



Two thousand was an active year in Oklahoma for this program. Over 100 landowners participated in the program which provided tree planting in addition to enhanced existing future forestland result in over 2,350 acres planted. As a result, nearly one million trees were planted.

### Soil Surveys in Oklahoma

Conservation of land and water resources is an important part of all land use in Oklahoma. The maps and soil descriptions in soil surveys can help in identifying specific conservation problems in a given area and planning measures to reduce erosion, sedimentation, subsidence, slippage, wetness, water quality, and other hazards.

Currently, modern published soil surveys are available in 75 of the 77 counties in Oklahoma. The Natural Resources Conservation Service is the only agency with soils data that can provide these at no-cost to landowners, farmers and ranchers.

*"Soil is the fundamental entity for all living and nonliving things. It is like the human race, comes in variable colors, shapes, structures, and texture. If ill-treated, it will deteriorate and fall short of supporting the living and nonliving things. So, handle it with care and respect."*

Andy Piri, Soil Scientist

### Private Grazing Lands Technical Assistance

Grazing lands, which include rangeland, pastureland, grazed forest, and grazed cropland are the backbone of Oklahoma's agricultural industry. The Natural Resources Conservation Service provides assistance to landowners to improve range and pasture conditions by managing for forage improvement, weed and brush control, erosion control, and revegetation.

Partnerships with landowners and other organizations help expand the management of grazing lands. The Grazing Land Conservation Initiative (GLCI) is a voluntary effort to enhance privately owned lands. Hands-on workshops, tours, and training sessions were conducted to over 5,000 customers this year through this process.

In 2000, prescribed grazing was completed on 751,081 acres in Oklahoma. Significant range assistance was provided after the wildfires and tornadoes in the state.

### Plant Materials

Responsibility for plant science activities of the Natural Resources Conservation Service is a primary function of the Plant Materials Program. Oklahoma is served by three plant materials centers, dedicated to providing vegetative solutions to conservation problems.

The primary products produced by the Plant Materials Program include the development of improved varieties of plants and plant science technology. The principal customers of the program include:

- ◆ The Natural Resources Conservation Service offices, who in turn serve both rural and urban land owners and managers
- ◆ Public agencies, universities, and private conservation related affiliations that utilize the technology developed by the program
- ◆ Commercial seed and plant growers who receive seeds and plants of selected superior species, then produce the material on a larger basis, and make it available to the public

### New emerging Plant Materials resource needs for 2000 included:

- ☑ Propagation of culturally significant plants working with the Muscogee (Creek) Nation
- ☑ Plant species established for bioengineering application
- ☑ Plant species evaluated for use as potential biofuels
- ☑ Preservation of federally listed threatened plant species
- ☑ Enhanced seeding preparation and techniques for native forbs and legumes
- ☑ Released two superior highly adaptive legume species
- ☑ Woody plant species evaluative for windbreak/wildlife plantings

For more information on the Plant Materials Program, visit the web site at: <http://Plant-Materials.nrcs.usda.gov>

### Small Watershed Program

The Watershed Protection and Flood Prevention Act of 1954, and Public Law 83-566 (Small Watershed Program) provides broad authority to USDA agencies and other federal and state agencies to cooperate in watershed planning, surveys, and investigations. The Natural Resource Conservation Service works with the natural resources districts as the local sponsor on watershed projects.

The Natural Resources Conservation Service uses the Small Watershed Program to map flood hazard areas, reduce local flooding problems, develop guidelines for erosion control and runoff management, help landowners control erosion in high priority watersheds, and improve water quality to water bodies and groundwater.

With many Oklahoma dam construction dates dating from the 1940s, several dams have exceeded their 50-year design life. A survey of rehabilitation needs of watershed dams in Oklahoma was conducted. That survey indicated that 190 dams were in need of rehabilitation at an estimated cost of \$52.7 million.

Chief of the Natural Resources Conservation Service, Pearlie Reed, selected Oklahoma to establish a national pilot project on rehabilitation of aging flood control dams. The Sergeant Major Creek Watershed was selected for this pilot project, and a celebration was held in Cordell, Oklahoma, to mark the 50th anniversary of the nation's first upstream flood control dam, Cloud Creek, in Washita County, Oklahoma. This celebration raised to national attention the fact that many flood control dams in Oklahoma and across the nation, would soon reach the end of their 50-year designed life and many would require rehabilitation.

Reconstruction of Sergeant Major Creek site was completed and dedicated in April 2000. The principal spillway was raised to provide sediment storage for the next 100 years.

# Land, Water and People

## 2000 Oklahoma Annual Report Natural Resources Conservation Activities

*"America's good fortune  
can't possibly last longer  
than her natural resources."*

**Will Rogers  
(Oklahoma's favorite son)**





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Dear Oklahomans:

Welcome to our 2000 edition of "Land, Water, and People", a highlight of annual accomplishments for the USDA Natural Resources Conservation Service in Oklahoma. This is a first hand look at what our Oklahoma farmers, ranchers, communities and landowners have accomplished. These conservationists utilize technical and financial assistance from the Natural Resources Conservation Service (NRCS) to accomplish voluntary conservation on the landscape. This work has off site benefits that help communities with clean water, clean air and sustainable soils.

The accomplishments you will find in this publication are truly a partnership effort in action. The Oklahoma Conservation Partnership extends to many groups such as: Oklahoma Association of Conservation Districts, Oklahoma Conservation Commission, and the Oklahoma State Resource Conservation and Development Association. Other conservation partners such as Oklahoma State University Cooperative Extension, Langston University, the American Indian Nations and many other local, state, and national partners play important roles in helping people get conservation accomplished.

This unique partnership effort brings talents and special assistance of each to the table to benefit the landscape and communities. This leadership accomplished projects such as:

- ❖ Emergency Watershed Protection Program (EWP) – 1.5 million cubic yards of debris were removed from 16 counties after \$1 billion in insured losses due to tornado damage;
- ❖ EWP assistance to partners and landowners after the Binger and Shady Point wildfires that included aerial seeding and erosion control for restoration work;
- ❖ Public Law 566 and Public Law 534 – Oklahoma's Small Watershed Program - National legislation was passed to rehabilitate aging watershed structures in which Oklahoma has over 2,000;
- ❖ Wetland Conservation – Over 115,511 acres of wetlands created;
- ❖ Soil Survey – Much natural resource work starts with soils and many soil surveys are being digitized;
- ❖ Oklahoma Buffer Partnership - Rolling out the state Buffer Program and related promotional actions;
- ❖ Grazing Lands Coalition – Providing livestock producers technical assistance through range conservationists and grazing lands specialists.

The natural resource challenges ahead will become more complex. There will be a need for our conservation partnership to work diligently on the voluntary approach to conservation on private lands. There are also the challenges of having the resources to get the job done. The funds spent on private land conservation today do not have the buying power of what was spent on efforts in the 1940s. For example, for every \$5 spent on public lands today there is only \$1 spent on private land. Over 70 percent of the U. S. is private land and over 95 percent of Oklahoma is privately held. This land and the people of the land provide us with water, food and fiber for daily survival.

The investment in conservation is an investment for the next generation and sustainable communities. Oklahoma has a rich history of responding to conservation challenges such as the "Dust Bowl". Oklahoma will again respond to the conservation challenges we have today.

I hope you will reflect with pride on these conservation accomplishments for Oklahoma. By Listening...Joint Decision-Making...and ACTION we can make even further strides for 2001. Thank you for being a part of the best conservation partnership and for being a steward for conservation of Oklahoma's natural resources.

Daniel Dominick  
Oklahoma State Conservationist

## A Short History of the Natural Resources Conservation Service in Oklahoma

When settlers first came to Oklahoma, they found lush native grasslands and productive soils. Settlers plowed up the grasslands to raise crops and food, not realizing how fragile the land was in the state. After only a few years of cropping, the land felt the effects of droughts and high winds.

By the early 1930s, Oklahoma was in the heart of the "Dust Bowl." Dr. Hugh Hammond Bennett (later to become the first chief of the Soil Conservation Service) had preached for years about the dangers to come. He presented facts to Congress in 1927, which led to the establishment of 10 erosion control experiment stations,

the first of which was established in Guthrie, Oklahoma.

In 1934, the first great dust storm swept fine particles of soil from the Great Plains over Washington, D.C., and 300 miles out into the Atlantic Ocean. This storm, along with Dr. Bennett's urging, convinced Congress to form the Soil Erosion Service (SES) in the Department of Interior. In 1935, the second great dust storm occurred and Congress transferred the Soil Erosion Service to the U.S. Department of Agriculture. Dr. Bennett was named chief of the Soil Conservation Service.

By 1937, the President sent a letter to all governors urging them to pass legislation to effect a soil conservation service program. Oklahoma was one of the first states to pass such legislation. The McIntosh Soil Conservation District was the first to organize. Conservation districts

became the local unit of government in which the Soil Conservation Service was to operate through, and the partnership was born.

Today the Natural Resources Conservation Service (NRCS) is a federal agency in the U.S. Department of Agriculture. The name change in 1994 from Soil Conservation Service to Natural Resources Conservation Service was to better reflect the current role of the agency – to conserve all natural resources. The primary function of the agency is to provide leadership and assistance in the conservation of natural resources on private lands.

The Natural Resources Conservation Service works through local conservation districts to solve natural resource concerns by providing help to individuals, groups, organizations, cities, towns, and state government. An agency for the people, providing no-cost technical conservation assistance to America's private lands.

## Emergency Watershed Protection (EWP) Program

The Natural Resources Conservation Service provides emergency restoration for eligible projects that relieve imminent threat to life and property due to impairments to the watershed through the Emergency Watershed Protection program.

Oklahoma committed over \$15.1 million in EWP program funds for 1999/2000. Some of the disasters covered under this funding were:

- ◆ 74 tornadoes that crossed through 16 counties with additional tornadoes occurring in Comanche, Cherokee, and LeFlore Counties
- ◆ Flooding events that occurred affecting 48 counties
- ◆ Wildfires that ravaged 40,000 acres in Oklahoma

As a result of these disasters, there were 44 fatalities and 795 persons injured. Approximately 3,150 homes were destroyed and a total of 4,870 were determined to be unlivable. The total insured losses were reported to be one billion dollars. It would be virtually impossible to put a dollar amount on the natural resources loss. More than one-third of the Oklahoma Natural Resources Conservation Service staff worked on the flooding and tornado related EWP restoration work.

## Projects that Oklahoma Natural Resources Conservation Service accomplished:

- ❖ Stream bank restoration projects due to flooding in Lincoln, Oklahoma, Carter, Logan, Okmulgee, Tulsa, Creek, Kay, Kiowa, Blaine, and Alfalfa Counties totaled \$3 million.
- ❖ Debris removal due to tornadoes covering Cleveland, Lincoln, Grady, Oklahoma, McClain, Canadian, Noble, Payne, Logan, Comanche, Cherokee, Pottawatomie, Kingfisher, and LeFlore Counties totaled \$10.3 million.
- ❖ Dead bird disposal from the January 2000 snowstorms in McCurtain County totaled \$48,000.
- ❖ And the work continues!

## Resource Conservation and Development (RC&D) Program

Resource Conservation and Development programs help people in rural areas plan and carry out

activities that increase conservation of natural resources, support economic development, and enhance the environment and standard of living in local communities.

In this program, the local people in the community make the choices for their community – whether they work on land conservation, water management, environmental enhancement, community development, or something unique to their particular area. In every case, local people are the decision-makers.

## Rural Abandoned Mine Program (RAMP)

The purpose of the Rural Abandoned Mine Program is to reclaim the soil and water resources of rural lands adversely affected by past coal mining practices.

Abandoned surface mines pose an "attractive nuisance" to young people and others for swimming, fishing, etc. Location of some of these next to county roads has resulted in vehicle accidents. The presence of the pits pose a life threatening risk to Oklahomans of all ages, with the majority of the pits located in the fastest growing county, Rogers County. Between 1980 and 1999, 52 projects have been completed on 1,102 acres.

## Successes include:

- ☑ The Natural Resources Conservation Service received 1997 funding for a special demonstration project to showcase the cooperative efforts between the Natural Resources Conservation Service and the state Abandoned Mine Land program
- ☑ The Natural Resources Conservation Service personnel incorporate designs, construction drawings, and specifications into construction contracts
- ☑ The Natural Resources Conservation Service provides engineering support to the partnership
- ☑ This partnership was awarded the "Mid-Continent Reclamation Award" by the Office of Surface Mining.

## Locations and Needs:

- ☞ There are approximately 120 abandoned mines in Oklahoma
- ☞ Office of Surface Mines estimates reclamation costs to be over \$56 million
- ☞ Projects are designed and ready for contracting, pending fund approval.

## Forestry Incentive Program (FIP)

Oklahoma's forestlands are a valued renewable natural resource dependent upon harvesting results and reforestation techniques. Pressure placed on this resource may result in less forested acreage, dwindling production, and deterioration of the forest ecosystem.

Oklahoma has approximately 2.6 million acres of timberland, of which less than 60 percent is stocked with desirable trees necessary to meet the timber production needs of our growing nation. Another 500,000 acres of cleared marginal agriculture production land would be better suited for trees. Landowners have applied for over \$273,000 in Forestry Incentive Program funding. The Natural Resources Conservation Service developed contracts which obligated nearly \$141,000 of federal cost-share assistance for 2000. Several of these contracts were only funded due to emergency FIP funds allocated from natural disaster damages.