USDA

United States Department of Agriculture

Technical and Financial Assistance Programs

Denise Coleman, State Conservationist

Natural Resources Conservation Service

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Private Lands and Conservation

- 70 percent of the land (1.4 billion acres) in the lower 48 States is owned by private landowners
- 88 percent of all surface water falls on private land before reaching lakes, streams, and groundwater aquifers
- The conservation health and productivity of private lands depends on the millions of individual decisions landowners make every day

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Private Lands in Pennsylvania
Some Facts

- Six of every seven acres of land in PA is in private ownership.
  - 54% of the Commonwealth's lands are in forest; 70% of these lands are in private forests
    - 600,000 private landowners own 17 million acres of forestland, with 63% of these landowners owning between 1 and 10 acres
  - 38% of the Commonwealth's lands are in cropland, pasture, hay, and CRP
    - There are 59, 309 farms in PA, covering over 7.7 million acres.
    - Agriculture provides 1 in 7 jobs in PA
    - 98% of the farms are family owned

NRCS Conservation Values

1. Conservation Work is **VOLUNTARY** Work
2. **Science** is the foundation for voluntary conservation on private lands.
3. Our conservation assistance is **site-specific**.
4. Natural resource concerns cannot be treated in isolation. We must use a **systems approach**.

Dr. Hugh H. Bennett
First Chief of SCS

5. Coordinated action should be encouraged on a **watershed or landscape scale.**
6. **Local leadership and partnerships** are critical to success.

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Evolution of Conservation Technical Assistance

1914 to 1935 – Pre-Soil Conservation Service

- USDA experimental work and demonstrations in selected States, but no program of direct technical assistance to farmers and ranchers to conserve soil and water

1935 – Formation of the Soil Conservation Service (SCS)

- The original focus of SCS was on education and demonstration projects, with a goal of 350 demonstrations by 1944, the 1935 Act transformed the Agency from a temporary workforce to a permanent workforce available nationwide

1937 – Formation of the Soil and Water Conservation Districts

- SCS found that most farmers and ranchers needed local leadership and direct technical assistance to develop and execute conservation plans; most farmers could not lay out terraces, contours, outlets, gully plugs, and other more or less permanent conservation measures
- "What SCS needed was a representative who could walk over a man's (or woman's) land with him (or her), lay out a conservation plan, and come back to help him (or her) install the more difficult practices and structures." (R. J. Morgan, 1966)

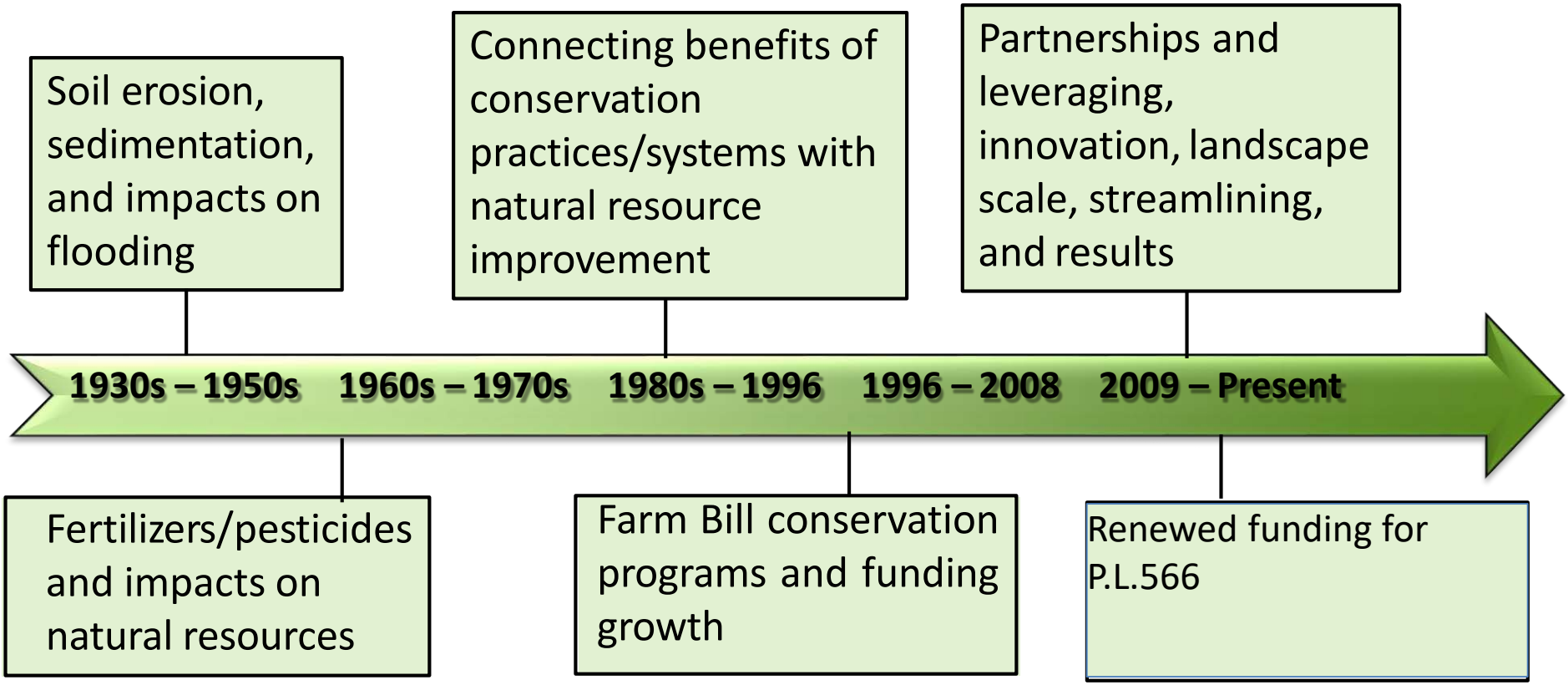
1994 – Renaming of SCS to the Natural Resources Conservation Service

- The SCS was renamed the Natural Resources Conservation Service (NRCS) to better reflect the broad scope of the agency's mission of addressing the conservation of soil, water, air, plants, and animals

Formation of the Soil and Water Conservation Districts and NRCS—a local team working together

- After the 1935 Act was implemented, some people began to examine the best approach to get farmers interested in soil conservation. The most prominent individual was then Asst Secretary, Milburn Wilson. Wilson conceived of the conservation district, a subdivision of the state that the local people would organize for the district and spread the word of soil conservation.
- Henry Wallace and FDR endorsed this concept and transmitted the Standard State Soil Conservation Districts Law to governors of the states on February 27, 1937.
  - Arkansas was the first to pass the law.
  - Brown Creek Soil Conservation District in NRC was the first to sign an agreement with NRCS for technical assistance and equipment.
- "What SCS needed was a representative who could walk over a man's (or woman's) land with him (or her), lay out a conservation plan, and come back to help him (or her) install the more difficult practices and structures." (R. J. Morgan, 1966)

NRCS Conservation Technical Assistance Through the Decades



What does NRCS do?

Provides conservation expertise to farmers and ranchers through a nationwide, locally-led delivery system to guide their wise use and management of natural resources for agricultural productivity, economic returns, and sustained conservation benefits. Our locally led leaders are Conservation District Board Members.

What does NRCS do?

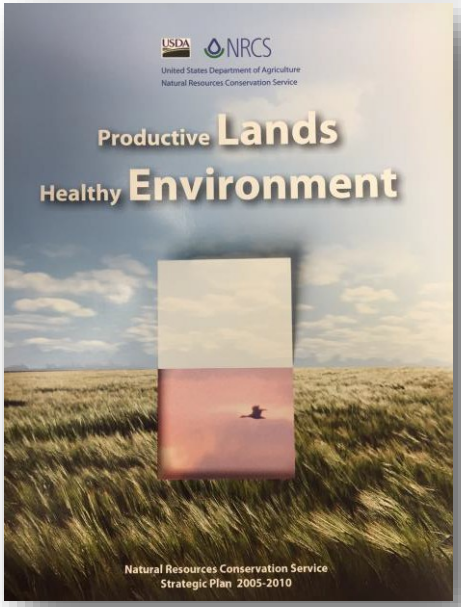
Delivers practical, site-specific solutions based on sound science and proven research that produces on-farm results and off-farm public benefits, such as clean water, safe air, and healthy plant and animal populations

The foundation is NRCS's experienced and capable technical staff who can help the farmer or rancher weave together conservation practices into a system where the whole has greater benefit than the sum of the parts.

The statutory authority to provide conservation technical assistance is derived from the Soil Conservation and Domestic Allotment Act of 1935 (P.L. 74-46; 16 U.S.C. §590 et seq.)

What NRCS Business Lines Does the CTA Program Support?

- Conservation Planning and Technical Consultation
- Conservation Implementation
- Natural Resource Inventory and Assessment
- Natural Resource Technology Transfer
- Financial Assistance



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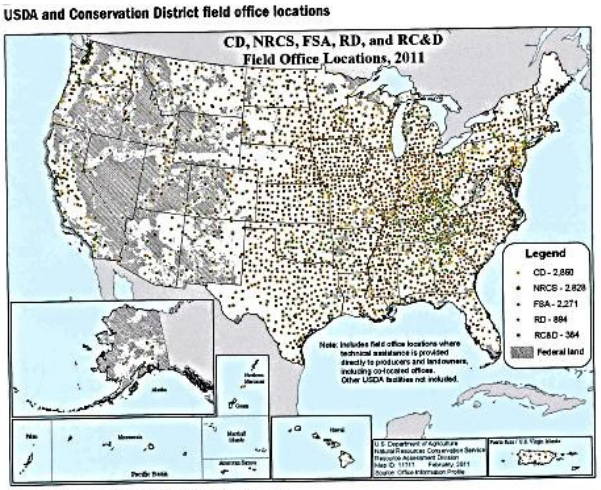
What Technical Capacity and Infrastructure Does the CTA Program Support?

- **Technical Specialists Across Many Disciplines – Salaries, Benefits, Awards, and Travel**
- **Technical Training for Specialists**
- **Technical Standards, Processes, Tools, and Technology Transfer**
- **Technical Quality Control and Oversight**
- **Infrastructure to Support Technical Specialists – Appropriate Share of Costs for Office Space, Vehicles, Information Technology, and Equipment**



Source: USDA Office Information Profile, February 2011

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How is the CTA Program Related to the Conservation Operations Account?

Conservation Technical Assistance (CTA) Program funding is provided within the Conservation Operations Account

Components of Conservation Operations account include (FY 2019 funding level):

- CTA Program ($725 million)
- Soil Survey Program ($74.6 million)
- Snow Survey and Water Supply Forecasting Program ($9.4 million)
- Plant Materials Centers ($9.4 million)
- Watershed Projects ($150 million)

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CTA Program Resources Leveraging

How are CTA Program resources leveraged with partners to strengthen delivery of on-the-ground conservation?

- **Agreements with Partners for technical services, outreach, recruitment, training, technical tools, etc.**
  - **Cooperative Agreements (competitive)**
  - **Contribution Agreements (50/50 sharing of costs)**
- **Share NRCS office space, computers, equipment, and vehicles with partner employees in exchange for technical and support services in 22 locations**
- **Engineering Job Approval Authority for 56 District employees**

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What are the Primary Conservation Results of the CTA Program? (On-Farm/Ranch and Off-Site)

- Reduce soil loss from erosion
- Solve water quality, water conservation, air quality, and agricultural waste management problems
- Reduce potential damage caused by excess water and sedimentation or drought
- Enhance the quality of fish and wildlife habitat
- Improve the long term sustainability of all lands, including cropland, forestland, grazing lands, coastal lands, and developed and/or developing lands
- Assist others in facilitating changes in land use as needed for natural resource protection and sustainability

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What Benefits Does Voluntary Conservation Provide?

- Improved agricultural production levels (less dependence on foreign products; more quantity and quality to export)
- Improved economic bottom line of the farmer/rancher
- Improved efficiency and effectiveness of on-farm/ranch operations
- Marketing advantages for food and fiber produced in a sustainable manner
- Community economic impacts and agricultural viability
  - Job equivalents
  - Use of local land improvement contractors
  - Purchase of materials for conservation practices/systems
- Social and cultural (rural America, family farm, historically underserved)
- National food security

Program	Federal Cost (Billion $)	Total Jobs Per Year
Financial Assistance (Payments Made)	2.099	33,786
Technical Assistance	1.556	29,924
Total	3.655	63,710 (Includes 10,566 NRCS jobs)

Source: Impact Analysis for Planning Model

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Modeled Result: FY2016 NRCS financial assistance payments and technical assistance funds accounted for the equivalent of 53,144 jobs, in addition to NRCS staff.

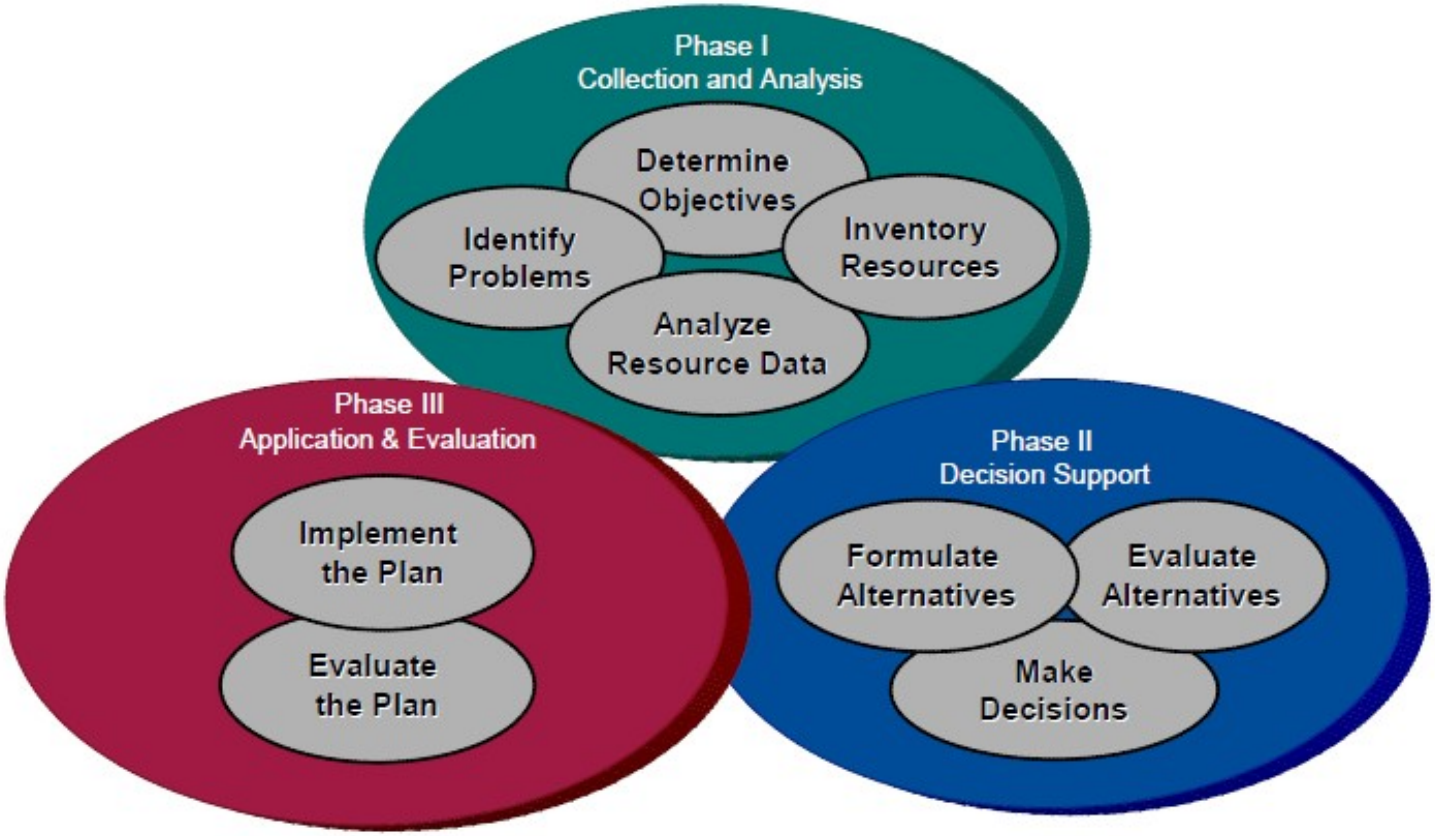
Conservation Planning

Focus of Conservation Planning = Conservation Systems

At its core, the focus of conservation planning is on increasing voluntary adoption of:

- Right conservation systems
- Right integration into the landscape
- Right amount/extent
- Right timing and sequencing of practice/system implementation (progressive implementation)

What are the 9 Steps of Conservation Planning?



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Why Is Conservation Planning An Essential Competency?

- Combines art and science; a proven process, supported by experienced technical specialists
- Decision-maker is the farmer or rancher – the one with the personal stake in the outcome
- Recognizes that natural resource concerns cannot be treated in isolation – soil, water, air, plants, animals, and humans are all part of an integrated ecosystem with interdependencies
- Components that conservation planners factor in:
    - Farmer's/Rancher's objectives
    - On-site effects and off-site impacts
    - Alternative solutions that are practical and fit the operation – not a prescription of Best Management Practices (BMPs)
    - Economic considerations (costs/benefits)
    - Adaptive management; a living document to adjust to changing conditions, technologies, and lessons learned

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"There is no virtue in planning merely for the sake of planning. Unless plans can be translated into action, planning becomes a profitless mental exercise."

Hugh Hammond Bennett, 1939

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Conservation Plans Developed and Applied

Average Acres and Numbers per Fiscal Year
FY 2011 through 2016

FY 2011 through FY 2018			
Planned		Applied	
Number	Acres	Number	Acres
74,202	25,166,954	74,902	24,899,220

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Voluntary Incentives-based Conservation on Private Lands

Conservation Technical Expert

Conservation Technical Infrastructure (FOTG, Tech Processes, Tools, and Training)

Conservation Plan (through CTA) – "Combining Art and Science"

- Site-specific, not prescriptive BMPs
- Based on Farmer/Rancher objectives and needs
- Considers all natural resources, economics, and farm operation needs
- Flexible scale (e.g. one field or entire operation)
- Goal is a system of conservation practices because synergies are greater and results are more impactful when practices are combined.

Address Concerns and Opportunities		Maintain and Improve	Rest	Retire
Without FA (CTA only)	With FA (e.g. EQIP) and CTA	HFRP ACE Easement CSP	CRP	WRE Easement
Farm Bill Working Lands Programs			Farm Bill Reserve Programs	

Results (Outcomes) – Enhanced Agricultural and Forest Production, plus:

- Clean Water and Air
- Healthy Soils, Plants, and Habitat/Wildlife
- Conserved Energy Resources
- Strategic Future Ability to Feed the Nation (Sustainability)
- Improved Farm Economics (Less Inputs and Greater Operational Efficiency and Production

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Financial Assistance

Cost-Share Programs

Agricultural Management Assistance Act: primarily focused on irrigation and risk reduction practices approximately $500K

Environmental Quality Incentives Program: conservation practices applied on cropland, pasture, farmsteads and forest $24.6 million

Regional Conservation Partnership Program: Uses EQIP and ACEP, partners leverage technical and financial assistance funds $9.9 million

Easement Programs

Agricultural Land Easement Program: Farmland Protection Easements, and grassland protection easements $1.5 million

Wetlands Reserve Easement Program (a component of ALE): restores wetlands $732,152

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