

SUBCHAPTER B—CONSERVATION OPERATIONS

PART 610—TECHNICAL ASSISTANCE

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AUTHORITY: 16 U.S.C. 590a-f, 590q, 2005b, 3861, 3862.

SOURCE: 42 FR 38169, July 27, 1977, unless otherwise noted.

Subpart A—Conservation Operations

§610.1 Purpose.

This subpart sets forth Natural Resource Conservation Service (NRCS) policies and procedures for furnishing technical assistance in conservation operations.

[61 FR 27999, June 4, 1996]

§610.2 Scope.

(a) Conservation operations, including technical assistance, is the basic soil and water conservation program of NRCS. This program is designed to:

- (1) Reduce soil losses from erosion;
- (2) Help solve soil, water, and agricultural waste management problems;
- (3) Bring about adjustments in land use as needed;
- (4) Reduce damage caused by excess water and sedimentation;
- (5) Enhance the quality of fish and wildlife habitat; and
- (6) Improve all agricultural lands, including cropland, forestland, and grazing lands that include pastureland, rangeland, and grazed forestland so that the long-term sustainability of the resource base is achieved.

(b) The Natural Resources Conservation Service is USDA's technical agency for providing assistance to private landowners, conservation districts, and other organizations in planning and carrying out their conservation activities and programs. NRCS works with individuals, groups, and units of government to help them plan and carry out conservation decisions to meet their objectives.

[64 FR 42003, Aug. 3, 1999]

§610.3 Assistance through conservation districts.

(a) Technical assistance is provided through and in cooperation with conservation districts in the 50 States, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands. These districts, formed under authority of State laws, are operated and controlled by local citizens. They provide the leadership and the program needed to meet the conservation objectives of the district.

(b) NRCS furnishes technical assistance to conservation districts as specified in memorandums of understanding. Soil conservationists assigned to conservation districts work directly with land users and others according to the program needs and the priorities established by the conservation districts.

(c) The practical experience of land users is combined with the scientific knowledge and skills of professional conservationists to plan and carry out locally formulated conservation programs.

(d) When requested, technical assistance may be provided to owners, operators, or groups using land that is under the jurisdiction of the United States Department of the Interior if such land is included in a conservation district or if assistance is in accordance with memorandums of understanding identifying the coordination of agency activities.

§ 610.4 Technical assistance furnished.

The Natural Resources Conservation Service provides technical assistance to land users and others who are responsible for making decisions and setting policies that influence land use, conservation treatment, and resource management. Technical assistance furnished by NRCS consists of program assistance, planning assistance, application of conservation practices, and assistance in the technical phases of USDA cost-share programs.

(a) Program assistance is provided to conservation districts and other organizations concerned with the conservation of soil, water, plant, and wildlife resources. This assistance includes providing resource inventory data and identifying conservation problems and needs in order for districts to develop long-range soil and water conservation programs. Individuals, groups, and organizations requesting NRCS assistance through conservation districts include:

(1) Farmers, ranchers, and other land users concerned with the conservation of land and water resources.

(2) County and other local government units such as park authorities, departments of public works, planning, zoning (rural, urban, and flood plain), school, and institution boards, highway departments, and tax assessors.

(3) Citizen groups, youth groups, recreation groups, and garden clubs.

(4) State and local units of government (highway, health, recreation, water resources, and regional planning) involved in establishing public policy regarding the use of resources.

(5) Federal departments and agencies such as Defense, Housing and Urban Development, Public Roads, Health and Human Services; and Interior.

(6) Professional consultants who provide services such as engineering, plan-

ning, environmental assessment, tax assessment, and forest management.

(b) Planning assistance includes evaluation of soil, water, vegetation, and other resource data needed for making land use, environmental and conservation treatment decisions. NRCS helps land users make conservation plans for farms, ranches, and other land units. This help includes onsite planning assistance in making conservation plans. The plans are based on a soil survey and interpretations for the intended land uses and conservation treatment. Plans may also include other inventories of soil, water, plant, and related resources needed in the planning process. Information about the responses of each kind of soil and the conservation practices and resource management needed for different land uses is provided. The land user's decisions recorded in the plan are based on his conservation objectives. Conservation plans provide for the orderly installation of conservation practices. Conservation plans reflect changing conditions.

(c) Application assistance is provided to help land users apply and maintain planned conservation work. NRCS assistance for applying the conservation practices in the plan may include:

(1) Designing, constructing, and maintaining conservation practices;

(2) Selecting management alternatives and cultural practices needed to establish and maintain vegetation; and

(3) Other conservation practices needed to protect land and water resources.

(d) The Natural Resources Conservation Service assists in carrying out certain phases of USDA soil and water conservation cost-share programs. NRCS assists individual program participants with conservation plans needed for long-term cost-share agreements. NRCS is assigned responsibility by the Secretary of Agriculture for technical phases of applying conservation practices on the land. This assignment includes:

(1) Determining what practices are needed and feasible to install, (2) selecting sites and planning and designing practices, (3) providing assistance

for installing practices, and (4) certifying that the work done is in accordance with NRCS standards and specifications.

[42 FR 38169, July 27, 1977, as amended at 47 FR 56473, Dec. 17, 1982]

§ 610.5 Interdisciplinary assistance.

Technical assistance is based on the principle that soil, water, plant, and related resources are interdependent and must be managed accordingly. Soil conservationists integrate the various technical fields in providing for the conservation of land and water resources. Staff scientists and specialists develop conservation standards, prepare necessary specifications, provide training, and review work performance. NRCS uses consultants for conservation problems that require special expertise.

Subpart B—Soil Erosion Prediction Equations

SOURCE: 61 FR 27999, June 4, 1996, unless otherwise noted.

§ 610.11 Purpose and scope.

This subpart sets forth the equations and rules for utilizing the equations that are used by the Natural Resources Conservation Service (NRCS) to predict soil erosion due to water and wind. Section 301 of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA) and the Food Security Act, as amended, 16 U.S.C. 3801–3813 specified that the Secretary would publish the universal soil loss equation (USLE) and wind erosion equation (WEQ) used by the Department within 60 days of the enactment of FAIRA. This subpart sets forth the equations, definition of factors, and provides the rules under which NRCS will utilize the USLE, the revised universal soil loss equation (RUSLE), and the WEQ.

§ 610.12 Equations for predicting soil loss due to water erosion.

(a) The equation for predicting soil loss due to erosion for both the USLE and the RUSLE is $A = R \times K \times LS \times C \times P$. (For further information about USLE see the U.S. Department of Agriculture Handbook 537, "Predicting

Rainfall Erosion Losses—A Guide to Conservation Planning," dated 1978. Copies of this document are available from the Natural Resources Conservation Service, P.O. Box 2890, Washington, DC 20013. For further information about RUSLE see the U.S. Department of Agriculture Handbook 703, "Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)." Copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.)

(b) The factors in the USLE equation are:

(1) *A* is the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion.

(2) *R* is the rainfall erosivity factor. Accounts for the energy and intensity of rainstorms.

(3) *K* is the soil erodibility factor. Measures the susceptibility of a soil to erode under a standard condition.

(4) *LS* is the slope length and steepness factor. Accounts for the effect of length and steepness of slope on erosion.

(5) *C* is the cover and management factor. Estimates the soil loss ratio for each of 4 or 5 crop stage periods throughout the year, accounting for the combined effect of all the inter-related cover and management variables.

(6) *P* is the support practice factor. Accounts for the effect of conservation support practices, such as contouring, contour stripcropping, and terraces on soil erosion.

(c) The factors in the RUSLE equation are defined as follows:

(1) *A* is the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion.

(2) *R* is the rainfall erosivity factor. Accounts for the energy and intensity of rainstorms.

(3) *K* is the soil erodibility factor. Measures the susceptibility of a soil to erode under a standard condition and adjusts it bi-monthly for the effects of freezing and thawing, and soil moisture.

(4) *LS* is the slope length and steepness factor. Accounts for the effect of

length and steepness of slope on erosion based on 4 tables reflecting the relationship of rill to interrill erosion.

(5) *C* is the cover and management factor. Estimates the soil loss ratio at one-half month intervals throughout the year, accounting for the individual effects of prior land use, crop canopy, surface cover, surface roughness, and soil moisture.

(6) *P* is the support practice factor. Accounts for the effect of conservation support practices, such as cross-slope farming, stripcropping, buffer strips, and terraces on soil erosion.

§610.13 Equations for predicting soil loss due to wind erosion.

(a) The equation for predicting soil loss due to wind in the Wind Erosion Equation (WEQ) is $E = f(IKCLV)$. (For further information on WEQ see the paper by N.P. Woodruff and F.H. Siddaway, 1965. "A Wind Erosion Equation," Soil Science Society of America Proceedings, Vol. 29, No. 5, pages 602-608, which is available from the American Society of Agronomy, Madison, Wisconsin. In addition, the use of the WEQ in NRCS is explained in the Natural Resources Conservation Service (NRCS) National Agronomy Manual, 190-V-NAM, second ed., Part 502, March, 1988, which is available from the NRCS, P.O. Box 2890, Washington, DC 20013.)

(b) [Reserved]

(c) The factors in the WEQ equation are defined as follows:

(1) *E* is the estimation of the average annual soil loss in tons per acre.

(2) *f* indicates the equation includes functional relationships that are not straight-line mathematical calculations.

(3) *I* is the soil erodibility index. It is the potential for soil loss from a wide, level, unsheltered, isolated field with a bare, smooth, loose and uncrusted surface. Soil erodibility is based on soil surface texture, calcium carbonate content, and percent clay.

(4) *K* is the ridge roughness factor. It is a measure of the effect of ridges formed by tillage and planting implements on wind erosion. The ridge roughness is based on ridge spacing, height, and erosive wind directions in relation to the ridge direction

(5) *C* is the climatic factor. It is a measure of the erosive potential of the wind speed and surface moisture at a given location compared with the same factors at Garden City, Kansas. The annual climatic factor at Garden City is arbitrarily set at 100. All climatic factor values are expressed as a percentage of that at Garden City.

(6) *L* is the unsheltered distance. It is the unsheltered distance across an erodible field, measured along the prevailing wind erosion direction. This distance is measured beginning at a stable border on the upwind side and continuing downward to the nonerodible or stable area, or to the downwind edge of the area being evaluated.

(7) *V* is the vegetative cover factor. It accounts for the kind, amount, and orientation of growing plants or plant residue on the soil surface.

§610.14 Use of USLE, RUSLE, and WEQ.

(a) All Highly Erodible Land (HEL) determinations are based on the formulas set forth in 7 CFR §12.21 using some of the factors from the USLE and WEQ and the factor values that were contained in the local Field Office Technical Guide (FOTG) as of January 1, 1990. In addition, this includes the soil loss tolerance values used in those formulas for determining HEL. The soil loss tolerance value is used as one of the criteria for planning soil conservation systems. These values are available in the FOTG in the local field office of the Natural Resources Conservation Service.

(b) RUSLE will be used to:

(1)(i) Evaluate the soil loss estimates of conservation systems contained in the FOTG.

(ii) Evaluate the soil loss estimates of systems actually applied, where those systems were applied differently than specified in the conservation plan adopted by the producer or where a conservation plan was not developed, in determining whether a producer has complied with the HEL conservation provisions of the Food Security Act of 1985, as amended, 16 U.S.C. §3801 *et seq.*, set forth in 7 CFR Part 12; and

(2) Develop new or revised conservation plans.

Subpart C—State Technical Committees

SOURCE: 64 FR 42003, Aug. 3, 1999, unless otherwise noted.

§ 610.21 Purpose and scope.

This subpart sets forth the procedures for establishing and using the advice of State Technical Committees. NRCS shall establish in each State a technical committee to assist in making technical recommendations relating to the implementation of natural resource conservation activities and programs. USDA will use State Technical Committees in an advisory capacity in the administration of certain conservation programs and initiatives. These State Technical Committees are exempt from the provisions of the Federal Advisory Committee Act (5 U.S.C. App.2).

§ 610.22 State Technical Committee membership.

(a) State Technical Committees shall include members who represent a variety of natural resource sciences and occupations, including those related to soil, water, wetlands, plants, and wildlife. The State Conservationist in each State will serve as chairperson. In addition, committee membership will include one representative from each of the following agencies or groups, if willing to serve:

- (1) NRCS, USDA;
- (2) Farm Service Agency, USDA;
- (3) State Farm Service Agency Committee, USDA;
- (4) Forest Service, USDA;
- (5) Cooperative State Research, Education, and Extension Service, USDA;
- (6) Rural Development, USDA;
- (7) Fish and Wildlife Service, United States Department of Interior;
- (8) United States Environmental Protection Agency;
- (9) Bureau of Land Management, United States Department of Interior;
- (10) Bureau of Indian Affairs, United States Department of Interior;
- (11) U.S. Geological Survey, United States Department of Interior;
- (12) Bureau of Reclamation, United States Department of Interior;
- (13) Corps of Engineers, United States Department of the Army;

(14) Each of the Federally recognized American Indian Tribal Governments and Alaskan Native Corporations encompassing 100,000 acres or more in the State;

(15) State departments and agencies that the NRCS State Conservationist deems appropriate, including a member from each of the following agencies or entities within the State:

- (i) Fish and wildlife agency;
- (ii) Forestry agency;
- (iii) Water resources agency;
- (iv) Department of agriculture;
- (v) Association of soil and water conservation districts;
- (vi) Soil and water conservation agency;
- (vii) Coastal zone management agency; and

(16) Other Federal, State, tribal, and local agency personnel with expertise in soil, water, wetlands, plant, and wildlife management, as the NRCS State Conservationist considers appropriate.

(b) In addition to agency and Tribal membership, State Technical Committees shall include members from the following private interests, if willing to serve:

- (1) Agricultural producers with demonstrable conservation expertise;
- (2) Nonprofit organizations with demonstrable conservation expertise;
- (3) Persons knowledgeable about economic and environmental impacts of conservation techniques and programs; and
- (4) Representatives from agribusiness.

(c) To ensure that recommendations of the State Technical Committees take into account the needs of the diverse groups served by the USDA, membership shall include, to the extent practicable, individuals with demonstrated ability to represent the conservation and related technical concerns of particular historically underserved groups and individuals; i.e., minorities, women, persons with disabilities and socially and economically disadvantaged groups.

(d) In accordance with the guidelines in paragraphs (a), (b), and (c) of this section, the State Conservationist establishes membership on the State Technical Committee. Individuals or

groups wanting to participate on a State Technical Committee within a specific State may submit to the State Conservationist of that particular State a request that explains their interest and outlines their credentials which they believe are relevant to becoming a member of the State Technical Committee. Decisions of the State Conservationist concerning membership on the committee are final and not appealable to any other individual or group within USDA.

§610.23 State Technical Committee meetings.

(a) The State Conservationist shall provide public notice of State Technical Committee meetings in which issues related to conservation programs will be considered.

(b) The State Conservationist shall publish a meeting notice no later than 14 calendar days prior to the meeting. Notification may exceed this 14-day minimum where State open meeting laws exist and provide for a longer notification period. This minimum 14-day notice requirement may be waived in the case of exceptional conditions. The State Conservationist shall publish this notice in at least one or more newspaper(s), including recommended Tribal publications, to attain statewide circulation. The State Conservationist, as Chairperson, schedules and conducts the meetings, although a meeting may be requested by any USDA agency as needed.

§610.24 Responsibilities of State Technical Committees.

(a) Each State Technical Committee established under this subpart shall meet on a regular basis, as determined by the State Conservationist, to provide information, analysis, and recommendations.

(b) The State Technical Committee shall provide, in writing to the implementing USDA program agency, recommendations, data, and technical analyses, which reflect the professional information and judgment of the State Technical Committee. Such information, analyses, and recommendations shall be provided in a manner that will assist in determining matters of fact, technical merit, or scientific question.

(c) The responsibilities of the State Technical Committee include making recommendations with respect to the technical matters such as:

(1) Guidelines for evaluating petitions by agricultural producers regarding new conservation practices and systems not already described in field office technical guides;

(2) Aspects of wetland protection, restoration, and mitigation requirements;

(3) Criteria to be used in evaluating bids for enrollment of environmentally-sensitive lands in the Conservation Reserve Program (16 U.S.C. 3831-3836);

(4) Guidelines for haying or grazing and the control of weeds to protect nesting wildlife on set-aside acreage;

(5) Highly erodible land exemptions and the appeals process as it pertains to technical issues and information;

(6) Wetland and highly erodible land conservation compliance exemptions and the appeals process;

(7) Methods to address common weed and pest problems, and programs to control weeds and pests found on acreage enrolled in the Conservation Reserve Program (16 U.S.C. 3831-3836);

(8) Guidelines for planting perennial cover for water quality and wildlife habitat improvement on set-aside lands;

(9) Criteria and priorities for state initiatives under the Environmental Quality Incentives Program (EQIP) (16 U.S.C. 3839aa), including:

(i) Criteria to prioritize applications from applicants with significant statewide resource concerns outside a priority area;

(ii) Eligible conservation practices for an EQIP priority area or for significant statewide resource concerns outside a priority area;

(iii) Criteria to be used in defining a large confined livestock operation under EQIP;

(iv) Suggestions on how often producers' EQIP applications are ranked and selected;

(v) Criteria to prioritize applications from applicants with significant statewide resource concerns outside a priority area; and

(vi) Determination of cost share and incentive payment limits for participants subject to environmental requirements or with significant statewide resource concerns outside a priority area.

(10) The implementation of the Wildlife Habitat Incentives Program (WHIP) (16 U.S.C. 3836a);

(11) The technical merits of proposals submitted for the Farmland Protection Program (16 U.S.C. 3830);

(12) The development of a Wetland Reserve Program (WRP) (16 U.S.C. 3837) wetland restoration plan;

(13) Statewide program guidelines applicable to WRP easement compensation, restoration planning, priority ranking, and related policy matters, 7 CFR part 1467;

(14) Identification of any categories of wetland conversion activities and conditions which are routinely determined by NRCS to have minimal effect on wetland functions and values as described in 7 CFR part 12.

(15) Conservation techniques and measures related to achieving environmental justice needs; and

(16) Types or classes of wetland that are not eligible for mitigation exemption under the Wetland Conservation provisions of 7 CFR part 12.

(d) The implementing agency reserves the authority to accept or reject the Committee's recommendations; however, the implementing USDA agency shall give strong consideration to the Committee's suggestions.

§ 610.25 Specialized subcommittees.

In some situations, specialized subcommittees, made up of State Technical Committee members, may be needed to analyze and refine specific issues. The State Conservationist may assemble certain members to discuss, examine, and focus on a particular technical or programmatic topic. The subcommittee may seek public participation; however, it is not required to do so. Nevertheless, decisions resulting from these subcommittee sessions shall be made only in a general session of the State Technical Committee, where the public is notified and invited to attend.

Subpart D—Conservation of Private Grazing Land

SOURCE: 67 FR 68497, Nov. 12, 2002, unless otherwise noted.

§ 610.31 Purpose and scope.

(a) This subpart sets forth the policies for the Conservation of Private Grazing Land (CPGL) Program, as authorized by Section 386 of the Federal Agriculture Improvement and Reform Act of 1996, (Pub. L. 104-127, April 4, 1996) 16 U.S.C. 2005b. Under the CPGL Program, NRCS will provide technical assistance to landowners and managers who request assistance based on locally-established priorities and resource concerns. The purpose of the CPGL Program is to provide technical assistance to private grazing land owners and managers to voluntarily conserve or enhance grazing land resources to meet ecological, economic, and social demands.

(b) The term "private grazing land" means private, State-owned, tribally owned, and any other non-federally owned rangeland, pastureland, grazed forestland, hayland, and other lands used for grazing.

(c) The NRCS Chief may implement the CPGL Program in any of the 50 States, the District of Columbia, Commonwealth of Puerto Rico, Guam, the U.S. Virgin Islands, and American Samoa. NRCS will provide assistance in cooperation with conservation districts, or directly to a landowner or operator.

§ 610.32 Technical assistance furnished.

(a) Provide technical assistance to grazing-land owners and managers to plan and implement resource conservation on grazing land. The objective of planning on grazing land is to assist landowners and managers in understanding the basic ecological principles associated with managing their land. This objective can be met by implementing a plan that meets the needs of the resources (soil, water, air, plants, and animals) and management objectives of the owner or manager. NRCS may provide assistance, at the request of the private grazing-land owner or manager to:

- (1) Maintain and improve private grazing land resources that provide multiple benefits;
 - (2) Ensure the long-term sustainability of private grazing land resources;
 - (3) Implement new grazing land management technologies;
 - (4) Manage resources on private grazing land through conservation planning, including, but not limited to; grazing management, nutrient management, and weed and invasive species control;
 - (5) Maintain and improve water quality and quantity, aquatic and wildlife habitat, recreational opportunities, and aesthetics on private grazing land;
 - (6) Harvest, process, and market private grazing land resources; and
 - (7) Identify opportunities to diversify private grazing land enterprises.
- (b) Refer to 7 CFR 610.4 on other items relating to technical assistance.
 - (c) To receive technical assistance, a landowner or manager may contact NRCS or the local conservation district to seek assistance to solve identified natural resource problems or opportunities. Participation in this program is voluntary.

PART 611—SOIL SURVEYS

Subpart A—General

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- 611.1 Purpose and scope.
- 611.2 Cooperative relationships.

Subpart B—Soil Survey Operations

- 611.10 Standards, guidelines, and plans.
- 611.11 Reproduction and distribution of soil survey information.

Subpart C—Cartographic Operations

- 611.20 Function.
 - 611.21 Availability of aerial photography.
 - 611.22 Availability of satellite imagery.
- AUTHORITY: Pub. L. 74-46, 49 Stat. 163 (16 U.S.C. 590(a-f)); Pub. L. 89-560, 80 Stat. 706 (42 U.S.C. 3271-3274).

SOURCE: 39 FR 7415, Feb. 26, 1974, unless otherwise noted.

Subpart A—General

§ 611.1 Purpose and scope.

- (a) This part sets forth policy on soil survey operations of the Natural Resources Conservation Service (NRCS).
- (b) NRCS is responsible for soil survey activities of the U.S. Department of Agriculture (USDA). A soil survey provides (1) an orderly, on-the-ground, scientific inventory of soil resources according to their potentialities and problems of use, and (2) information about each kind of soil in sufficient detail to meet all reasonable needs of farmers, agricultural technicians, community planners, engineers, and scientists in planning and transferring the findings of research and experience to specific land areas.

§ 611.2 Cooperative relationships.

- (a) Soil surveys on nonfederal lands are carried out cooperatively with state agricultural experiment stations and other state agencies. The cooperative effort is evidenced in a memorandum of understanding setting forth guidelines for actions to be taken by each cooperating party in the performance of soil surveys. Similar cooperative arrangements exist between NRCS and other federal agencies for soil surveys on federal lands.
- (b) Arrangements for nonfederal financial participation in the cost of soil surveys may be made with states, counties, soil conservation districts, planning agencies, and other local groups.

Subpart B—Soil Survey Operations

§ 611.10 Standards, guidelines, and plans.

- (a) NRCS conducts soil surveys under national standards and guidelines for naming, classifying, and interpreting soils and for publishing soil surveys in the USDA series.
- (b) A soil survey work plan of a county or area of similar size that is to be completed for publication is prepared prior to the start of each soil survey. The work plan provides information relevant to the conduct and publication of the soil survey. The plan is