
LANCASTER SOIL AND WATER CONSERVATION DISTRICT LONG RANGE PLAN 2017-2022

Developed by the
**Lancaster Soil and Water Conservation District
Board of Commissioners**

In Partnership
With the

**South Carolina Department of Natural Resources,
Land and Water Resources and Conservation Districts Division**

**United States Department of Agriculture,
Natural Resources Conservation Service**

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All programs and services of the Lancaster Soil and Water Conservation District are offered on a non-discriminatory basis without regard to race, color, national origin, religion, gender, age, handicap or marital status.

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Commissioners and Partners of the Lancaster Soil and Water Conservation District

Commissioners

Joe H. Ghent, Jr., Chairman
Phil Cleveland, Vice-Chairman and acting Secretary/Treasurer
Bill Ardrey, Commissioner
Gary Moore, Commissioner

District Personnel

Amanda Roberts,
District Manager
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Partners of the District

USDA - Natural Resources Conservation Service

Ann Christie,
District Conservationist
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SC Department of Natural Resources

Marc Cribb and Dorothy Phillips

THE CONSERVATION DISTRICT

The mission of the Lancaster Soil and Water Conservation District is to enhance awareness of natural resources by educating school children, citizens and community leaders about conservation and environmental issues.

CONSERVATION DISTRICT ORGANIZATION

The Lancaster Soil and Water Conservation District is an entity of state government, organized April 17, 1937, in accordance with Soil Conservation District Law No. 182 of the 1937 South Carolina General Assembly. Organized originally as a part of the Catawba Soil and Water Conservation District, the Lancaster District became a single-county conservation district on July 7, 1950.

An unpaid Board of Commissioners, consisting of three positions elected in the General Election and two appointed by the SC Department of Natural Resources Board, administers the affairs of the District. Associate commissioners, affiliate members, and a chaplain assist the District. Citizen input on various concerns such as education, sediment & erosion control, soil and water stewardship, and new government regulations are solicited periodically and as needed.

POLICIES OF THE DISTRICT

It is the policy of the Lancaster Soil and Water Conservation District:

- 1. To provide technical and informational assistance to units of government, landowners, and land users as available human resources permit and as established priorities require.*
- 2. To enter into memoranda of understanding and/or cooperative agreements with federal, state and local agencies, other units of local government, groups, and individuals to further the protection and wise use of the natural resources within the District.*
- 3. To develop an annual plan of work outlining specific actions and activities for the year ahead.*
- 4. To report major conservation activities to the public and cooperating agencies on an annual basis.*
- 5. To review and revise the long range plan of work annually. At a minimum, the District's Long Range Plan is updated every five years.*
- 6. To insure that all programs and services of the Lancaster Soil and Water Conservation District are offered on a non-discriminatory basis without regard to race, color, age, gender, national origin, religion, handicap or marital status. State and federal agencies may have different non-discriminatory bases.*
- 7. To seek out and utilize projects such as the Small Watershed Program, cost-share programs, and grants to assist land users in the protection and improvement of their natural resources.*
- 8. To solicit District affiliate members and newsletter sponsors for programs input and financial support.*

EXISTING PROGRAMS AVAILABLE IN THE DISTRICT

The Conservation District has leadership responsibility for conservation of the soil, water, and related resources within the District. The District executes this responsibility by utilizing the efforts of a number of cooperating agencies, landowners, other units of government, concerned businesses, and individuals.

The conservation district is involved with a wide range of educational programs associated with the natural resources of Lancaster County. These include programs for the public as well as special programs in the local schools. Programs are supported with funds contributed by the affiliate members. Technical assistance is provided to land owners, land users and local units of government in soil, water and related resource conservation.

Through an agreement and the district's relationship as a legal subdivision of DNR-Land, Water and Conservation Division (the state agency charged with coordinating conservation district operation), various programs are carried out to educate and train commissioners. SCDNR also provides access to professional, technical, and financial assistance in carrying out district programs.

Through an agreement with the USDA-Natural Resources Conservation Service (NRCS), technical and financial assistance are provided to cooperating landowners and users.

The partnership supports each member agency and cooperates in state and federal programs which provide cost sharing, technical assistance, public education, information and products to promote priority conservation.

Lancaster Soil and Water Conservation District Sub- Committees:

Conservation Education Committee:

Commissioners: Gary Moore

Staff: Amanda Roberts

Public Awareness Committee:

Commissioners: Joe Ghent and Phil Cleveland

Staff: Amanda Roberts and Ann Christie

Natural Resources Committee:

Commissioners: Bill Ardrey and Gary Moore

Staff: Amanda Roberts and Ann Christie

District Operations Committee:

Commissioners: Joe Ghent, Phil Cleveland and Bill Ardrey

Staff: Amanda Roberts

LONG-RANGE OBJECTIVES:

Through cooperation with private landowners as well as county, state, and federal agencies, the Conservation District works toward conserving and improving the condition of our natural resources.

The long-range objectives of the Lancaster Soil and Water Conservation District are:

Conservation Education Objectives:

- To increase educational opportunities to the people of the District, emphasizing the importance of natural resources conservation and its benefits.

Public Awareness Objectives:

- To increase public awareness of the importance of conservation and of the services provided by the District.

Technical Objectives:

- To provide quality conservation planning and implementation of conservation practices on cropland, grasslands (grazing and hay), forest lands and wildlife lands.
- To protect, sustain and improve:
 - soil quality and condition, including soil organic matter
 - water quality and quantity
 - air quality
 - plant productivity, health and condition of native and domestic plants
 - domestic animal health, forage and drinking water
 - wildlife food, cover, shelter, threatened and endangered species, declining species and species of concern
- To reduce:
 - soil erosion and sedimentation
 - surface water and groundwater pollutants
 - flooding and excessive runoff
 - Inefficient use of irrigation water
 - airborne odors and greenhouse gases
 - noxious and invasive plants, varieties not suited or adapted to the area
 - inadequate structure and composition of plant communities
 - inadequate wildlife habitat
- To provide for operation and maintenance federally-funded flood control watershed lakes and utilize federal and state programs for flood control.

Natural Resources

The District boundaries are the same as those of Lancaster County. Contour relief of Lancaster County ranges from gently sloping to steep. The physiography of the county is diverse, with most of the county on the Piedmont Plateau, and 11% of the county in the southeastern section of the county in the Sandhills region. Soils in the Piedmont Plateau contain large amounts of silt and clay and the Sandhills area is sandy. There is slate and granite rock underlying soils in the Piedmont Plateau, and numerous rock outcrops are present in the county.

The drainage in the county is dendritic, or branching. On the west is the Catawba River and south is the Catawba-Wateree river system. On the east is the Lynches River. Twelve Mile, Cane, Camp, Gill's, Hannah's, Bear, Waxhaw, and Turkey Quarter Creeks drain into the Catawba system. Little Lynches, Wildcat, and Flat Creek drain to Lynches River.

Human Resources

The 2010 census showed a population within the District of 76,652. This figure represents an increase of 24.9% from the 2000 census. The commissioners of the Lancaster Soil and Water Conservation District consider the youth of the county to be its most precious resource and consequently much emphasis is placed on conservation education in the District programs. There were approximately 12,597 students enrolled in the 23 public and private schools within the District for the 2015-2016 school year.

CONSERVATION EDUCATION

The Lancaster Soil and Water Conservation District Commissioners believe a significant effort must be made to educate people of all ages and backgrounds, both rural and urban, about the importance of natural resource conservation. The District has developed a conservation education program to promote natural resource conservation throughout Lancaster County.

OBJECTIVE: INCREASE CONSERVATION EDUCATION ACTIVITIES.

- Sponsor poster contest for all school classes based on NACD contest.
- Sponsor photo contest for middle and high school students.
- Attend Job Fairs to promote the Natural Resources Education Fields.
- Conduct in-classroom programs as requested by teachers.
- Host an Arbor Celebration at a school in Lancaster County.
- Work with other clubs/ organization to enhance our education outreach.
- Sponsor awards at the County Science Fair for projects that incorporate natural resources.
- Sponsor and staff statewide conservation camps – such as Envirothon, Camp Wildwood and South Carolina Commissioner's School for Agriculture.
- Sponsor Students for Scholarship:
 - a) Glenn Alexander Memorial Scholarship
 - b) Scholarship at USC-Lancaster

PUBLIC AWARENESS

To meet the needs of a rapidly increasing urban population and to satisfy the requests for assistance from the rural population, the Lancaster District commissioners believe a significant effort must be made to keep the public informed of conservation problems and solutions of all land users.

OBJECTIVE: INCREASE PUBLIC AWARENESS OF THE IMPORTANCE OF CONSERVATION AND THE SERVICES PROVIDED BY THE DISTRICT.

- Make presentations to groups and organizations about conservation.
- Publish and distribute an annual report of district's activities and programs manually and online.
- Award annually a district farmer who uses model conservation practices.
- Meet with County Council elected officials quarterly and County delegation as appropriate to discuss local resource concerns.
- Attend local County and City Council meetings as needed and participate on committees concerned with natural resources
- Solicit affiliate membership to meet the District's financial goals through commissioner contact.
- Meet annually with personnel from other natural resource agencies and cooperate with partner agencies and groups in local events.
- Publish district newsletter quarterly.
- Commissioners and staff stay abreast of changing legislation and react proactively in favor of natural resources conservation where appropriate.

NATURAL RESOURCES CONSERVATION - SOIL

The quality and condition of our soil is perhaps the most important of our basic resources. Erosion of soil affects the production of food and fiber, and affects water quality when soil moves into our waterways. Poor soil quality can prevent wildlife from having adequate food and cover for nesting and protection. It can prevent good growth of timber and affect our quality of life. Compaction of soils in use as cropland, hayland and pastureland and poor soil structure from overwork are all soil quality problems. Factors preventing the resolution of these problems in Lancaster County are absentee landowners, large acreages of rented land, cost of installing conservation practices, steep topography, delicate soils, serious past erosion due to cotton cropping, and the uncertainties associated with farm income.

OBJECTIVE: PROTECT, SUSTAIN AND IMPROVE SOIL QUALITY AND CONDITION AND REDUCE EROSION AND SEDIMENTATION.

1. Monitor NRCS in assisting landusers to plan and apply conservation practices to improve and sustain soil resources.
2. Oversee Local Conservation Working Group in implementation of federal cost share programs as part of the Farm Bill.
3. Approve Highly Erodible Land conservation plans (Farm Bill).

NATURAL RESOURCES CONSERVATION - WATER

Water quality is a major concern for Lancaster County citizens. The district recognizes the need for water conservation programs to effectively protect this vital resource, due to the Catawba River being the source of public drinking water, and SCDHEC evidence of pollutants in all major watersheds of the county.

The Catawba and Lynches Rivers are the major river systems in Lancaster County and serve a significant portion of South Carolina. River water quality is determined primarily by point discharges from municipal and industrial users and non-point discharges from urban and agricultural areas.

Agricultural and urban runoff can carry sediment, which by volume is the major pollutant of our waters. Soil erosion, pesticide use and land application of livestock wastes are possible contributors to degradation of water quality. In addition, improved grazing management is needed on grazing lands in the county. Adoption of cropland erosion control practices and improved pasture management are needed to reduce erosion, sedimentation and runoff polluted by sediment, chemicals and organic waste. The District recognizes the need for improving water quality of rivers, lakes and streams by reducing sediment and polluted runoff.

OBJECTIVE: PROTECT, IMPROVE AND SUSTAIN WATER QUALITY AND QUANTITY.

1. Monitor NRCS in assisting landusers to plan and apply conservation practices to improve and sustain water resources.
2. Assist as requested SCDHEC, city, county, special purpose districts and individuals on sediment, erosion control and stormwater management to alleviate urban and rural Non-Point Source (NPS) pollution.
3. Participate in water quality improvement efforts.
4. Oversee Local Conservation Working Group in implementation of federal cost share programs as part of the Farm Bill.

NATURAL RESOURCES CONSERVATION – AIR

OBJECTIVE: PROTECT, IMPROVE AND SUSTAIN AIR QUALITY.

Lancaster is in an area of concern for ozone and other air pollutants, being downwind of Charlotte, NC and the Greenville-Spartanburg, SC urban areas. Odors from poultry waste is the major source of public concern in the county.

1. Monitor NRCS in assisting landusers to plan and apply conservation practices to improve and sustain air quality.
2. Cooperate with SCDHEC in odor and vector abatement for confined livestock operations.
3. Support NRCS in promoting reduction of airborne odors and greenhouse gases as part of the Farm Bill.
4. Oversee Local Conservation Working Group in implementation of federal cost share programs as part of the Farm Bill.

NATURAL RESOURCES CONSERVATION – PLANTS

OBJECTIVE: PROTECT, IMPROVE AND SUSTAIN PLANT PRODUCTIVITY AND QUALITY AND REDUCE MOXIOUS AND INVASIVE PLANTS AND USE OF VARIETIES NOT SUITED OR ADAPTED TO THE AREA.

Forests cover approximately 71% of the land in Lancaster County. Small, private landowners and commercial timber own the majority of this land. The major portion of this acreage is unimproved mixed pine and hardwood and needs resource management assistance.

Grasses used for grazing and hay are the major plants intensively managed for agriculture in the county. Plants for wildlife and beautification are significant resources for environmental diversity and ecosystem health. Invasive plants such as kudzu and Japanese privet and noxious weeds need control.

1. Monitor NRCS in assisting landusers to plan and apply conservation practices to improve and sustain native and introduced plant resources.
2. Increase conservation practices applied to forestlands by supporting NRCS and the SC Forestry Commission in implementing state and federal forestry cost-share programs.
3. Oversee Local Conservation Working Group in implementation of federal cost share programs as part of the Farm Bill.

NATURAL RESOURCES CONSERVATION – ANIMALS

OBJECTIVE: PROTECT, IMPROVE AND SUSTAIN DOMESTIC ANIMALS HEALTH, FORAGE AND DRINKING WATER AND WILDLIFE HABITAT

Domestic animals are a major part of agriculture in Lancaster County. Confined poultry and beef cattle are major livestock enterprises in the county. Hay and grazing lands for the support of free-range cattle are the majority of open land.

The soil and water resource base is generally not significantly threatened on wildlife land; however, maintenance of these lands is important to the quality of life in the area. There are significant opportunities to improve the habitat of existing wildlife land through good conservation practices and to target declining species such as quail and other ground-nesting birds.

1. Monitor NRCS in assisting landusers to plan and apply conservation practices to improve and sustain wild and domestic animal resources.
2. Oversee Local Conservation Working Group in implementation of federal cost share programs as part of the Farm Bill.
3. Improve wildlife habitat by supporting state and federal cost-share programs.
4. Monitor NRCS to increase acreage managed for wildlife by promoting wildlife habitat as a secondary land use.

NATURAL RESOURCES CONSERVATION - WATERSHEDS AND RURAL DEVELOPMENT

The Conservation District and the citizens of Lancaster County worked hard to secure five watershed dams, four in the Cane Creek watershed and one in the Little Lynches watershed. Over the years, these structures have provided flood protection, sediment retention, and a source of drinking water to the citizens of the County.

The District, through various sources, will pursue funding for community development projects in the County. The District continues to explore new and innovative ways to utilize federal and state projects as well as seeking other sources of funds for projects that will have a positive impact on the environment of Lancaster County.

OBJECTIVE: TO PROVIDE FOR OPERATION AND MAINTENANCE OF WATERSHED STRUCTURES AND UTILIZE RURAL DEVELOPMENT ASSISTANCE FOR DISTRICT PROJECTS.

1. Participate in NRCS', SCDHEC's and Watershed Boards' yearly dam safety inspections.
2. Approve watershed budget and seek funding for operating expenses.
3. Oversee Watershed Board's maintenance of watershed dams (mowing, fertilizing, woody vegetation control, rodent control and repairing damages) as needed.
4. Present the last of the Dam Assessment Reports (Little Lynches) to Emergency Management and associated agencies.

DISTRICT OPERATIONS

The District commissioners realize that in order to provide the best programs possible to the people of the County, they must continuously review and evaluate the effectiveness of District programs, policies, and personnel. The District's Annual Plan of Operation and Long-Range Plan are based on input from the citizens of the county and cooperating agencies. These plans provide the goals and objectives for the District and for their financial implementation.

OBJECTIVE: TO PLAN, REVIEW, AND EVALUATE THE DISTRICT PROGRAMS, POLICIES, AND PERSONNEL AND PROVIDE FUNDING FOR IMPLEMENTATION OF THE PROGRAMS ON A NON-DISCRIMINATORY BASIS.

1. Conduct an audit annually.
2. Develop annual budget.
3. Review and evaluate Long Range Plan annually.
4. Develop and regularly update annual plan of work.
5. Review District Manager's performance annually prior to budget.
6. Assure incorporation of civil rights and Equal Employment Opportunity policy into all areas of District operation and program delivery.
7. Implement District employment policies.
8. Foster a cooperative atmosphere within the partnership.

Conservation Plans

The conservation plan is the main tool used to pull together all needed conservation practices on the land user's property. The plan includes conservation practices for improving and sustaining natural resources as well as meeting other conservation and landuser objectives. A landuser is any person who owns, controls, or has an interest in rural lands and its resources. Landusers must be willing to cooperate with the Lancaster Soil and Water Conservation District and its conservation partners to protect, conserve and improve the renewable resources under their control. Soil survey information is the basis for deciding proper management of resources.

Soil Survey

Soil surveys provide one of the most complete inventories of an area's natural resources. They provide information for general planning as well as more detailed information for specific-site planning.

Soils information is available through the Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov>) and Soil Data Mart (<http://soildatamart.nrcs.usda.gov>) on-line. Published information is available at the conservation office.

Information available includes:

- A. Detailed soil maps showing individual soils with a description of each for detailed planning.
- B. Use and management data relating to buildings, septic systems, crops, pastures, woodlands, recreational uses, and wildlife habitat potentials.
- C. Soil properties including engineering properties, physical and chemical properties, and soil and water features.

Job sheets and conservation practice standards

Conservation practice standards of the USDA-NRCS are accepted by the District as the basis for quality conservation planning and application. These standards are based on research and science and are adapted to South Carolina.

Job sheets are informational sheets detailing where and how to use various conservation practices. They are designed for public distribution.

Conservation practice standards and job sheets are available on the electronic Field Office Technical Guide web site of the USDA-NRCS at <http://www.nrcs.usda.gov/technical/efotg>, in Section IV. Practice standards can and may need to be customized for individual landusers so that they are specific to the person and land. These are called practice specifications.