necessary permits, implementing planned practices.

#### Evaluate plan

- Resource Management System
  - Revisit remaining resource concerns (RC)
  - Plan for future project to address remaining RC's
- Long term viability of conservation plan is dependent on continued operation, maintenance, and evaluation by producer.





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# **Conservation Programs**



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# **Environmental Quality**Incentives Program

- NRCS' flagship program for helping producers apply conservation practices on their land
- Provides financial and technical assistance to address natural resource concerns
- Benefits include:
  - Improving air, soil and water quality
  - Conserving water
  - Preventing soil erosion
  - Enhancing wildlife habitat
  - Mitigating impacts from climate change
- NRCS accepts applications year-round. State specific ranking dates can be found at <u>www.nrcs.usda.gov/staterankingdates</u>
- In fiscal year 2021, NRCS invested \$1.26 billion to help producers implement conservation practices on 11.6 million acres

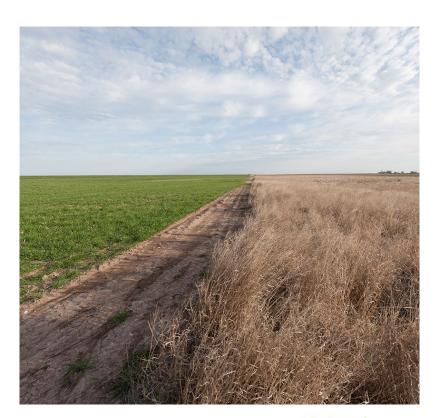


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# Conservation Stewardship Program

- Nation's largest conservation program in terms of numbers of acres
- Helps producers take their conservation activities to the next level
- NRCS accepts applications year-round. State specific ranking dates can be found at www.nrcs.usda.gov/staterankingdates
- In fiscal year 2021, NRCS invested \$513.6 million to help producers implement conservation practices on 9.8 million acres



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# Agricultural Conservation Easement Program

- Aids landowners and eligible entities with conserving, restoring and protecting wetlands, productive agricultural lands and grasslands
- Footprint of more than 5 million acres
- Two types:
  - Wetland Reserve Easements
  - Agricultural Land Easements
- NRCS accepts applications year-round. State specific ranking dates can be found at www.nrcs.usda.gov/staterankingdates
- In fiscal year 2021, NRCS invested \$230.5 million in 361 new easements, enrolling 197,734 acres



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# Conservation Reserve Program

- Key conservation program offered by FSA that provides yearly rental payments for farmers who maintain conservation for 10 to 15 years
- In exchange for a yearly rental payment, farmers remove environmentally sensitive land from agricultural production and plant cover species that will improve environmental health and quality
- Benefits of establishing cover:
  - Help improve water quality
  - Prevent soil erosion
  - Create wildlife habitat
  - Mitigate impacts of climate change



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## **Conservation Innovation Grants**

- Competitive grant program that supports the development of new conservation tools, approaches, practices and technologies
- These innovations also help build resilience in producers' operations and improve their bottom lines
- All non-Federal entities and individuals are eligible to apply
- In fiscal year 2021, NRCS is investing up to \$25 million in CIG projects



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# Regional Conservation Partnership Program

- Partner-driven approach to voluntary conservation that funds solutions to natural resources challenges
- Leverages \$1 for every \$1 invested by USDA
- Eligible entities include private industry, non-government organizations, Indian tribes, state and local governments, water districts and universities
- RCPP stats:
  - \$330 million invested in 85 projects in fiscal year 2021
  - \$75 million to be invested in additional alternative funding arrangement projects in fiscal year 2021



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# Conservation Practices



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## **Conservation Practices**

- Land and crop management choices that producers can implement to conserve natural resources
- About 170+ conservation practices available through NRCS programs
- Practices often work in systems
  - For example, fencing is often used in concert with prescribed grazing
- Each practice has a conservation practice standard, which details how producers should implement to maximize benefits
  - These standards are available on the Electronic Field Office Technical Guide, available on nrcs.usda.gov



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## **Conservation Concerns Tool**

- Launched in November 2020 to help producers learn about conservation issues that might impact their agricultural operation
- Helps producers identify targeted solutions that best fit their business needs
- Provides a walkthrough of more than 40 conservation concerns related to soil, water, plants, animals, energy, and air
- Available at farmers.gov

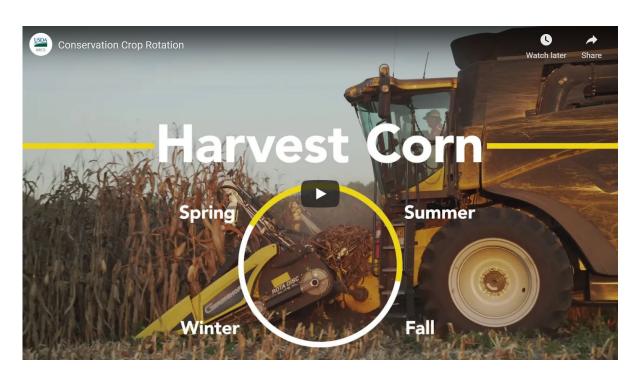


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## Conservation at Work Video Series

- 90-second video series to hear directly from farmers, ranchers, and forestland owners about their conservation practices
- Available at farmers.gov



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# Benefits of Voluntary Conservation on Agricultural Lands



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## Soil Health

- Healthy soil is the foundation of productive, sustainable agriculture
- Benefits of soil health management systems:
  - Reduce erosion
  - Maximize water infiltration
  - Improve nutrient cycling
  - Save money on inputs
  - Improve resiliency
- Principles to improve soil health:
  - Minimize disturbance
  - Maximize soil cover
  - Maximize biodiversity
  - Maximize presence of living roots
- Key practices include:
  - No-till
  - Cover crops
  - Rotational grazing
  - Crop rotation



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# Water Quality

- All land is in a watershed, meaning what happens on the land impacts water quality
- USDA offers programs and practices that help farmers improve water quality while gaining efficiencies and reducing costs
- Practices focus on avoiding, trapping and controlling nutrients and sediment
- Managing water quality:
  - Fight erosion
  - Enhance management
  - Improve filtration
  - Manage animal waste
- Key practices include:
  - Cover crops
  - Grassed waterway
  - No-till



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# Water Quantity

- Agriculture is one of the largest users of water
- Producers can manage excess water, conserve limited supplies of water, and build resilience to mitigate drought
- Managing water quantity:
  - Control drainage
  - Improve irrigation infrastructure
  - Improve water supply
  - Improve moisture management
- Key practices include:
  - Irrigation water management
  - Pumping plant
  - Micro-irrigation



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## Wildlife

- America's privately-owned farms, ranches, and forests don't just provide us with food and fiber—they also support lots of wildlife
- USDA offers practices to help producers integrate wildlife friendly practices on croplands, rangelands, pastures and forests
- Key practices include:
  - Brush management
  - Prescribed or rotational grazing
  - Forest stand improvement
  - Wetland restoration



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# Climate-Smart Agriculture and Forestry

- Agricultural producers play a key role in mitigating climate change
- Benefits of climate-smart practices
  - Conserve natural resources
  - · Build healthier soils
  - Sequester carbon
  - Reduce greenhouse gas emissions, including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O)
- Focus areas include:
  - Soil health
  - Nitrogen stewardship
  - Livestock partnerships
  - Conservation of sensitive lands
  - Grazing and pasture lands
  - Private forest growth and retention



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# Investing in Small and Urban Farms in California In Fiscal Year 2023:

NRCS California invested \$46.5 million to farmers growing specialty crops

- \$9.4 million went to Beginning Farmers
- \$21.9 million went to Socially Disadvantaged **Farmers**
- \$875,000 went to Limited Resource Farmers



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# National USDA Support for Urban Farmers

#### Office of Urban Agriculture and Innovation Production

- Urban Agriculture and Innovation Production Grant
  - Investing \$5.2 million in grants recipients in FY24
  - Building on \$46.8 million invested in projects since 2020
- Compost and Food Waste Reduction Cooperative Agreement
- People's Garden Initiative



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