



DESIGN AND IMPLEMENTATION ACTIVITY

Feed Management

DEFINITION

A feed management plan is a farm-specific plan developed for a client, to document control of the quantity and quality of available nutrients, feedstuffs, and/or additives fed to livestock and poultry.

CRITERIA

General Requirements

A Design and Implementation Activity (DIA) is the planning and designing of a single practice or any combination of structural, vegetative, or land management practices and management activities to treat one or more resource concerns.

The DIA documents the verification of the client's conservation plan, and the development of the implementation requirements or plans and specifications for each planned conservation practice.

The TSP will maintain an ongoing record of DIA related discussions with the client. The TSP will document on a conservation assistance notes form (CPA-6) or other format that includes all components of the CPA-6 (client objectives, dates of assistance, all parties present, notes of significant information, alternatives considered, and decisions reached). Any correspondence between the TSP and the client related to the development of the DIA will be included in the record.

The TSP may use any of the Conservation Practice Documents located in the state's Field Office Technical Guide.

The activity will meet the Natural Resource Conservation Service (NRCS) planning criteria for one or more of the following resource concerns:

Water Quality:

- Excess Nutrients in Surface water by reducing nitrogen, phosphorus, sulfur, salts, and other nutrients
- Excess Nutrients in Groundwater by reducing nitrogen, phosphorus, sulfur, salts, and other nutrients
- Excess pathogens and chemicals from manure, biosolids or compost

Air Quality:

- Emissions of Airborne Reactive Nitrogen
- Emissions of Greenhouse Gases
- Emissions of Particulate Matter (PM) and PM Precursors

- Objectionable Odors

The activity will meet the state adopted NRCS Conservation Practice Standards (CPS) and Statements of Work (SOW) included in the client's conservation plan or EQIP Contract and include at least one of following:

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DELIVERABLES

Two copies (hardcopy or electronic) of the plan must be developed—one for the client and one for the NRCS field office. At the client's request, Technical Service Provider (TSP) can deliver NRCS's copy to the NRCS Field Office. The client's copy must include the implementation requirements or plans, specifications, operation and maintenance, and quality assurance plan. The NRCS copy must include all items identified herein. An additional electronic copy of the plan should also be uploaded on NRCS Registry.

1. Cover Page

Cover page reporting the technical services provided by the TSP. Cover page(s) must include the following:

- a. Client information: Name, farm bill program, contract number, and contract item number.
- b. TSP information: name, address, phone number, email, TSP number, TSP expiration date; and county of service.
- c. Farm identification:
 - i. Farm name, owner name, street address, and county/state.
 - ii. Primary phone number of the client.
 - iii. List of all practices and/or scenario designs included in this plan.**
- d. Statement by TSP that services provided:
 - i. Comply with all applicable Federal, State, Tribal, and local laws and requirements.
 - ii. Meet applicable NRCS standards, specifications, and program requirements.
 - iii. Are consistent with the conservation program goals and objectives for which the program contract was entered into by the client.
 - iv. Incorporate alternatives that are both cost effective and appropriate to address the resource issues.
- e. TSP certification statement: signature and date.
- f. Client acceptance statement:
 - i. A statement that the plans and specifications adequately represent existing conditions and the selected preliminary design alternatives, and the client understands and will abide with the operation and maintenance plans.
 - ii. Signature of the client and date the client received the plans.
- g. Block for NRCS reviewer acceptance (to be completed by NRCS).

2. Conservation Assistance Notes and Correspondence

- a. Conservation Assistance Notes (NRCS-CPA-6) or other format that includes all components of the CPA-6.
 - i. Document the client's objectives.
 - ii. Document each interaction with the client, include notes and results of that interaction, date, and initials of the TSP.
 - iii. Document each site visit, activity in the field, results of each site visit, all parties present, date, and initials of the TSP.
- b. Any correspondence between the TSP and the client relating to the development of the DIA.

3. Maps

- a. Maps to include, but not be limited to:
 - i. General location map of the implementation areas showing access roads to the location.
 - ii. Conservation Plan map (this may consist of several maps to account for the entire implementation area). This map may be obtained from the client.
 - iii. Other maps, as needed, with appropriate interpretations.
- b. At a minimum, all maps developed for the DIA will include:
 - i. Title block showing:
 - Map title.
 - Client's name (individual or business).
 - Prepared with assistance from USDA – NRCS
 - Assisted By [TSP planner's name].
 - Name of applicable conservation district, county, and State.
 - Date prepared.
 - ii. Map scale.
 - iii. Information needed to locate the implementation area, such as geographic coordinates, public land survey coordinates, etc.
 - iv. North arrow.
 - v. Appropriate map symbols and a map symbol legend on the map or as an attachment.

4. Planning

- a. Include and update, when needed, the client's conservation plan. The following are items for consideration based upon producer's concern:
 - i. Meet but not exceed, livestock nutritional needs
 - ii. Reduce nutrient purchases
 - iii. Increase homegrown forage or grain use on farm
 - iv. Improve forage yield, quality
 - v. Improve profitability
 - vi. Maintain or improve water, air quality or both
 - vii. Others as appropriate
- b. Using the criteria in the applicable state adopted CPS and the client's needs, develop preliminary design alternatives for each practice and/or scenario contracted in this DIA.
 - i. Estimate installation cost, in dollars, of each preliminary design alternative.
Work includes developing preliminary layouts, determining feasibility of

current infrastructure, determining performance specifications of proposed equipment, computing approximate quantities of all components, and estimating costs of equipment, materials, labor, permits, certifications, and related items required for installation and start-up of the system.

- ii. Determine the applicable NRCS financial assistance payment schedule scenario, quantity, and payment rates for the implementation of each preliminary design.
- c. Present each preliminary design alternative to the client and obtain the client's selections. Document the selections and date received.

5. Documentation

- a. Number of animals on the farm by group (i.e. calves, heifers, milking cows, sows, piglets, etc.)
- b. Description of housing and feeding systems
- c. Ration parameters of the groups in the written plan
- d. Description of equipment and technologies used for feeding
- e. Forage inventory and nutrient analyses, if applicable
- f. Ration nutrient analyses for the groups of animals the plan is written
- g. Table showing N and P nutrient requirements and the current ration N and P nutrient levels, the predicted or measured manure N and P nutrient excretion, and the level of reductions targeted
- h. If incorporating a feed additive for purposes of air quality, note the name, amount to incorporate, timing and duration to be fed.
 - i. Also, record the anticipated reduction in emissions of the various air pollutants (e.g., greenhouse gases, ammonia, etc.) to be addressed.
- i. All resource concerns identified and quantified based on the analysis of existing feeding system conditions.

6. Implementation Requirements / Plans and Specifications

- a. Recommended changes to the ration
- b. Forage management recommendations, if applicable
- c. Feed mixing and delivery systems recommendations
- d. Predicted manure nutrient reduction amount
- e. Sampling procedures for forages, if applicable, and manure
- f. Resource concerns addressed by the plan
- g. Contingency plans for lack of adequate forage, equipment breakdown, weather extremes, etc.
- h. Include the following certification on the plans, along with the seal and/or signature of the TSP: "To the best of my professional knowledge, judgment, and belief, these plans meet applicable NRCS standards." (Title 210, NEM, Part 505, "Non-NRCS Engineering Services", Subpart B, Section 505.10(3)).
- i. Prepare an operation and maintenance plan for each design that the client will use after implementation of the practices are complete.
 - i. Include, as a minimum, all items listed in each CPS "Operation and

- Maintenance” section and the SOW “Design” section.
- ii. Include requirements to obtain all applicable manufacturer installation guides, user manuals and warranty information.

References

USDA Natural Resources Conservation Service. Field Office Technical Guide.

<https://efotg.sc.egov.usda.gov/#/>

USDA Natural Resources Conservation Service. National TSP Website.

<https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp/>

USDA Natural Resources Conservation Service. National TSP Resources.

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/technical/tsp/?cid=nrcseprd1417414>