



DESIGN AND IMPLEMENTATION ACTIVITY REQUIREMENTS

Pest Management Conservation System

DEFINITION

Pest Management Conservation System manages pests using a combination of conservation practices and Prevention, Avoidance, Monitoring, and Suppression (PAMS) techniques. It addresses beneficial organism, plant pressure, surface, and groundwater impacts.

Pest management plans are documents of record establishing how pests will be managed while addressing identified resource concerns including plant pest pressure, beneficial organisms, and the movement of pesticides. These plans are prepared in collaboration with producer and/or landowner and designed to help the producer implement and maintain an effective plan for the management of pests from available sources.

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 161 Pest Management Conservation System 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 DIA addresses site identified resource concerns, crops grown, crop rotation(s), times and types of tillage practices, and other supporting conservation practices that are implemented to improve or protect air, soil water and animal (invertebrate) resources. This activity includes one or more conservation practices to address plant pest pressure, beneficial organisms and the application and potential loss pathways for pesticides.

The TSP will maintain an ongoing record of DIA related discussions with the client. Any correspondence between the TSP and the client related to the development of the DIA is included in the record submitted to the client.

The TSP will complete Implementation Requirements for vegetative and land management practices as outlined in each state adopted Conservation Practice Standard (CPS) and Statement of Work (SOW) found in the NRCS Field Office Technical Guide for the state in which the practices are being implemented.

The TSP may use any of the Conservation Practice Documents, such as Implementation Requirement Sheets, Job Sheets, templates, Standard Detail Drawings, etc. 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:

- Plant pest pressure
- Injury to beneficial organisms
- Transport of pesticides to surface and ground water
- Emissions of particulate matter (PM) and PM precursors (chemical droplet drift)
- Emissions of ozone precursors (pesticide volatilizations)

The activity will meet the state adopted NRCS Conservation Practice Standards (CPS) and Statements of Work (SOW) for Pest Management Conservation System Code 595 and all other CPS that facilitate Prevention, Avoidance, Monitoring and Suppression (PAMS) activities, soil erosion control or reduce the risk of pesticide transport to surface water, groundwater or air, that are included in the client's conservation plan.

Technical Requirements

Pest Management Conservation System requirements:

Pest Management Conservation System plans must comply with all technical criteria contained in the state approved Pest Management Conservation System (595) Conservation Practice Standard and address the use and management of all targeted pests, beneficial organisms and pesticides applied on agricultural lands.

Hazard Assessments for Land Treatment on all fields where pesticides are applied:

Land treatment conservation practices planned for the fields where pests are managed can be found in the NRCS Conservation Plan. Resource assessments used to refine the pest management are included in the DIA 161 Pest Management Conservation System plan. Wind and water soil erosion estimates from WEPS and RUSLE2 may be in the client case folder. If no documents are found, complete the assessment for each field. Hazard Assessments must be completed for applicable fields.

General Risk Assessment:

Field evaluation and verification of soil conditions as noted in Web Soil Survey to identify sensitive areas, vulnerable soils (shallow to bedrock/karst; depth to groundwater); surface inlets, concentrated flow paths, surface water, tile outlets and wells.

Pesticide Hazard Assessment:

The current NRCS-approved tool to assess the hazards of pesticides is the Windows Pesticide Screening Tool (WIN-PST).

Erosion Risk Assessment:

Planners must use current NRCS nationally approved erosion-prediction technology to assess the risk of transporting pesticides from the field causing off-site degradation due to wind, water, and irrigation induced erosion.

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, unless the client requests other documents from this section. 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.
- 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: (May be copied from Client Case File Conservation Plan)
 - 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 or if the client has a signed release form NRCS-CPA-70.
 - iii. Field maps showing:
 1. Soil map units
 2. Conservation practices planned (i.e. 595 Pest Management Conservation System)
 3. Buffers and setbacks from sensitive areas and surface water.
- 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, which includes all related PAMS conservation practices or activities.
- 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.
- d. A record of the alternatives developed (a minimum of two alternatives must be developed)

- e. A record of the preferred alternative for each habitat type, which includes:
 - i. PLU label (name, number, or both).
 - ii. Client objectives and desired future condition.
 - iii. NRCS practice name and code.
 - iv. Amount to be applied.
 - v. Brief description of the planned practice (practice narrative).
 - vi. Date the planned practice is scheduled to be implemented.
 - vii. As needed, applicable "Conservation Practice Overview" sheets or other prepared material.
 - viii. Operation and maintenance agreements and procedures.
 - ix. Available maps, sketches, and designs resulting from the planning process that will be useful to the client in implementing the plan.

5. Documentation (As appropriate for structural and non-structural practices)

- a. Provide documentation of the following:
 - i. Surveys
 - ii. Geological Investigations
 - iii. Testing
 - iv. Layouts of all components
 - v. Material specifications
 - vi. Infrastructure and other considerations
 - vii. Structural, foundation, hydraulic, and other design computations, and analysis
 - viii. Design checking and reviews
 - ix. Facilitating practices or components
- b. Computations, analysis, and other items that support and ensure adherence to the CPS criteria and are needed to develop the implementation requirements.
- c. Cost estimate of each final design, including costs of components, materials, equipment, and labor required for demolition, relocation, installation, disposal and start-up; fees for disposal; permits, and certifications; charges for testing and other quality assurance activities; and all other costs associated with the implementation of each design.
- d. Quality assurance activities that are required during installation to ensure the equipment, materials, and installations meet the design intent, function properly, and can be certified as meeting the plans and specifications.
- e. Other information as required in the CPS Statement of Work, including but not limited to, practice purpose, list of permits, facilitating practices, and state required items that affect safety and other environmental concerns.

6. Implementation Requirements

- a. Develop written plans and specifications and/ or Implementation Requirements for each design.
 - i. Include, as a minimum, all items listed in each CPS "Plans and Specifications" section and the SOW "Design" section.
 - ii. Include both visual / photographic and narrative descriptions of the work, when applicable. Provide descriptive information on the quality of the completed work and the quantities of all materials required for completion of the work.
 - iii. A location map, plan view and written information are required. These items

- may be included in a single document where all specification information is included on the plans, or in multiple documents where the specifications are independent of the plans.
- iv. 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)).
- b. 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>
- USDA Natural Resources Conservation Service. National Planning Procedures Handbook.
<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=44407>
- USDA Natural Resources Conservation Service. National Environmental Compliance Handbook.
<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=39467>
- USDA Natural Resources Conservation Service. Windows Pesticide Screening Tool (WIN-PST).
- USDA Natural Resources Conservation Service. Cultural Resources Handbook.
<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=42752>
- USDA-NRCS GM-190-404 Pest Management Policy
<http://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=17015>
- Using Farming Bill Programs for Pollinator Conservation
http://plants.usda.gov/pollinators/Using_Farm_Bill_Programs_for_Pollinator_Conservation.pdf
- Regional IPM Centers. A national umbrella site for the regional IPM centers
<http://www.ipmcenters.org/index.cfm/ipm-in-the-us/federal-ipm-coordinating-committee/>
- USDA Organic Regulations
<https://www.ams.usda.gov/rules-regulations/organic>
- USDA Agricultural Marketing Service, National Organic Program, National List of Allowed and Prohibited Substances