

Conservation Planning

The Natural Resources Conservation Service uses a nine step planning process to develop and implement conservation plans that protect, conserve, and enhance natural resources within a social and economic perspective.

1 - Identify Problems and Opportunities

Resource problems and opportunities for improvement are initially identified by the agricultural producer then refined during an onsite field visit with the NRCS conservation planner.

2 - Determine Objectives

During this step, the producer identifies their objectives through a process guided by the conservation planner. The producer's needs and values, along with natural resource quality criteria, both on and off the planned site are considered. Objectives may need to be revised or modified as new information is learned later in the inventory and analysis stages. Therefore, objectives may not be finalized until Step 4 of the planning process.

3-Inventory Resources

In this step appropriate natural resource, economic, and social information is collected. The information will be used to further define the problems and opportunities. The information will be used throughout the entire process to develop alternatives and to evaluate the conservation plan. Inventories are conducted for the planned area which can range in size from a field, a land use (i.e. cropland, pastureland, rangeland), or a small watershed.

4 - Analyze Resource Data

The conservation planner will study the resource data to clearly define existing (baseline) conditions, limitations, and potential for the desired use. This step is crucial in developing a conservation plan that will work for the producer and their land.

5 - Formulate Alternatives

The purpose of this step is to develop ideas that solve all identified problems, take advantage of opportunities, and meet the social, economic, and environmental needs of the producer and land.



6 - Evaluate Alternatives

The conservation planner must evaluate the alternatives to determine the effectiveness in addressing the producer's problems, opportunities and objectives. Attention must be given to those ecological values protected by law or executive order.

7 - Make Decisions

At this point the producer chooses alternatives that will work best for their situation.

If the producer decides to pursue an application for a Farm Bill Program: Program Application, Ranking, and Contracting occur here.

8 - Implement the Plan

The designer, NRCS Engineers and Technicians, work with the producer to develop designs that meet NRCS policy and standards.

See inside for details on project implementation.

9 - Evaluate the Plan

Conservation planning is an ongoing process that continues long after implementation of an individual practice or the entire conservation plan. By comparing conditions after the practice or plan is implemented to the baseline data collected in Step 3, one can evaluate the effectiveness.



USDA is an equal opportunity provider and employer.



United States Department of Agriculture

Producer's Guide for Structural Practices

from the Natural Resources Conservation Service (NRCS)



This guide will help you understand the process NRCS utilizes to plan, design, and implement structural conservation practices through Farm Bill Programs.

By understanding your role and providing timely, well thought out input to the process, you can ensure a successful project and avoid costly delays.

Conservation Planning Step 8: Implementation

	Activity	Producer Responsibility
Final Data	In most cases, only a limited amount of onsite data was collected to develop the conceptual design. At this point, final topographic surveys, geotechnical investigations, soil mechanics tests, and other required data is collected. (In some cases this is done during Step 6).	Allow access to the site, provide requested information, ensure the person completing geotechnical investigations completes utility locates (One-Call) as required by state law. If necessary, hire a licensed land surveyor to mark property line boundaries for final design work.
Preliminary Design Review	An optional phase, typically utilized on complex projects. Preliminary layout and structure details are provided to the producer and sometimes laid out in the field to determine if changes are necessary. The intent is to ensure time is not wasted in preparation of the final design.	Take the time you need to provide a well thought out response. Consult with suppliers or contractors, if needed, before concurring with the preliminary design. GENERALLY, NRCS WILL PROVIDE ONLY 1 FINAL DESIGN. YOU MAY BE REQUIRED TO HIRE A PRIVATE ENGINEER, AT YOUR OWN COST, FOR SIGNIFICANT CHANGES.
Final Design	A final design package will be prepared that contains: design drawings, construction specifications, materials list, and operation and maintenance plan. Larger, complex projects will include a design report and construction inspection plan.	Upon receiving the design materials, read them over thoroughly and ask any questions you have to the designer. STARTING CONSTRUCTION PRIOR TO RECEIVING A FINAL DESIGN MAY RESULT IN NON-PAYMENT OF CONTRACT ITEM(s).
Permitting	Implementation of a conservation practice may require acquisition of local, state, and federal regulatory agency permits.	Acquire all necessary regulatory agency permits. (The designer may assist by providing technical information.)
Pre-Construction Meeting	Construction can not start before a thorough pre-construction meeting is held between the landowner, installer, and designer to review the construction drawings, specifications, and other details of the project.	Make a decision on who will complete the construction work. Contact the designer to schedule a meeting with you, the installer, and designer.
Construction	The designer will observe and inspect the construction to determine if the work meets the requirements of the construction plan and specifications. Protection of cultural and historical resources, complying with permit conditions, and safety are concerns for everyone involved.	Ensure the installer completes utility locates (One-Call) as required by state law. Notify the designer when construction will start and at key points as agreed to. Closely monitor work progress and quality to ensure compliance with the design and specifications. Contact the designer if any modifications are required due to onsite conditions.
After Construction	The designer is responsible for attesting that construction plans, specifications, and the construction project meet NRCS standards and specifications.	The producer is responsible for operation and maintenance of the project throughout the lifespan of the project.

Additional details on roles and responsibilities can be found at: <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/north-dakota/engineering-north-dakota>