

Pre-Course Reading



Natural Resources Conservation Service

Conservation Planning Course

Pre-Course Reading Course Overview

Course Organization

Part 1—Modules 1-5

Provides the background and framework for conservation planning. Part 1 can be taught in the classroom or taken individually by computer in a self-paced module.

Part 2—Modules 6-8

Is the hands-on field application of the planning process. It includes classroom and field exercises.

Part 3—Module 9

Is the individual application of the conservation planning process utilizing the information learned in Parts 1 and 2. Part 3 is to be completed at the employee's work location with the assistance of a coach and the employee's supervisor.

Course Layout

Part 1—Background and Framework

1. How NRCS Will Do Business
2. Planning Policy and Guidance
3. Key Elements of Conservation Planning
4. Conservation Planning Environment
5. Resource Management Systems

Method of Delivery: Computer—Self-Paced or Classroom

Part 2—Hands-on Application

6. Phase I of the Planning Process
7. Phase II of the Planning Process
8. Phase III of the Planning Process

Method of Delivery: Classroom and Field Exercises

Part 3—Conservation Planning

9. - Develop a Plan
- Evaluate a Plan
- Revise a Plan

Method of Delivery: On-the-job Within Four Months

Module Descriptions

Module 1—How NRCS Will Do Business. Sets the stage for the course by providing a synopsis of the history of NRCS and the conservation partnership, and describes how we will do business in the conservation planning arena.

Module 2—Planning Policy and Guidance. Provides highlights of conservation planning and related policy, as well as information on programs and how they relate to the planning process.

Module 3—Key Elements of Conservation Planning. Covers the key elements of conservation planning and an introduction to the three-phase, nine-step planning process.

Module 4—Conservation Planning Environment. Covers the conservation planning environment, including the components and relationships of the natural resources, cultural resources, economic considerations, social considerations, and policy issues.

Module 5—Resource Management Systems. Covers resource management systems (RMS) and the tools used to develop RMSs.

Module 6—Phase I of the Planning Process. Provides classroom and field experience in carrying out conservation planning steps 1 through 4 - collection and analysis.

Module 7—Phase II of the Planning Process. Provides classroom and field experience in carrying out conservation planning steps 5 through 7 - decision support.

Module 8—Phase III of the Planning Process. Provides classroom and field experience in carrying out conservation planning steps 8 and 9 - application and evaluation.

Module 9—Conservation Planning. Allows the participants to put the information they learned to practical use by developing a plan, evaluating a plan, and revising a plan.

Pre-Course Reading



Natural Resources Conservation Service

Conservation Planning Course

Pre-Course Reading How NRCS Will Do Business

I. Introduction—NRCS Vision and Mission.

Vision:
Harmony
between people
and the land.

NRCS is guided by an enduring vision of a Nation where use of resources is governed by a widely shared and deeply felt stewardship ethic. Like Hugh Hammond Bennett, we believe that good management of natural resources will make possible “a more abundant life for the people of the country, both urban and rural, now and for all time.” Our vision includes a quality resource base; a quality environment that provides people with attractive and satisfying places to live; and a quality standard of living for all Americans.

Mission:
To provide
leadership in a
partnership effort
to help
people conserve,
improve, and
sustain our
natural
resources and
environment.

NRCS helps land users plan and apply integrated resource management systems that have a positive effect on the quality of the nation's natural resources, are economically and environmentally sustainable, and meet mandated requirements. We help public officials develop sound policies and plans for natural resource development and protection. In all of our activities, we try to lead people to a greater understanding of the world around them—of the physical and biological processes that shape it, of the ways their activities affect it, and of the responsibility all citizens share to work together to protect it.

II. Conservation planning—we build on our history and experience.



Conservation
Planning,
Your work—is
important!

Have you ever stopped to think that...

- technical assistance provided through conservation planning is the very reason for having Conservation Districts and the Natural Resources Conservation Service?
- conservation planning is made possible because of a strong conservation partnership that includes private and public interests, and is organized at the local, state, and national levels?
- as a result of technical assistance from NRCS, our clients are better able to protect, maintain, and improve soil, water, air, plant, animal and cultural resources, and address economic, social, and policy issues?
- clients come to the partnership—to you—because they believe you have knowledge and skills needed to help them?
- the voluntary approach to conservation is the best way to help landowners develop and practice a stewardship ethic?
- much of our knowledge about resource management systems was learned from clients as they applied conservation systems?
- your effectiveness as a conservation planner depends on your technical expertise (what you have to offer clients), your skill in using the planning process (a systematic approach to lead clients to reasonable decisions about the use and management of their resources), and your belief in conservation?

Natural resource degradation is a national menace.

Hugh Hammond Bennett is generally thought of as the father of soil conservation. Bennett was a career soil scientist with USDA who had become convinced that soil erosion was a national menace. In the 1920s-30s problems existed in almost all parts of the country—the Great Plains, the southeastern “cotton belt,” the Palouse Prairie region of the Pacific Northwest, the Midwest corn belt, the high plains of Texas, the desert rangelands of the southwest and the Great Basin, the foothills of California, and the Appalachian region of the northeast. In 1933 Bennett convinced the President and Congress to create the Soil Erosion Service (SES). This agency, in the Department of the Interior, was to accelerate the process of soil conservation in the US.

We learn by doing.

Much of the work of the SES was done in demonstration projects implemented by the Civilian Conservation Corps (CCC). With a limited scientific base to draw upon, staff of the SES and the CCC had to often rely on learning by doing. This process paid off, not only in terms of learning more about erosion control, but also in terms of on-the-land training for people who would become national leaders in the soil conservation movement.

“...something had gone wrong with the land resource of the nation.”

Writing in his text, Soil Conservation, in 1939 Bennett describes one of the Nation’s worst dust storms.

“The great dust storm of May 12, 1934, stimulated national interest in the problem of erosion. This spectacular dust cloud was the first one in history big enough to retain its identity as it swept across the country from the Great Plains to beyond the Atlantic Coast. It blotted out the sun over a large part of the nation and sifted through the windows of New York skyscrapers. When that happened it began to dawn on the public that something had gone wrong with the land resource of the nation.”

Bennett used the story of this dust storm to lobby Congress to pass the Soil Conservation Act of 1935.



The Soil Conservation Service, the predecessor of NRCS was established.

Among things created by the Soil Conservation Act of 1935 was the Soil Conservation Service (SCS), now the Natural Resources Conservation Service (NRCS). The agency, part of the US Department of Agriculture, was to lead a national effort to prevent erosion and protect the Nation's privately owned soil and water resources. The legislation stated in part:

“It is hereby recognized that the wastage of soil and moisture resources on farm, grazing, and forest lands of the Nation, resulting from soil erosion, is a menace to the national welfare and that it is hereby declared to be the policy of Congress to provide permanently for the control and prevention of soil erosion and thereby to preserve natural resources, control floods, prevent impairment of reservoirs, and ... protect public health.”



The conservation partnership was born.

It would be easy to focus on the creation of NRCS as the foundation of conservation in the US, but the story is much bigger. Bennett believed that conservation could only be successful when private landowners were involved, so a centerpiece of the bill authorized states to form state conservation commissions and local soil conservation districts. The commissions were to be organized as desired by the state. Their purpose was to provide overall leadership for soil and water conservation in their states. The Districts were to be led by an elected board. The purposes of the Districts were to advocate soil and water conservation, to sponsor the federal partner—SCS—at the local level, to enter into cooperative conservation agreements with local landowners, and to advise SCS on what conservation work needed to be done at the local level. The conservation partnership was born.



Participation in the conservation program was to be voluntary.

Bennett believed that landowner participation in the conservation program should be voluntary. If a landowner had a soil erosion problem he or she was encouraged to seek assistance from the District. The District set priorities and asked SCS to help the landowner solve the problem. Technically qualified specialists employed by SCS—known as conservationists—made an appointment to meet with the landowner at his or her farm to view the problem and to recommend possible solutions. The landowner chose the solution he or she believed would work the best on their farm. Once an alternative was chosen, the conservationist helped design the treatment and usually assisted in implementing and evaluating the practice.



The private landowner is the key to successful conservation.

Others agreed with Bennett's belief that the success or failure of conservation would be determined by the active involvement of private landowners. Aldo Leopold, the father of wildlife management, recognized in 1939 in his essay "The Farmer as a Conservationist" that the landowner was key to successful conservation when he said,

"Conservation means harmony between men and land. When land does well for its owner, and the owner does well by his land; when both end up better by reason of their partnership, we have conservation. When one or the other grows poorer we do not.... It is the individual farmer who will weave the greater part of the rug on which America stands."

Leopold further observed in this essay that, "Subsidies and propaganda may evoke the farmer's acquiescence, but only enthusiasm and affection will evoke his skill."

Conservation planning was the vehicle used by SCS to transfer knowledge about conservation.

Knowledge transfer leading to land stewardship was and remains the intended purpose of the consultation between the landowner and the conservationist. Conservation planning was the vehicle used by SCS to transfer knowledge about conservation. The conservation planner's notes on the discussions with the client about problems, opportunities, objectives, inventories, alternative solutions, the client's decisions, and the schedule for implementation became the conservation plan.

As respect for the knowledge offered by SCS increased, our role expanded to comprehensive farm and ranch planning and areawide planning.

Over time, landowner commitment to soil and water conservation grew as did their respect for the Districts and SCS. Landowners began asking for help to properly manage resources—to take advantage of opportunities, not just solve problems. Groups began asking Districts and SCS to help them address resource issues that required action by multiple landowners. Conservation planning expanded from a narrow focus on soil erosion to include water quality, water quantity, flood control, watershed protection, rangeland condition, wildlife habitat, air quality, soil quality, cultural resources, biodiversity, and many other resource issues. The conservation plan evolved into a more comprehensive look at the natural resources contained in a planning unit.

In 1947, after a decade of work by the local, state, and federal partnership, Hugh Hammond Bennett summarized the principles of conservation in his text, Elements of Soil

Hugh Hammond Bennett:
“Every acre used according to its capacity and protected according to its need.”

Conservation. His summary reflected the more comprehensive approach being taken by landowners, the districts, and SCS. According to Bennett, an effective conservation planner must adhere to the following principles:

- Consider the needs and capabilities of each acre within the plan.
- Consider the client’s capabilities, knowledge, facilities, machinery, and economic situation.
- Understand the farmer’s willingness to try new practices.
- Consider the relationship of the land being planned to the entire farm, ranch, community, and watershed.
- Conservation planning should be done in the field with the decisionmaker.

Much of what we know we learned from landowners while helping them develop and implement conservation plans.

Knowledge transfer is not a one way street from the conservationist to the landowner. Much of the knowledge a conservationist has to offer has been learned through trial and error on the land with a patient landowner. The experience of one conservationist was combined with that of others and with information provided by research into a substantial body of knowledge about soil and water conservation. This knowledge is recorded in the Field Office Technical Guides (FOTG), handbooks, and other documents.

Conservation technology must be adapted to local ecological, economic, and social conditions.

To be true to Bennett's principles and effective in getting conservation applied on the ground, knowledge must be localized to the resources, issues, and capabilities found on the farm, ranch, watershed, or community where a plan is being developed.

Conservation planning has been and remains the cornerstone of the work we do with landowners, groups, and our conservation partners.

Today the conservation partnership is carrying on the 60-plus year old tradition of helping landowners and communities take a comprehensive approach to natural resource stewardship. It is important to understand that sharing knowledge through conservation planning is not only how we do business but is the reason for NRCS to exist. Knowledge transfer through conservation planning has been a basic and essential part of the Agricultural Conservation Program, Great Plains Conservation Program, Watershed Program, Long-term Contracting, Conservation Reserve Program, Resource Conservation and Development, and other NRCS programs and authorizations.

Conservation compliance and other program mandates can best be accomplished through conservation planning.

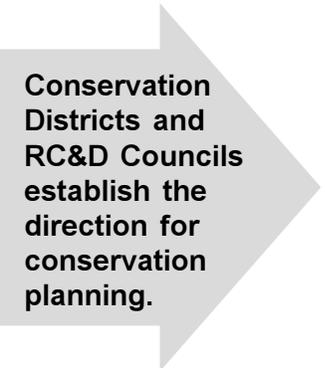
Although it often did not seem true, knowledge transfer through conservation planning was a purpose of the Conservation Compliance provisions of the 1985 Food Security Act and 1990 Food, Agriculture, Conservation, and Trade Act. Knowledge transfer through conservation planning will continue to be our reason for existence as we continue existing programs and implement new or modified provisions of the 1996 Federal Agricultural Improvement and Reform Act—the Environmental Quality Incentives Program, the Private Grazing Lands Conservation Initiative, Wetland Reserve Program, Wildlife Habitat Incentives Program, and Forestry Incentives Program.

III. The desired future condition of conservation planning as practiced by NRCS.



Conservation planning is a way of teaching and learning.

The conservation planning process is based on the premise that clients will make and implement sound decisions if they understand their resources, associated resource problems and opportunities, and the effects of their decisions on the land, their neighbors, and themselves. The conservation planning process is most successful when clients gain knowledge that allows them to address resource problems and opportunities. Clients and NRCS employees learn about natural resources through problem identification, resource inventory and analysis, plan development, decisionmaking, plan implementation, and evaluation of results.



Conservation Districts and RC&D Councils establish the direction for conservation planning.

The conservation partnership is fully engaged in the planning process. Conservation plans should address issues considered important by local leaders, particularly those individuals elected to serve on soil and water conservation District Boards or appointed to RC&D Councils. When requested, conservationists should assist Districts, Councils, and other groups to develop areawide assessments or plans. Such assessments or plans can help decisionmakers and NRCS address natural resource problems and opportunities where multiple land owners are involved. Areawide assessments and plans provide information needed to address many social or community issues. A conservation planner should be comfortable and skilled in working with Districts, Councils, and other groups.

Conservation planning is an integrated, systematic way of addressing resource problems and opportunities.

Planning involves more than considering individual resource problems. It focuses on the ecological processes that sustain resources and human interactions (economic, social, and policy) with the resources. Natural resources and human considerations are appropriately considered and integrated during the planning process. All plans consider on-site and off-site effects and long-term effects and impacts of planned actions. Conservation planning, as practiced by NRCS and described in the National Planning Procedures Handbook, is a nine-step process that integrates ecological, economic, and social considerations to meet private and public needs. The same process is used in all planning activities undertaken by NRCS. A conservation planner should be an expert in using the planning process.

Conservation planners are fully trained in conservation planning policy and procedures.

Conservation planners use the nine-step planning process to help clients address natural resources and related issues. As a conservation planner, you must be able to help individuals and groups identify problems, set objectives, and select appropriate conservation treatments. A conservation planner needs to be a good listener, teacher, and learner.

Conservation planners are technically competent.

Without technical knowledge, there is nothing for the conservation planners to include in a conservation plan. The planning process involves technical tasks such as resource inventories, development of appropriate conservation treatment alternatives, and predicting and documenting resource responses to treatments. A conservation planner should have sufficient depth and breadth of knowledge to effectively help most clients who seek assistance. A conservation planner should know who has more detailed information and how to obtain it when the client's needs exceed their knowledge and skills. The source of more detailed information may be NRCS specialists or specialists from other organizations.

Conservation planners strive to learn more so they can help more.

The world is constantly changing. Conservation planners should constantly seek new knowledge and new and creative ways of using existing knowledge. A conservation planner should be engaged in a personal development program to maintain existing and develop new technical expertise.

Conservation planning is done in the field with the decisionmaker.

Knowledge transfer requires the active participation of those with knowledge and those seeking it. Problems will be better understood when they have been explained by the decisionmaker and seen by the conservationist. Problem solving is often a process of give and take—this is the standard versus this is what the client can do. Given that knowledge transfer goes both ways during the conservation planning process—clients learn from conservationists and conservationists learn from clients—it is essential that the conservation planner and the client work together.

Conservation planning is based on the best available local information and modern inventory, analysis, and planning tools.

Through study and experience, NRCS has developed and organized knowledge about resource use and management, and implemented processes to appropriately access and use the knowledge. Field staff have adapted this knowledge to local conditions and situations. The Field Office Technical Guide and other planning tools need to be up-to-date and localized. NRCS technology is readily available for use by staff, clients, and partners. A conservation planner must be knowledgeable about the content and competent use of NRCS technology and information management tools.

Conservation planning is a flexible, dynamic, and continuing process.

Clients change as land is sold. Client goals change in response to various social, economic, environmental, and policy factors. Resource conditions change in response to use, management, and naturally occurring events such as drought and wildfire. New technology may allow conservation treatments today that were not feasible in the past. For all of these and other reasons, conservation plans need to be periodically revised to reflect new clients, revised goals, changing resource conditions, and advances in technology.

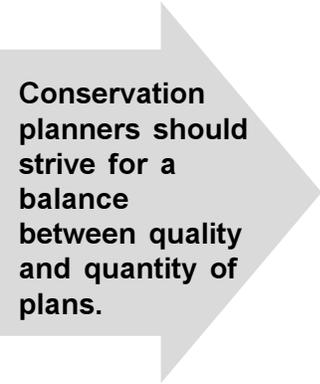
To most effectively respond to the need for changes in conservation plans, conservation planners need to develop long-term relationships with clients.

NRCS and conservation partners have the technical expertise needed to help a client plan and implement a Resource Management System (RMS). Such a system combines management and conservation practices that, when installed, will prevent resource degradation and permit sustained use of natural resources by meeting quality criteria. RMS systems will be most successful with those clients where a good, long-term relationship has been developed by NRCS conservation planners. Such a system requires a deep understanding by the client of the technical foundation of the plan. Achieving RMS level conservation plans should be a goal of NRCS and the conservation partnership.

Financial assistance programs are tools to help implement conservation plans.

Cost share, rental, or other payments are available from NRCS and other organizations to help land owners implement all or parts of conservation plans. The justification for such financial assistance is that conservation benefits all taxpayers, not just the owner of the land where a conservation practice is applied. To get the biggest bang for the buck, comprehensive conservation plans should be basically developed before financial assistance funds are discussed. For instance, decisions should be made about the need for conservation cover before a Conservation Reserve Program (CRP) contract is considered, and only the land needing treatment should be covered in the contract. Objectives for the land after the CRP contract expires influence what is seeded on the land. The same approach holds for the Wetland Reserve Program, the Environmental Quality Incentives Program, and other financial assistance programs available to a client.

Successful plans are used to teach other clients about conservation. Nothing promotes success like success. Clients, other members of the conservation partnership, and conservationists should use successful plans to teach and encourage others to develop and implement plans. Innovative conservation programs should be used as informal demonstrations or case studies. Clients should be called on to give “testimonials” at educational programs. Farms with RMS level conservation plans should be used for field days so that others can observe successful conservation in the field.



Conservation planners should strive for a balance between quality and quantity of plans.

It takes time to do a good job of conservation planning. It involves 'locally led' planning to set District priorities. It takes time to develop a good relationship with the client. It takes time to document what is learned from clients. It takes time to maintain competency in technical matters and the planning process. It takes time to help a client develop and implement a plan at the RMS level. It takes time to document our work. Conservation planners and their supervisors should develop goals and workloads that allow conservation planners to take the time to do the job right and get conservation applied on the ground. A few plans that are being implemented to benefit the resources and the clients are better than file drawers full of plans that are not causing anything good to happen. Our work should increase knowledge and cause positive change in the quality of the Nation's natural resources. If it does not, then we should be doing something else!

IV. As a Conservation Planner you should...



Believe in conservation!

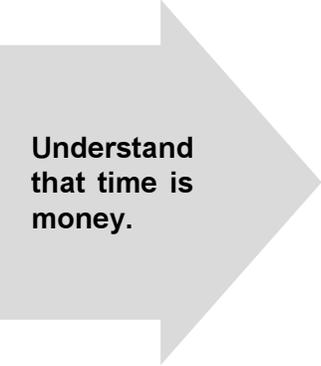
Have a strong conservation ethic: BELIEVE IN CONSERVATION! Learn and understand the benefits of conservation. Learn that there is a pay-back in the long-term for applying and maintaining conservation systems. BELIEVE THAT CONSERVATION PAYS! Be able to speak to individuals or groups about the benefits of conservation.



Develop technical knowledge and skills to address client problems.

Clients are specialists in their lines of work. They expect you to be a specialist in yours. As a conservation planner, you should

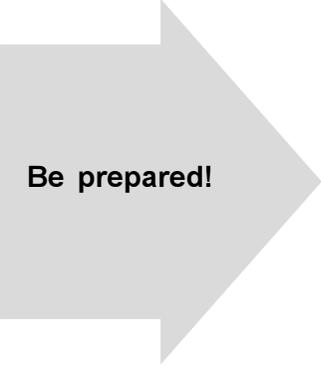
- be qualified to provide technical assistance on the management systems that are common in the area where you work.
- know, call, and learn from specialists that are more knowledgeable in a subject than you are.
- proceed cautiously, but experiment with new ways of accomplishing client conservation goals when proven ways do not seem to work or you think the client has a good idea.
- document new knowledge so that others can benefit from what you have learned.
- understand how to use cost share and other financial assistance tools to get the most conservation applied for the money.



**Understand
that time is
money.**

Our clients are professionals and time is money. They expect you to be professional as well. As a conservation planner, you should

- use the nine-step planning process because it helps you follow a systematic approach to assisting the client.
- involve the client throughout the planning process, especially when there is something important for him or her to learn, whenever they have information that you must have, and when they need to make a decision.
- protect the client's time by doing many of the routine activities such as calculating data at the office without the client.



Be prepared!

Clients come to you because they want help. You should be prepared to

- listen.
- teach clients about their soil, water, air, plant, animal and cultural resources; the ecological interactions that occur among these resources, and the social, economic, and policy issues that affect resource use.
- lead, guide, and assist clients to recognize resource problems and opportunities.
- assist clients in resource inventories and developing realistic objectives.
- progressively plan as much conservation treatment as clients are willing and able to attain.
- help clients choose conservation treatments that are appropriate for their situation, implement treatments, and evaluate results.
- interact with the client as a professional.
- learn from the client.

Additional Reading:

Bennett, Hugh Hammond. 1939. *Soil Conservation*. McGraw Hill. New York. 993 p. (The Preface, pages v-xi, is a particularly good treatment of the early history of soil conservation).

Bennett, Hugh Hammond. 1947. *Elements of Soil Conservation*. McGraw-Hill. New York. 358 p.

Leopold, Aldo. 1939. *The Farmer as a Conservationist*. *American Forests*. 45:205-208.

Sampson, R. Neil. 1981. *Farmland or Wasteland*. Rodale Press. Emmaus, Pennsylvania. 422 p. (Chapter 13, p 256-292, provides a good discussion of the development of the conservation partnership).

US Department of Agriculture. 1996. *In Partnership with People and a Healthy Land*. Natural Resources Conservation Service. PA-1540.

US Department of Agriculture. 1996. *A Geography of Hope*. Natural Resources Conservation Service PA-1548.

US Department of Agriculture. 2000. *National Planning Procedures Handbook*. Natural Resources Conservation Service.