

The U.S. Department of Agriculture's Role in Voluntary Conservation on Private Lands

Conservation Planning Chronology

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INTRODUCTION

Purpose:

To provide a brief chronology of key developments in America's private lands conservation movement as directly related to, or relevant to, conservation planning and its evolution, including areawide conservation planning. This chronology is not all inclusive, has a strong USDA focus, and is only intended to provide a high-level overview of this journey over roughly nine decades.

Source:

The abbreviated items listed below were derived principally from the following document - "The U.S. Department of Agriculture's Role in America's Private Lands Conservation Movement: Chronology of Key Developments - 1933 Through 2019", Thomas W. Christensen, U.S. Department of Agriculture, January 1, 2020.

Definitions of Headings in the Context of this Chronology:

<u>Capacity</u>: Items relate directly to increasing the capacity of technical assistance available to:

- 1. Assist farmers and ranchers with site-specific conservation planning and implementation, and
- 2. Assist local governments, organizations, and groups with areawide planning and associated decision-making processes.

Partnerships: Items relate to partnerships to further private lands conservation, with a strong focus on NACD, NASCA, NCDEA, NARC&DC, and NRCS.

Policy: Policy is used in the broadest sense in this document, inclusive of legislation, Executive Orders, Departmental/agency memorandums, and other influences that all result in policy related to conservation planning and conservation technical assistance.

Professional Development: Items are specific to the development of the conservation knowledge and skills of the professional conservationists and supporting technical staff.

Technical: Items pertain to technical guidance, technologies and tools, and information technology systems that support conservation technical assistance, including site-specific and areawide conservation planning.

What is Absent from this Chronology?

As a high-level chronology, this is not an authoritative document about the evolution of site-specific nor areawide conservation planning in support of America's private lands conservation movement. It is intended as a quick reference, with greater explanation often found in the January 1, 2020 source document ("The U.S. Department of Agriculture's Role in America's Private Lands Conservation Movement - A Chronology of Key Developments - 1933 Through 2019").

There is no doubt that many developments directly related to or relevant to site-specific and areawide conservation planning are absent or underrepresented in this document. These developments are absent or underrepresented because there are too many of them to reasonably capture, adequate historical information is not available, or a specific development is well documented in many other readily available sources and/or well known to today's private lands conservation community. The developments with limited or no mention include, but are not limited to:

- Organizational changes and reorganizations,
- Farm Bills and conservation programs changes,
- Conservation budgets and their changes,
- Staffing levels and changes, and
- Conservation results and outcomes.

Areawide conservation planning (inclusive of watershed and landscape-scale planning) is defined in the NRCS National Planning Procedures Handbook as a "plan with a client for a watershed or other geographic area as defined by the client or stakeholders. The areawide conservation plan addresses all resources identified , contains alternative solutions that meet the minimum planning criteria for each resource, and addresses applicable laws and regulations."



Thoman W. Clistena

THOMAS W. CHRISTENSEN U.S. Department of Agriculture, Retired February 13, 2020

<u>1933</u>

<u>Policy</u>

Watershed demonstration projects initiated by the USDI Soil Erosion Service (SES), with Civilian Conservation Corps labor.

- Farmers and ranchers sign five-year agreements to implement conservation measures.
- Introduction of areawide conservation planning in large watershed demonstration projects of 25,000 to 300,000 acres in size.
 - Alignment of watershed boundaries was intended to show the cumulative effects of soil conservation, including flood prevention.

<u>1935</u>

<u>Policy</u>

New Soil Conservation Service (SCS) sought to bring technical assistance to <u>all</u> farmers and ranchers, not just those in select watershed demonstration projects.

• Focus was to help farmers and ranchers assess, plan, and implement conservation measures.

<u>Technical</u>

SCS emphasized the "soil conservation survey" as the basis for conservation planning for farms and ranches.

• "Soil conservation surveys" mapped four factors: soil erosion, land use, slope, and soil type. (Discontinued in 1952 as soil surveys became more available.)

<u>1936/1937</u>

<u>Policy</u>

Omnibus Flood Control Act of 1936 (amended in 1937) was the first stage of federal legislation to help local governments, organizations, and groups bridge the gaps between conservation work on individual farms and ranches and the downstream flood control work of the U.S. Army Corps of Engineers.

• This Act signaled for the first time that it was a proper role for the federal government to assist with the planning and implementation for the conservation measures to slow excessive runoff and control erosion in watersheds for flood control.

<u>1937</u>

<u>Policy</u>

"Standard State Soil Conservation District Law" sent to Governors from President Franklin D. Roosevelt.

- First State soil conservation district law enacted by Arkansas (March 3, 1937)
- First soil conservation district organized in North Carolina on August 3, 1937 (Brown Creek).

<u>Technical</u>

First soil survey manual published, providing the major principles and practices for making and using soil surveys.

<u>1939</u>

Technical

Procedures for developing land capability classes (LCCs) released by SCS. LCC maps contained sufficient detail to streamline the erosion control planning and application process.

<u>1940</u>

<u>Technical</u>

Efforts initiated to develop a soil-loss estimating procedure for the Corn Belt, which was the forerunner to the Universal Soil Loss Equation (USLE).

<u>1941</u>

Professional Development

First meeting of the Soil Conservation Society of America held in Chicago, Illinois to create a professional society to advance the art and science of the relatively new profession of soil and water conservation.



<u>Policy</u>

- SCS watershed demonstration projects closed down. Emphasis now placed on providing SCS technical assistance to farmers and ranchers who cooperated with soil and water conservation districts.
- The Flood Control Act of 1944, further amended the Act of 1936, and authorized USDA to install watershed improvement measures in eleven upstream watersheds based on surveys and reports completed under the original 1936 Act. These eleven watersheds became the predecessors of the small watershed projects authorized by the Agricultural Appropriations Act of 1953 and the Watershed Protection and Flood Prevention Act of 1954.



<u>Policy</u>

- Water conservation and utilization officially became a part of SCS's responsibility.
- SCS policy established: "Hold administrative and overhead costs in all offices to the minimum consistent with efficient management, in order that the greatest possible part of resources provided to the service may be available for work on the land."

<u>1946</u>

Partnerships

Conservation district representatives form the National Association of Soil Conservation District Governing Officials, predecessor to the National Association of Conservation Districts.

<u>1948</u>

<u>Partnerships</u>

On-farm conservation demonstration conducted that involved applying conservation systems on the Thrasher Farm, Frederick County, Maryland, with over 40,000 people attending. Twenty of these on-farm demonstrations attracting large audiences were held across the U.S. in the late 1940s.

<u>1949</u>

<u>Policy</u>

County agricultural conservation committees (with State Committee approval) are authorized to provide up to 5 percent of ACP funds to SCS for technical assistance related to ACP.

<u>1950</u>

Partnerships

The Land Improvement Contractors of America (LICA) was formed in response to the growth in specialized contractors for the installation of farm and ranch conservation works of improvement.

<u>1951</u>

<u>Policy</u>

- Secretary of Agriculture's Memorandum 1278 declares: "The basic physical objective of soil conservation activities by Department agencies shall be the use of each acre of agricultural land within its capabilities and the treatment of each acre of agricultural land in accordance with its needs for protection and improvement."
- SCS made the land-capability concept the foundation of its "complete" conservation plan approach. SCS believed that separate, unrelated conservation practices would not accomplish the objectives of soil and water conservation effectively nor efficiently.
- "Progressive planning" was officially adopted by SCS. The new procedure consisted of three stages to enable farmers and ranchers to start gradually and move progressively into well-rounded conservation systems.

<u>1954</u>

<u>Policy</u>

The Watershed Protection and Flood Prevention Act of 1954 created a permanent nationwide small watershed program to help local communities willing to protect, improve, and develop watersheds. The small watershed program was unique among federal water resources programs in that it was an "assistance program" - - all actions eligible under this program had to be initiated by local people and sponsors. Decisions were local within the constraints and parameters of the program.

<u>1955</u>

<u>Policy</u>

Administrator's Memorandum SCS-72 placed in SCS policy how technical staff was to carry out its technical responsibilities for the Agricultural Conservation Program (ACP).

<u>1956</u>

<u>Policy</u>

- Administrator's Memorandum SCS-81 further clarified Memorandum SCS-72 (1955) calling for SCS to develop and use technical standards to design and implement permanent conservation measures under ACP. This became the origins of the Field Office Technical Guide, now in its fifth revision as of September 19, 2019.
- The Great Plains Conservation Program is enacted, introducing the concept of a single voluntary agreement that included technical and financial assistance for the entire ranch or farm.

Policy and Technical

SCS began emphasizing conservation cropping systems in lieu of crop rotations to call attention to the interrelationships of individual conservation practices to treating cropland.

<u>1962</u>

<u>Policy</u>

Secretary of Agriculture Orville L. Freeman proposes the concept of multiple uses for private lands to aid in land-use adjustments during the White House Conference on Conservation.

Policy and Partnerships

The Food and Agriculture Act of 1962 gave the Secretary of Agriculture authority to establish locallysponsored, multi-county Resource Conservation and Development (RC&D) project areas and SCS was delegated the responsibility to administer the RC&D Program. Among the major objectives of the RC&D Program was to develop and improve the capabilities of local governments and nonprofit organizations serving rural areas to develop a planning and decision-making process and record the decisions in an RC&D Area Plan.

<u>1965</u>

<u>Technical</u>

A wind erosion equation (WEQ) was published for use and adopted by SCS, along with the previously released USLE, as tools to aid planning conservation systems.

<u>1970</u>

Policy

The National Environmental Policy Act (NEPA) becomes law and declares that it is the policy of the federal government to use all practicable means to create and maintain conditions under which people and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations of Americans. The complexity of conservation planning increases as a result.

<u>1972</u>

<u>Policy</u>

The Federal Water Pollution Control Act (Clean Water Act) of 1972 is authorized requiring a process to identify agricultural- and silvicultural-related nonpoint sources of pollution and procedures to control these sources. The Clean Water Act and NEPA provide a legal basis for incorporating biological and chemical concerns in watershed-based planning related to agricultural lands.

<u> 1973</u>

<u>Policy</u>

- The ACP was renamed the Rural Environment Conservation Program (RECP), with agreements contingent upon a conservation plan approved by the conservation district. RECP was established in recognition of the new awareness in Congress of environmental manners. Just a year later, in 1974, RECP was renamed back to the original ACP.
- SCS discontinued providing technical assistance for the drainage of specified wetlands, as defined by the USDI Fish and Wildlife Service. This policy was broadened in 1975 to include nearly all freshwater and saline-water areas.

<u> 1977</u>

Policy and Technical

The Rural Clean Water Program (RCWP) was established through the amended Clean Water Act of 1977, enabling USDA through SCS to establish a program to control nonpoint source pollution through conservation systems in experimental watersheds. RCWP provided SCS and its partners a view into the complex scientific, economic, and social issues related to the movement of materials through and over the soil to water bodies.

<u>Policy</u>

Congress passed the Soil and Water Resources Act (RCA) of 1977 to conserve, protect, and enhance the Nation's natural resources for future uses. Combined with the Consolidated Farm and Rural Development Act of 1972, the SCS was directed to assess the status, conditions, and trends of soil, water, and related natural resources on non-federal lands. These assessments have been used as a basis for the improvement and for planning further conservation legislation, programs, and activities.

<u>1985</u>

Policy and Capacity

The Food Security Act of 1985 (1985 Farm Bill) introduced Conservation Compliance, Sodbuster, Swampbuster, and the Conservation Reserve Program into mainstream agriculture, which had an "earthquake like" impact to the agricultural community, SCS, conservation districts, and other partners. SCS, in particular, struggled for years thereafter to meet the workload demands, new complexities, and sometime controversies related to helping producers meet the intent of this legislation. In many field locations, the workload demands were so pressing that no time was available for years to come to develop complete conservation plans.

<u>1988</u>

Policy and Technical

SCS Chief Wilson Scaling established policy on the use of alternative conservation systems in the context of Highly Erodible Lands under the Food Security Act of 1985. The development and use of alternative conservation systems was recognition by SCS that the applicable conservation system should be designed to achieve substantial reductions in soil erosion - - but take into account consideration of economic and technical feasibility and other resource factors.

<u>Technical</u>

The Computer Assisted Management and Planning System (CAMPS) was delivered to SCS field offices for use. CAMPS streamlined and automated certain clerical and administrative tasks and included GIS to support more flexible conservation planning concepts using a systems approach.



<u>Technical</u>

- The Water Erosion Prediction Project (WEPP) model is officially introduced by ARS for predicting rill and interrill soil erosion and deposition.
- The Grazing Land Application (GLA) was released to SCS personnel to aid the improved planning and management of pasture and rangeland, providing a tool to carry out "what if" assessments using different scenarios.

<u>1991</u>

Partnerships -

The Grazing Lands Conservation Initiative (GLCI) - now called the National Grazing Lands Coalition (NatGLC) was established to foster the maintenance and improvement of the management, productivity, and the health of the Nation's privately-owned grazing land.

<u>1992</u>

<u>Technical</u>

The Revised Universal Soil Loss Equation (RUSLE) was introduced to replace the USLE, providing significant improvements across seven major elements in the formula and a computer program.

<u>1993</u>

Policy and Technical

The first version of the National Planning Procedures Handbook (NPPH) was released by SCS. The Handbook was amended in 1996, 1997, 2003, 2010, and 2014. The NPPH provides guidance on the planning process NRCS now uses to help decision-makers develop, implement, and evaluate conservation plans for individuals and areawide plans or assessments for local governments, organizations, and groups.

<u>1994</u>

<u>Technical</u>

- NRCS deployed the Field Office Computing System (FOCS) to replace the legacy CAMPS. FOCS contained client information, resource inventory data, conservation plans, and conservation contracts. It also contained at least six companion applications, such as RUSLE.
- NRCS deployed the National Soil Information System (NASIS), which automated the management of and access to soil survey data.
- NRCS deployed PLANTS, the first agency internet web application with public access to the taxonomic and distribution data on the plants of the U.S., and the attributes of conservation plants.

<u>1995</u>

Policy and Partnerships

A regional workshop on "whole farm planning" was held in St. Louis, Missouri to discuss and debate perspectives on whole-farm conservation planning to better serve the farmer/rancher and the resource base.

<u>1997</u>

Policy and Technical

NRCS released "Future Directions: A Vision of Information Technology for Field Conservationists" to provide a holistic, business-based, user-friendly approach to the strategic use of information technology to return field conservationists to work hand-in-hand with farmers and ranchers on their conservation needs.

<u>1998</u>

<u>Technical</u>

The use of FOCS by NRCS was discontinued to reduce the significant burden on field employees that hindered their ability to work on the backlog of priority conservation work because they were office-bound by the intensive data-entry requirements of the system.

<u>1999</u>

<u>Policy</u>

NRCS enters into the first of five MOUs with the Certified Professional Soil Scientists and the Certified Professional Agronomists to become certified organizations that facilitated the use of "third-party vendors" in carrying out USDA conservation programs - - from conservation planning to practice implementation.

<u>2000</u>

Technical

NRCS released the first version of the Customer Service Toolkit as a limited pilot for field conservationists to use for customer case management and conservation plans. The application integrated ESRI ArcView GIS software and Microsoft Outlook/Office tools. Full deployment was on December 1, 2000.

Policy and Technical

NRCS released the "Comprehensive Nutrient Management Planning (CNMP) Technical Guidance" to assist livestock and poultry producers to develop and implement CNMPs to address water quality concerns. This policy and technical guidance was contained in the NRCS National Planning Procedures Handbook.

<u>2001</u>

<u>Technical</u>

NRCS brought the Geospatial Resource Data Gateway on-line. This web application provided a "one-stop" shop for environmental and natural resources data, at any time, from anywhere, and for anyone.

<u>2002</u>

Policy and Capacity

The Food Security and Rural Investment Act of 2002 (2002 Farm Bill) authorized NRCS to use Technical Service Providers (TSPs) to help farmers and ranchers with conservation work related to conservation practice planning, design, and implementation. TSPs expanded the number and availability of conservation technical experts capable of offering customized one-on-one conservation assistance to farmers and ranchers. <u>2003</u>

<u>Technical</u>

- NRCS released a beta version of ProTracts in Texas in January 2003, a web-based application for managing conservation program cost-share contracts. ProTracts was later deployed nationwide in October 2003.
- NRCS brought the Technical Service Provider Registry (TechReg) on-line. This web application provided the ability to manage the registration, certification, and profiles of technical service providers (TSPs), who could be accessed by farmers and ranchers to help meet their conservation goals using NRCS programs.

Partnerships, Policy, and Technical

The Conservation Effects Assessment Project (CEAP) was initiated as an interagency effort to quantify the environmental benefits of conservation practices/systems at watershed scales and nationally, and thereby help quantify the environmental benefit of conservation programs.

<u>2005</u>

<u>Policy</u>

NRCS released the first-ever comprehensive policy for the operation of its Conservation Technical Assistance (CTA) Program. As part of the policy, NRCS identified five program priorities, including the development of comprehensive nutrient management plans (CNMPs).

<u>Technical</u>

- ARS delivered the Wind Erosion Prediction System (WEPS) to NRCS, a computer model for forecasting wind erosion damage in the Great Plains States. The model is essential for conservation planning, natural resources inventories, and reducing air and water pollution from wind-blown soil materials.
- NRCS brought the Web Soil Survey on-line, enabling users to "zoom" to their geographic area of interest to analyze soil survey resources and view or print soil interpretations.

<u>2006</u>

Professional Development

NRCS initiated the inaugural Conservation Planning Boot Camp designed to teach new conservationists how to guide decision-makers through a comprehensive conservation planning process that complied with NRCS national policies and procedures.

<u>2008</u>

Capacity

- NRCS established the Agriculture Conservation Experienced Services (ACES) Program for experienced workers to help provide supplemental technical services in support of its conservation work, using authority from the 2008 Farm Bill.
- Based on the authority of the 2008 Farm Bill, NRCS implemented the vehicle for participants in EQIP to hire a Technical Service Providers (TSPs) to help them plan, design, and implement conservation practices or develop conservation activity plans (CAPs) to improve conservation on their operation.

Policy and Technical

NRCS established the Conservation Delivery Streamlining Initiative (CDSI) to develop workflows that streamlined conservation delivery, streamlined business processes, and ensured science-based conservation assistance through three major components - - Conservation Desktop, Conservation Client Gateway, and Mobile Planning Tool.



Policy and Technical

NRCS implemented "payment schedules" as a streamlined and transparent mechanism for NRCS's determination of incurred costs and income foregone associated with conservation practice implementation.

Policy

NRCS initiated a number of major landscape-scale initiatives based on critically important natural resource concerns in watersheds or other targeted geographic areas. These partnership-based areawide planning and implementation initiatives were intended to accelerate the realization of the benefits of voluntary conservation programs, including cleaner air and water, healthier soils, and enhanced wildlife habitat.

<u>2010</u>

Policy and Technical

NRCS first began to offer financial assistance to farmers and ranchers through EQIP to establish edge-of-field water quality monitoring, initially through the Mississippi River Basin Healthy Watersheds Initiative.

<u>2014</u>

<u>Technical</u>

The "Early Adopter Release" of the Conservation Client Gateway (CCG) provided farmers and ranchers web access to their conservation plans and financial assistance conservation program contracts. CCG is a full-service, secure web application that enabled farmers and ranchers to conduct business with NRCS virtually.

<u>2015</u>

Partnerships

- The first-ever national-level MOU is signed by NACD, NASCA, NCDEA, NARC&DC, and NRCS to encourage strong national, Tribal, regional, State, and local-level partnerships, was well as to strengthen cooperation among parties to result in coordinated interagency delivery of conservation assistance to private landowners, communities and others to sustain the health, diversity, and productivity of the nation's natural resources.
- The initial meeting of the National Conservation Planning Partnership was held in Atlanta, Georgia to reinvigorate the partnership's commitment to conservation planning with farmers, ranchers, and forest stewards as the decision-makers for private lands conservation.

<u>2017</u>

Partnerships

The formalized participation of NRCS in "Field to Market" was established via an MOU as an exofficio member. "Field to Market" strives to attain sustainable agriculture that meets the needs of the present while improving the ability of future generations to meet their own food and fiber demands, enhance the environment, improve human health, and further the social and economic well-being of ag communities.

<u>2019</u>

Technical

The full release of the CDSI Conservation Desktop (CD) takes place to provide field conservationists a fully integrated tool for conservation planning and case management that also enables the depreciation of the legacy Customer Service Toolkit in 2020. CD implementation represented the centerpiece and most significant accomplishment of the CDSI Project that was initiated in 2008.

Policy and Technical

The Farm Service Agency, NRCS, and the Business Center initiated work on the development of a Modernized Common Conservation Contracting System to replace the aging and stovepiped information systems that supported contract obligations, management, and payments for conservation financial assistance programs.

Questions for Consideration Related to Conservation Planning

- Are we delivering the conservation plans that farmers or ranchers desire in contrast to what the agencies need for program accountability and other purposes that don't add value for ease in understanding and implementation?
- Is the conservation plan easy to use, logical, and designed to be a living document?
- Do our conservation planning and related processes ensure proper farmer and rancher engagement at the right time and facilitate their decision-making?
- Do we engage at interim steps during the conservation planning process to "ground truth" its development with the decision-makers?
- Will the conservation plan readily facilitate implementation of the conservation practices/ systems so that it does not go unused and wind up in a desk drawer or on a pickup dashboard?
- How do we foster the conservation plan as a living document to encourage adaptive management and continuous improvement?
- What can we produce that is user friendly and repeatable in Conservation Desktop?
- Is the conservation plan developed in the context of an areawide plan to also contribute to larger community conservation goals?

"The landscape of any farm is the owner's portrait of himself." Aldo Leopold, "The Farmer As Conservationist", 1939