620.0 Introduction

A. In 1999, the Unified National Strategy for AFOs directed the USDA and U.S. Environmental Protection Agency (EPA) to work together to address environmental and public health issues associated with AFOs. The Strategy also defined CNMP elements and the relationship between federal voluntary and regulatory programs.

B. The Clean Water Act (CWA) gives EPA authority to regulate point source dischargers of pollutants into waters of the United States. Agricultural operations that discharge pollutants, via a point source, into waters of the United States must have a NPDES permit or face the risk of regulatory action. Under the CWA, a CAFO is defined as a point source.

C. EPA considers the animal production area of a CAFO (manure storage facilities, animal confinement areas) as a point source.

D. USDA’s goal is for AFO/CAFO owners and operators to take voluntary actions to minimize potential air and water pollutants from storage facilities, confinement areas, and land application areas. The objective of a CNMP is to provide AFO owners/operators with a plan to manage manure and organic by-products by combining conservation practices and management activities into a conservation system that, when implemented, will control soil erosion and protect air and water quality. USDA has an associated goal of assisting CAFOs to develop CNMPs that can be used for NPDES permitting purposes.

E. The CNMP shall not result in excessive air emissions and/or negative impacts to air quality resource concerns if it is feasible to mitigate these effects.

F. The CNMP documents agricultural utilization of nutrients according to science-based management strategies and, thus, meets the criteria for the storm water exemption of the CWA on fields receiving manure or organic by-products.

G. USDA and EPA have agreed that the CNMP is acceptable documentation for those seeking an NPDES permit, with the addition of “chemical handling” provisions. The CAFO decision maker (principal controlling producer or producer) can submit the CNMP as part of an NPDES permit application.

H. The nationally recognized MMP is the only NRCS supported technology software for use in developing CNMP output products. MMP uses national CNMP templates, as modified and adopted by each state, to generate CNMP output documents.

I. Refer to GM-180, Part 409, for policy regarding conservation planning. GM-190, Part 405 contains policy for conservation nutrient management planning. GM-190, Part 405, Section 405.11, Minimum Technical Requirements Essential for Providing CNMP Technical, supersedes/replaces GM-180, Part 409, Section 409.10.

J. This field handbook is a comprehensive guide for planners to use to develop CNMPs that meet USDA standards. The following sections briefly describe conservation planning and CNMPs:

1. Conservation planning

   (i) Conservation planning occurs when producers request technical assistance to help them meet their natural resource objectives. The NRCS conservation planning process includes the following nine steps:

   • Step 1 Identify natural resource concerns.
   • Step 2 The producer’s objectives are identified.
   • Step 3 Inventory resources.
   • Step 4 Analyze resource data.
   • Step 5 Formulate alternatives.
   • Step 6 Evaluate alternatives.
   • Step 7 Producer makes decisions.
   • Step 8 Producer implements the plan.
   • Step 9 Evaluate the plan.

   (ii) Although the nine steps of conservation planning are shown in sequence, the order of steps can vary due to site-specific circumstances. The process could start with any of the steps. Cycling back to previous steps is often necessary.

   (iii) The desired outcome of conservation planning is protection of the farm’s natural resource base. This is accomplished when the producer targets the natural resource concerns, makes decisions that address these concerns, and applies the practices that will treat the resource concerns. The conservation plan includes the “Record of Decisions” and the “Implementation Schedule” as reminders to the producer of the commitment made to properly manage their resources wisely. The Producer Activity Document (PAD) includes a checklist and recordkeeping forms to help the producer adequately meet this commitment.

2. CNMPs

   (i) CNMPs help the producer manage activities common to AFOs. The management of...
production and land treatment areas must be coordinated to enable the efficient and safe use of manure resources on the farm. There are natural resource concerns associated with both areas and there are conservation practices that address those concerns.

(ii) Management of livestock operations typically involve a complex set of considerations that can change based on dynamics of the market, weather, supplies and management decision. Farm produced products can include by-products like compost or manure. These by-products must be stored, utilized on the farm, or transferred to another location.

Definitions.

- A CNMP is a conservation plan for an animal feeding operation (AFO) that:
  -- Must include the following two components:
    --- The production area, including the animal confinement, feed, and other raw materials storage areas, animal mortality facilities, and the manure handling containment or storage areas; and
    --- The land treatment area, including any land under control of the AFO owner or operator, whether it is owned, rented, or leased, to which manure or process wastewater is, or might be, applied for crop, hay, pasture production, or other uses;
- Meets NRCS quality criteria for water quality (nutrients, organics, and sediments in surface and groundwater) and soil erosion (sheet and rill, wind, ephemeral gully, classic gully, and irrigation induced natural resource concerns on the production area and land treatment area);
- Mitigates, if feasible, any excessive air emissions and/or negative impacts to air quality resource concerns that may result from practices identified in the CNMP or from existing on-farm areas/activities;
- Complies with Federal, State, Tribal, and local laws, regulations, and permit requirements; and
- Satisfies the owner/operator’s production objectives.

Note: If it is probable that the producer will forward the CNMP to the State regulatory agency in pursuit of an NPDES permit, the planner should include all farm acreage that could foreseeably receive manure. This additional acreage, when included in the CNMP, will increase planning options should the plan need to be altered after it becomes a regulatory plan. Planning flexibility makes it less likely that the NPDES permit will need to be revised.

- The PAD is an abbreviated CNMP document for the producer’s use that summarizes the day-to-day activities to implement the CNMP. A template for a PAD is available in the MMP software.
- Miscellaneous Definition:
  -- Internal transfers. These are on-the-farm relocations (transfers) of manure, litter, wastewater, by-products, etc.
(iii) The CNMP accounts for the nutrient flow through the farm system. Nutrient excretion is a function of dietary intake, or the ration, animal type and size, and animal performance. The handling of manure on the production area will influence the rate of nitrogen loss and the concentration of nitrogen, phosphorus, and potassium in various types of storage facilities. The other volume inputs, such as rainfall, washwater, or bedding, will change the manure volume and nutrient concentration. The type of manure hauling equipment and the method and timing of application influences the loss of nitrogen and the relative risk of nutrient movement once the application is made on a crop field. Regardless of equipment type and method, the rate of application significantly influences the fate of that manure and nutrients. The field conditions and the weather will influence the stability of the manure applied.
(iv) The movement of nutrients through their respective biogeochemical cycles can affect multiple natural resource concerns (water, soil, air). In meeting specified resource concerns, if it is determined that excessive air emissions and/or excessive negative impacts to air quality resource concerns may arise from a proposed CNMP, additional or alternative practices shall be used to mitigate these effects, if feasible.
(v) In addition to nutrients, manure contains contaminants, such as fecal coliform, other pathogenic bacteria, and pharmaceuticals and their metabolites. These contaminants are part of the manure volume and are a potential threat to human health and the environment. In addition, manure may contain micronutrients, such as copper, that accumulates to excessive levels, over-time, on application areas.

**620.1 CNMP Development Process**

Development and implementation of a CNMP

(1) Because of production practices, land use options, weather, and site-specific attributes, the development and implementation of a CNMP is often complex. Planners should have the knowledge, skills, and abilities to complete the steps.

(2) In following the 9 steps of conservation planning, the CNMP development process requires
the completion of individual steps. Following a standard methodology allows for automation of the planning process via software. The steps of CNMP development and implementation are:

(i) Step 1 Identify the natural resource concerns.
(ii) Step 2 The producer(s) objectives are identified.
(iii) Step 3 Inventory resources.
(iv) Step 4 Analyze resource data.
(v) Step 5 Formulate alternatives.
(vi) Step 6 Evaluate alternatives.
(vii) Step 7 Make decisions.
(viii) Step 8 Implement the plan.
(ix) Step 9 Evaluate the plan.

(3) Having a standardized and uniform development process makes it easier to develop a quality plan efficiently. The NRCS CNMP template contains the following elements:

(i) Element 1 Background and site information.
(ii) Element 2 Manure and wastewater handling and storage.
(iii) Element 3 Farmstead safety and security.
(iv) Element 4 Land treatment practices.
(v) Element 5 Soil and risk assessment analyses.
(vi) Element 6 Nutrient management according to the criteria in the Nutrient Management Conservation Practice (Code 590).
(vii) Element 7 Feed management (optional).
(viii) Element 8 Other utilization options (optional).
(ix) Element 9 Recordkeeping.
(x) Element 10 References.

(4) Feed management and other utilization options are not required elements of a CNMP. However, these elements should be included in the CNMP, if needed, to help manage the farm nutrient balance.

(5) Where air quality has been identified as a resource concern because of agricultural operations an air quality element may be needed. Specific CNMP element criteria are located in the CNMP Technical Criteria in Section III of the FOTG, and in this document.

(6) The logical CNMP development process, coupled with a standardized template, ultimately results in the CNMP document, which provides a record of producer decisions and guidance to the producer and planner for implementation of the plan.

(7) Implementation of the CNMP is the producer’s responsibility. The CNMP must be written in concise and understandable language to enable the producer to understand and implement the elements of the CNMP. Additionally, it must meet the producer’s goals and objectives, address the natural resource concerns, and provide the producer with a land treatment plan for nutrients.

(8) The CNMP includes the list of conservation practices used to meet the resource concerns of the production and land treatment areas of the farm. Guidance for operation and maintenance (O&M) of practices is contained in the appropriate conservation practice standard located in the State-specific FOTG. Conservation practice maintenance includes periodic inspections and necessary repairs, and recordkeeping.

(9) If it is probable that the producer will forward the CNMP to the State regulatory agency in pursuit of an NPDES permit, the planner should include sufficient reporting and documentation information as required by the State.

(10) The PAD includes a producer activity checklist and recordkeeping forms.

620.2 Steps of CNMP Development and Implementation

The nine steps of conservation planning are used to develop a CNMP, so the end product meets the short- and long-term goals of the producer. All applicable local, Tribal, State, and Federal water quality goals or regulations are followed, including evaluation and documentation of compliance with the National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act.

(1) Step 1 Identify the on-site natural resource concerns

(i) Description:
   • An assessment of existing and potential natural resource concerns for the area under consideration. The identified resource concerns provide the basis for the development of the conservation plan. It is very difficult to adequately evaluate site-specific farm and natural resource conditions without an on-site visit with the producer.
   • Initial natural resource concerns are identified on-site, based on readily available information and discussion with the producer. The planner may have additional information available relating to natural resource needs based on information available from the conservation district, an area-wide conservation plan, regulatory needs, or personal knowledge. Natural resource, economic, and social factors are considered.
   • Natural resource concerns are identified by comparing present conditions with the quality criteria established for the particular natural resource consideration. Resource conditions that are below the minimum standard quality level, shown in the FOTG,
Section III, or established for an area-wide conservation planning area, should be
addressed to meet the requirements of conservation plans, or area-wide conservation
plans based on FOTG guidance.

(ii) CNMP Considerations:
- Complete nutrient management plans for cropping and animal operations include
  information about the operation's fields, crops, storage, animals, and application
  equipment; and allocating manure (where, when, and how much) on a monthly basis for
  the length of the plan (1-10 years), as well as commercial fertilizer. This allocation
  process helps determine if the operation currently has sufficient crop acreage, seasonal
  land availability, manure storage capacity, and application equipment to manage the
  manure produced in an environmentally responsible manner. Identifying agronomic
  issues that impact spreadable acreage will be needed to plan for conversion of a non-
  sustainable operation to a sustainable one. If the operation expands (more animals,
  more acreage), determine what changes may be needed to keep an operation
  sustainable. Typically, phosphate (P\(_2\)O\(_5\)) is the nutrient used to determine

(iii) Planning standard:
- The producer's on-site natural resource concerns are identified and documented.

(iv) Inputs:
- Producer input (identify natural resource concerns).
- The conservation planner's experience and knowledge of the area and type of
  livestock operations.
- Conservation district long-range plan, annual plan, and priorities.
- Locally led assessments (air and water quality, soils concerns, etc.).
- Area-wide conservation plans, where they exist.
- Information available from other sources, such as State and Federal agencies,
  universities, or centers of research.
- Soil survey.
- Discipline manuals and handbooks.
- FOTG, Sections I, II, III, and V.

(v) Products:
- Identification and documentation of natural resource concerns in the Customer
  Service Toolkit (CST) or similar State-approved process.
- Communication with the producer.

(2) Step 2 The producer's objectives are identified

(i) Description:
- To develop an understanding with the producer of the desired outcome, as
  compared to the existing conditions, is important. This includes determining the
  producer's conservation goals and natural resource objectives. Clearly stated objectives
  help the producer and planner achieve the desired goals. The producer's economic
  objectives should be considered. Use this opportunity to help the producer to expand
  consideration to include on-site and off-site natural resource concerns. It is the
  producer's responsibility to comply with State and Federal laws and regulations.

(ii) CNMP Considerations:
- Conservation planners will help the producer make informed decisions that result
  in the wise use and conservation of resources. CNMP planners must do the following:
  -- Identify the producer (decision maker).
  -- Help producer determine goals/objectives:
    --- Length of the planning timeframe.
    --- Farm size, herd size, and anticipated changes.
    --- Available labor.
    --- Profitability.
    --- Natural resource concerns to be addressed.
    --- Manure storage and handling needs.
    --- Land application area needs.
    --- Manure and nutrient application timing, rates, and methods of application.

(iii) Planning standard:
- The producer's objectives are clearly stated and documented.

(iv) Inputs:
- Producer input.
- Conservation district long-range plan, annual plan, and priorities.
- A list of natural resource concerns to be analyzed.
- Records from previous planning events.
- Resource data for the planning area and adjacent areas:
  - Soils information.
  - Resource information as available from partnering organizations.
  - FOTG, Sections I and II.
- Documentation of public concerns from locally-led assessments, or area-wide
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... conservation plan effects. Updated Conservation Practice Physical Effects (CPPE) and guidance documents.

J. This field handbook is a comprehensive guide for planners to use to develop CNMPs that meet each state, to generate CNMP output documents.

MMP uses national CNMP templates, as modified and adopted by USDA and EPA have agreed that the CNMP is acceptable documentation for those seeking an NPDES permitting purposes.

The Clean Water Act (CWA) gives EPA authority to regulate point source dischargers of... maintain contact with the producer to perform properly and meeting the producer needs or other changes.

Lead the producer in the formulation of alternatives. This allows practical implementations opportunities, and O&M for each practice; prepare the necessary documentation. Documentation includes recording the decision process, and specific....

Analysis is done to provide insight into limitations to their use and potentials. This step provides the information needed to make decisions that address these concerns, and applies the practices that will treat the resource concerns. The conservation plan includes the implementation opportunities, and O&M for each practice; technical assistance will be installed according to NRCS standards and specifications.

At this point in the planning process, there should be agreement on natural resource information as available from partnering organizations.

FOTG, Sections I, II, III, and V.

Conservation plan. Schedule of conservation system and practice implementation;.

Producer Activity Document (PAD). New or modified objectives or needs of the producer.

A decision to update or revise the plan, if needed. Identification of the causes or conditions that resulted in the resource problems.

Identification of other ecological concerns, such as threatened and endangered species, laws and local ordinances, utility rights-of-way, buried utilities, and other ecological concerns are located in the FOTG, Section I, and is commonly displayed on maps contained or referenced in this part of the FOTG. The FOTG, Section II, and the electronic soil survey database provide information relating to all land uses in terms of soil interpretations and ecological site descriptions. This information should be reviewed before meeting with the producer. The planning process includes an exchange of information where the planner acquires knowledge regarding the producer's enterprises and natural resource concerns.

(ii) CNMP Considerations:

The production area is the specific area on the farm where the livestock are housed, fed, and managed. The degree of complexity on the production area site can range from simple to complex. A simple example might be a swine facility built with slatted floors. The manure storage facility is the tank beneath the production facility. No rainfall, wash water, or bedding enters the manure storage facility. A complex example might be a dairy production area with a milking center, free stall barn, and older barns for the milk cows, dry cows, and bred heifers. The heifers may have access to pasture during the growing season. Concrete exercise areas in the older facilities are still in use.

Sufficient information must be gathered during the inventory phase to determine the status of the natural resources. The conservation planner must account for all manure, bedding, wastewater, contaminated feed, contaminated rainwater, and pharmaceuticals. The actual determination as to whether or not current conditions are acceptable is part of planning step 4.

Review the State and Federal laws and regulations that could have an impact on the producer's plan objectives. Consider the producer's ability and willingness to implement the CNMP.

Obtain information needed to comply with the National Environmental Protection Act and other environmental laws, and to satisfy specific State or Federal program requirements (State nonpoint source pollution abatement mandates, USDA farm program eligibility requirements).

There are numerous acceptable procedures and tools for conducting resource inventories. Many of these are described in detail in discipline handbooks, such as the National Agronomy Manual, National Biology Manual, National Forestry Manual, National Range Handbook, and the Water Quality Indicators Guide: Surface Waters, NRCS-TP-161. For example, automated tools like the Web Soil Survey and inventory forms which are a form to collect data on livestock types, size of operation, and acres of different crops.

(iii) Planning Standard:

Sufficient data and information are gathered to analyze and understand the natural resource conditions in the planning area.

(iv) Inputs:

Producer (decision maker).

Stated objectives and natural resource concerns are identified.

Aerial photography.

Inventory tools and procedures (see NPPH, Subpart D, Section 600.40).
- State and Federal reports and evaluations (soil surveys, highly erodible land determinations, and census data).
- Previous resource inventories completed by NRCS or others.
- Field observations and measurements.
- FOTG resource references, soils information, quality criteria, and practice standards, sections I, II, III, and IV.

(v) Products:
- Detailed resource inventories of the planning unit, as well as related off-site information.
- Information on human considerations.
- Identification of other ecological concerns, such as threatened and endangered species.
- Identification of cultural resources.
- Land units, locations, determinations, and producer/land relationships described.
- Identification of infrastructure physical features such as roads, houses, fences, power lines, and other utilities.
- Identification of how the producer manages resources, including kinds, amounts, and timing of management activities.
  - Benchmark data for the planning area.
  - Assistance notes for technical services provided to the producer.

(4) Step 4 Analyze Resource Data

(i) Description:
- Study the resource data and clearly define the natural resource concerns, including limitations to their use and potentials. This step provides the information needed to formulate and evaluate alternatives. The analyses should clearly establish cause and effect relationships and provide information about existing and future conditions.

(ii) CNMP considerations:
- To use the information gathered during the inventory process to full advantage, the planner must interpret the inventory data. Analysis is done to provide insight into natural resource information for the planner, and to present that information in a meaningful and understandable form to the producer. The format in which information is presented to the producer has a significant influence on the decision making process.
- For some resources, analysis methods are well established. For example, in step 3 (inventory) the soil types, slopes are identified, and the crop rotation(s) being used known. The Revised Universal Soil Loss Equation 2 (RUSLE2) can be used with the soils information and crop information to estimate soil loss. The FOTG, Section I, provides a list of technical references that relate to natural resource analysis. Approved automated analysis tools and reports generated can provide the planner and producer with basic inventory analysis data.
- Analysis of the natural resource data will help clarify the products from planning steps 1 and 2. In both planning steps 1 and 2, it was noted that each of these steps would likely not be completed until planning step 4 is complete, so that all of the appropriate information could be considered in total.
- At this point in the planning process, there should be agreement on natural resource concerns and objectives.

(iii) Planning Standard:
- The benchmark condition is documented. The CNMP planner will display results in easily understood formats depicting current natural resource concerns, physical characteristics of the planning unit, and comparisons between existing and potential conditions. The causes of the resource concerns are identified to the extent possible. An environmental evaluation is documented.

(iv) Inputs:
- Producer’s objectives.
- Identified natural resource concerns.
- Resource inventory data.
- FOTG, sections I, II, III and V.
- Resource evaluation tools (RUSLE2).

(v) Products:
- A complete analysis of all resources inventoried.
- A clear statement of the benchmark condition of the planning unit and related areas.
  - Environmental evaluation data.
  - Cultural resources evaluation data.
  - Other program and legal evaluations data.
- Identification of the causes or conditions that resulted in the resource problems.
- A complete definition of natural resource concerns (planning step 1 is completed to the extent that the producer and planner reach agreement).
(5) Step 5 Formulate alternatives

(i) Description:
- Develop alternatives that will achieve the conservation objectives of the producer. Technically feasible alternatives should be developed with the producer. Alternatives can include an appropriate mix of structural measures such as terraces, manure storage structures, waterways, constructed wetlands, and non-structural measures such as crop residue management, nutrient management, and buffers. Include measures that mitigate potential adverse impacts on adjacent, off-site natural resources. Also, address regulatory requirements, based on the producer’s desires and objectives.

(ii) CNMP Considerations:
- The purpose of formulating alternatives is to provide the most effective, efficient, and economical conservation treatments that meet quality criteria and are acceptable to the producer in solving problems, addressing opportunities, and meeting the stated objectives. These alternatives relate to identified natural resource concerns and are developed in view of the cultural, social, ecological, and economic conditions of the planning area. During the alternative formulation process, utilize the associated guidance documents developed and located in the local FOTG, section III.
- Lead the producer in the formulation of alternatives. This allows practical alternative formulation, improves decision making, and enhances the chances of successful implementation. It also helps ensure that low initial cost measures are developed in limited resource situations where costs are a critical issue.
- Develop enough alternatives to provide the producer with the opportunity to consider several possibilities.

(iii) Planning standard:
- Alternative treatments are developed to meet natural resource quality concern criteria and the objectives of the producer.

(iv) Inputs:
- The producer’s objectives from planning step 2.
- Physical, cultural resource, social, economic, and ecological information pertaining to the planning area and related areas.
- List of natural resource concerns from planning step 1.
- Resource data and analysis from planning steps 3 and 4.
- FOTG, sections II, III, IV, and V.

(v) Products:
- A description of the alternatives available to the producer.

(6) Step 6 Evaluate alternatives

(i) Description:
- Evaluate the alternatives to determine their effectiveness in addressing the producer’s natural resource concerns, and objectives. Attention must be given to those ecological values protected by law or Executive Order, e.g., threatened or endangered species, in all planned alternatives.

(ii) CNMP Characteristics:
- The purpose of evaluating alternatives is to provide the producer with the information needed to make sound decisions. This provides the producer further opportunity to be involved in the planning process and maximizes the likelihood of full implementation, including proper O&M.
- During the evaluation of alternatives, careful consideration must be given to social, economic, and ecological resource factors that influence planning. The planner may discover a need to revisit any or all of the previous steps during discussions with the producer or during any part of the evaluation.

(iii) Planning standard:
- The effects of each alternative are evaluated and the impacts are described. The alternatives are compared to benchmark conditions to evaluate their ability to solve problems, meet natural resource concern quality criteria, and meet the producer’s objectives.

(iv) Inputs:
- The producer’s objectives from planning step 2.
- FOTG, sections I, II, III, IV, and V.
- List of natural resource concerns developed during planning step 1.
- Benchmark data from planning step 4.
- List of alternatives from planning step 5.
- Environmental and cultural resource evaluations.
- Program information and requirements.

(v) Products:
- A practical system including alternatives that are compatible with producer and...
NRCS objectives;

- An evaluation, for each alternative, displaying the effects and impacts for the producer to consider and use as a basis for decision making for the conservation plan; and
- Technical assistance notes reflecting discussions between the planner and the producer.

7) Step 7 Make Decisions

(i) Description:
- The producer determines which alternative(s) to implement and the planner prepares the necessary documentation. Documentation includes recording the decision and preparing the conservation plan and NEPA documents.

(ii) CNMP consideration:
- The planner assists the producer in selecting conservation treatment alternatives. This involves comparing conservation alternatives and selecting one or more for implementation.

(iii) Planning standard to make decisions:
- A management system is selected based on the producer’s clear understanding of the impacts of each alternative. The selected alternative is recorded in the producer’s plan.

(iv) Inputs:
- Resource inventory record.
- A set of evaluated alternatives.
- Conservation effects and impacts information
- FOTG, Section V.

(v) Products:
- CNMP (including PAD);
- The plan document with the selected alternative, including potential program or implementation opportunities, and O&M for each practice;
- Schedule of conservation system and practice implementation;
- NEPA documentation; and
- Revised conservation effects and impacts information.

8) Step 8 Implement the Plan

(i) Description:
- Implementing the plan includes providing technical assistance for installing conservation practices and obtaining needed permits, funding, land rights, surveys, final designs, and inspections for structural practices. It also includes the operation, maintenance, and management needed by the producer to assure proper functioning of practices following installation.

(ii) CNMP considerations:
- Implementing a plan is the process of carrying out the conservation treatments that make up the planned conservation system(s). Well documented and understood decisions are a prerequisite to application of the plan. The producer may be able to implement the plan without additional technical assistance. Generally, additional technical assistance is necessary and plan revisions are occasionally warranted. Additional information or documentation may be required by an implementation program or funding authority. Thorough planning sets the stage for providing efficient and effective technical assistance.
- Implementation includes the design, layout, construction, inspection, management, operation, and maintenance of planned systems and practices. Specific program requirements and deadlines may also be involved and need to be considered when scheduling assistance with the producer. The PAD is an abbreviated CNMP that is designed to assist the producer in managing the day-to-day activities associated with implementing the CNMP, including recordkeeping.

(iii) Planning standard:
- The producer has adequate information and understanding to implement, operate, and maintain the planned conservation systems. Practices implemented with NRCS technical assistance will be installed according to NRCS standards and specifications.

(iv) Inputs:
- Conservation plan.
- Case file data.
- Technical studies.
- Environmental evaluations and documents.
- All necessary permits.
- Job sheets and nutrient management plan.
- Conservation practice designs.
- Technical assistance.
- Program requirements.
- FOTG, section IV.
(v) Products:
- Producer Activity Document (PAD).
- Conservation practices applied.
- Management systems applied.
- Communication with the producers and stakeholders.
- Updated plan document.
- Conservation plan revision notes.
- Technical assistance notes.
- Conservation contract where applicable.

(9) Step 9 Evaluate the Plan

(i) Description:
- Evaluate the effectiveness of the implemented plan to ensure that it is functioning as planned and achieving the objectives; identify reasons for lack of progress in plan implementation, if applicable; and obtain information on the results of the applied treatment. Where the actual results differ from those anticipated, provide feedback into the planning process. This could include revision of natural resource concern quality criteria; modification of indicators and target values; changes to current practice standards and specifications; revision of other FOTG data; and modifications to the plan. Also, take the opportunity to encourage the producer to continue plan implementation.

(ii) CNMP considerations:
- Conservation planning is an ongoing process that continues after the plan has been implemented. The CNMP planner should maintain contact with the producer to evaluate O&M needs and to determine if management systems and practices are performing properly and meeting the producer’s and NRCS’ objectives. On-site visits are a part of this process. The CNMP planner should enlist the help of technical specialists and non-Agency partners, as appropriate.

(iii) Planning standard:
- The planner maintains contact with the producer to determine whether the implementation results are meeting natural resource objectives.

(iv) Inputs:
- Copy of the CNMP (including PAD).
- Results of previous evaluations.
- On-site observation and data available from the producer.
- New or modified objectives or needs of the producer.
- Appropriate new technology.
- FOTG, Sections I, II, III, IV, and V

(v) Products:
- O&M reports;
- Outline of maintenance needs or other changes.
- A decision to update or revise the plan, if needed.
- Technical assistance notes indicating the effectiveness of the plan.
- Case studies, if appropriate, following the guidance provided in the FOTG, section V.
- Recommendations for changes in practice standards, specifications, or designs.
- Recommendations for changes in FOTG materials.
- A decision to revise or expand implementation strategies.
- Updated conservation plan effects.
- Updated Conservation Practice Physical Effects (CPPE) and guidance documents.