

CONSERVATION ACTIVITY PLAN

SOIL RESOURCES PLANNING CRITERIA

CODE 132

(No.)

DEFINITION

Conservation Activity Plan (CAP) 132 – Soil Resources Planning is a component conservation plan. The plan documents practices and strategies adopted to address soil resource concerns as well as potential economic considerations.

PURPOSE

The plan documents client objectives, benchmark conditions, resource concerns, alternative actions, the evaluation of alternative actions, and the clients preferred alternative. The plan will also document an ongoing record of all correspondence pertinent to completion of the CAP.

Resource concerns considered during CAP 132 development are soil erosion (sheet and rill, wind) and soil quality degradation (organic matter depletion).

Results from this conservation activity are components of a conservation plan and will need to be supplemented by remaining conservation planning requirements for a complete conservation plan.

CONDITIONS WHERE CONSERVATION ACTIVITY APPLIES

This conservation activity plan applies to cropland. This CAP does not apply to orchards, vineyards, pasture, hayland, range, or forest.

GENERAL CRITERIA

Prior to initiation of CAP 132, the Technical Service Provider (TSP) will schedule a conference to include the client, the TSP, and Natural Resources Conservation Service (NRCS) to discuss the required CAP deliverables, client objectives and the planning area (project scope).

The TSP will complete planning steps 3 through portions of 7 of the NRCS 9 step planning process as outlined in the NRCS National Planning Procedures Handbook (NPPH). These steps include, inventory and analyze resources (steps 3 and 4), formulate and evaluate alternatives (steps 5 and 6) and document client's preferred alternative (step 7).

The TSP will document all planning activities on the environmental evaluation worksheet (CPA-52). The TSP will maintain an ongoing record of each interaction with the client on conservation assistance notes form (CPA-6) and any correspondence between the TSP and the client related to the development of the CAP.

INVENTORY RESOURCES (Step 3)

The resource inventory documents existing natural resources within the planning area. Documentation of natural resources will include, but is not limited to:

- current crops and rotation,
- farming practices (tillage, residue, crop field operations, etc.),

- soils, climate, topography,
- subfield planning units,
- equipment and technology,
- economic information (labor, fuel, seed, machinery, and other typical costs to produce the crop, or crops in rotation, and revenue),
- pertinent local, state, tribal, and Federal statutory limitations, and
- special environmental considerations.

The TSP will use NRCS soil and climatic data available in the state Field Office Technical Guide (FOTG) for the erosion tools and the most reliable elevation data available for the planning area (e.g., LIDAR, DEM, etc.) for establishing slope and slope length.

The resource inventory will also include any previously installed or implemented conservation practices that are maintained to NRCS standards and specifications.

ANALYZE RESOURCE DATA (Step 4)

Analysis of resource inventory data documents the benchmark condition of natural resources in the planning area. A comparison between benchmark condition and planning criteria/quality criteria (desired future condition) will identify the existence or absence of a resource concern.

The TSP will provide benchmark annual sheet and rill erosion and/or wind erosion tolerable soil loss (T) in tons per acre using the current erosion prediction technology identified in state FOTG.

After analysis of resource data, documentation will include but is not limited to:

- resource concerns,
- results of risk assessment tools for soil erosion losses for benchmark conditions.

FORMULATE ALTERNATIVES (Step 5)

At a minimum the no-action alternative (benchmark condition) and one additional alternative must be developed.

Alternatives, other than the no-action alternative, will document a practice, or a system of practices, to address identified resource concern(s). These must meet the client's objectives and comply with federal, state, tribal, and local laws, regulations and permit requirements.

When providing technical assistance to organic clients, ensure recommended practices and activities are consistent with the USDA-Agricultural Marketing Service National Organic Program standard.

EVALUATE ALTERNATIVES (Step 6)

The TSP will evaluate alternatives to provide the client with information needed to select a preferred alternative.

When evaluating the no-action alternative the TSP will assume benchmark conditions for natural resources.

When evaluating all other alternatives, the TSP will estimate planned annual sheet and rill erosion and/or wind erosion in tons per acre, and/or soil conditioning index (SCI), using the current erosion

prediction technology identified in state FOTG. The TSP must show the impact of the income change associated with implementation of the practice(s)..

When making conservation practice recommendations, impacts to special environmental concerns identified in Step-3 (Resource Inventory) must be considered. Efforts to avoid, or mitigate, any adverse effects on those unique resources and other soil, water, air, plants, animals (including livestock, fish, and wildlife), energy, or social concerns are required.

After analysis of proposed alternatives, documentation will include, but is not limited to:

- results of risk assessment tools for soil erosion losses for planned conditions, and
- planned net profit, with supporting documentation (economic T-charts or other economic analysis to determine ROI).

CLIENT'S PREFERRED ALTERNATIVES (Step 7)

The TSP will present all alternatives to the client and document the clients preferred alternative.

The TSP will finalize all documentation of planning activities on the environmental evaluation worksheet (CPA-52) and develop necessary implementation requirements/job sheets identified in Section IV of the FOTG.

The TSP will provide the client with two copies the final CAP 132 plan in accordance with the statement of deliverables.

REFERENCES

USDA Natural Resources Conservation Service. National Planning Procedures Handbook.

USDA Natural Resources Conservation Service. Field Office Technical Guide.

USDA Natural Resources Conservation Service. 2011. National Agronomy Manual. 190-V. 4th Ed.

USDA Natural Resources Conservation Service. National Environmental Compliance Handbook.

USDA Natural Resources Conservation Service. Cultural Resources Handbook.

USDA Natural Resources Conservation Service. Title170, National Map Symbol Handbook, Part 601.

USDA Natural Resources Conservation Service. Economics Technical Note 1. Basic Economic Analysis Using T-Charts. 2013. Washington, DC. NRCS eDirectives under Technical Notes, Title 200

(<https://policy.nrcs.usda.gov/>).

Renard, K.G., G.R. Foster, G.A. Weesies, D.K. McCool, and D.C. Yoder, coordinators. 1997. Predicting soil erosion by water: A guide to conservation planning with the Revised Universal Soil Loss Equation (RUSLE). U.S. Department of Agriculture, Agriculture Handbook No. 703.

Skidmore, E.L. and N.P. Woodruff. 1968. Wind erosion forces in the United States and their use in predicting soil loss. U.S. Department of Agriculture. Agriculture Handbook No. 346.