

P R O G R A M

SEMINOLE SOIL CONSERVATION DISTRICT

Revised February 27, 1963

S
11-6-73

I INTRODUCTION

The Seminole Soil Conservation District was organized October 15, 1948. The District was organized in accordance with the provisions of the Florida Soil Conservation Districts Law, Chapter 582, Acts of 1937 with amendments, for the purpose, with the powers, and subject to the restrictions set forth therein.

The Seminole Soil Conservation District is composed of all lands lying within the boundaries of Seminole County, Florida. Seminole County was created in 1913 and organized in August 1913. As defined by its present boundaries, the county contains approximately 205,440 acres or 321 square miles. In a North and South direction it has a ~~minimum~~ maximum length of 16 miles and its greatest width is about 28 miles. It is bound on the North and East by the St. Johns River, on the West by the Wekiva River and Orange County, and on the South by Orange County.

The climate in Seminole County is Semi-tropical with an average temperature of approximately 72 degrees. The average rainfall for the past twenty-six year period is 49.59 inches per year.

Major cities and towns include Sanford, Longwood, Fern Park, Casselberry, Forest City, Oviedo, Chuluota, Lake Mary, and Altamonte Springs. The population of the Seminole District is now 63,500 and still increasing at a very rapid rate.

The livestock in the district consists of approximately 15,000 beef cattle and ~~20,000~~²⁰⁰⁰ dairy cows. There are about 12 large poultry farms, mainly for egg production, in this district. The combined production of the beef, dairy, and poultry industries amounts to over \$1.7 million each year.

Citrus is the leading money crop in this district. The approximately 20,000 acres planted to citrus produced about \$4.3 million dollars worth of citrus in 1960. Seminole county ranks 4th in the value of vegetables for sale. There are approximately 6,000 acres of land devoted to the production of miscellaneous truck crops each year. The main crops consist of; Celery, Cabbage, Lettuce, Corn, Beans, and carrots. The value of the vegetables produced in Seminole county in 1960 amounted to approximately \$3.2 million. The sales from the Ornamental Nurseries amounts to nearly \$2.0 million each year.

II Soil and Water Conservation Problems

The major problems with which the district will endeavor to assist landowners are; Water control, land use, soil depletion, erosion control (Wind & Water), pasture development, Wildlife and recreational area development, and proper development of rural areas.

A. Use and Treatment of Cropland.

1. Row Crops. The row crops in this district amounts to over 6,000 acres and consists almost entirely of miscellaneous truck crops. The vast majority of these crops are produced on class IV land continuously year after year. These soils are lacking in organic matter; very compact; and are generally heavily infested with nematodes.

The truck crop lands are nearly level to gently sloping and require both drainage and irrigation in order to produce crops effectively. A system of tiles is used for water control on these lands. The tile lines are generally installed on a 20 foot spacing and covered with saw-dust or gravel, as the filtering material. Flowing wells are used as the source of water for irrigation. There are over 3,000 flowing wells in this district being used for irrigation purposes. There are estimated to be over 500 broken-off or abandoned flowing wells that are creating a serious problem in this district. A large number of these abandoned wells, especially in the Geneva area and the Black Hammock area are now producing highly saline water that is not usable for man, crops, or livestock. Further agricultural and industrial development and excessive use and waste of the artesian water can be expected to ^{increase} ~~reduce~~ the areas of highly saline water and reduce the present areas of usable water. A serious curtailment of agricultural operations will undoubtedly result unless necessary precautions are taken to properly close these abandoned flowing wells.

2. The approximately 20,000 acres of citrus land is generally high, well drained soils that require good protection from wind and water. The planting of leguminous cover crops, irrigation during dry seasons, and internal drainage on many of the marginal type citrus lands are needed to protect and improve these lands.

3. The ornamental nurseries cover only a small area of land and are normally managed in such a manner as to prevent any serious problems with soil and water. Providing an adequate amount of good water for irrigation during the dry seasons is the most serious problem for the ornamental nurseries.

B. Use and Treatment of Pasture Land.

1. Since the district was organized in 1948 over 14,000 acres of woodland, cropland, and rangeland have been converted to improved pasture land. Water Control is the major factor or problem facing the cattlemen and dairymen in this district. The vast majority of the pastures are planted on class IV soils that are nearly level and to gently sloping/generally maintain high water tables. The removal of excess surface water during the rainy seasons is essential in order for the grasses to grow satisfactorily and maintain a good sod on the ground. During extremely dry seasons it is also necessary to apply supplemental water to a large portion of the pastureland in order to grow leguminous plants such as clover along with the grasses effectively. The district will endeavor to assist the ranchers and dairymen with proper water control on their pastures by providing technical assistance with the design and installation of adequate drainage systems, irrigation systems, and the necessary water control structures.

2. Native Range land. There are approximately 8,000 acres of native range land in this district. These lands are predominately over-flow lands along the St. Johns River, Lakes Jessup, Harney, Monroe, and Puzzle. These rangelands are normally covered with over-flow water from one to six months each year; therefore, grazing is limited to about 6 or 8 months each year. The most of these soils contain high concentrations of chlorides and the varieties of native weeds and grasses are somewhat curtailed. Overgrazing has caused many of

the native grasses that ~~were~~ palatable and useful to livestock to decrease thus allowing the non-palatable ones such as needle grass to increase. The district will provide technical assistance to the owners of these rangelands with management practices to improve the ranges such as; Controlled burning, Limited or controlled grazing, Periodic mowing or chopping to eliminate or control undesirable weeds and grasses, and limited surface drainage ditches.

3. Wildlife Land. There are over 12,000 acres of land in this district that is best ~~suitad~~ suited for wildlife and water storage areas. These areas consists mainly of; Swamps, Bay Heads, and intermittent pond areas. Cyprus, Gum, Bay, Myrtle and other water loving trees and brush are predominate over these areas and provide some feed and good protection for birds and ^{other} forms of wildlife. The timber resources from these areas are of very little commercial value. The district will provide assistance to the owners of these lands mainly through training and guidance in fire prevention, prevention of over-drainage, and the needs for planting wildlife food strips adjoining to these areas to provide supplemental feed for birds and game animals.

C. Forest and Woodland.

There are approximately 84,000 acres of land in this district devoted to forest and woodland production. These areas are primarily located on class IV or flat-woods type of soils. The product from these areas is primarily pulp-wood; however, saw-logs or lumber products has considerable importance. The chief problems on these areas consist of damage by uncontrolled fires, excessive grazing, and too much water during the rainy seasons. The district

will endeavor to assist the owners of these woodland areas by providing technical assistance with the management and installation of the conservation practices that are necessary to maintain and improve these woodland producing areas. The practices mostly generally required are; the construction of fire breaks to prevent severe damages normally caused by uncontrolled fires; Controlled burning to insure better natural reforestation; and the prevention of excessive grazing by livestock.

D. Other Lands.

1. In Farms. Other lands in farms consist of; Farmsteads, Farm roads, Holding and loading pens, wildlife areas, and etc. There are approximately 12,000 acres of wildlife habitats, as mentioned above under wildlife, and approximately 3,000 acres of land in farms being used for other miscellaneous purposes. Erosion caused by unregulated run-off is the main problem in these lands. Technical assistance will be provided these owners with the proper care, treatment, and control of run-off ~~in~~ from farmsteads, farm roads, and with the other lands in farms.

2. Not in Farms. There are approximately 6,000 acres of Clay land in this district not in farms. These lands consist of; Mine pits, Dumps, Parks, Cemeteries, Country Clubs, Highways & Railroads, and Rural Developments. The clay pits and dumps creates many problems and better management practices of land smoothing and the planting of trees around these areas after completing the removal operations is badly needed. Serious erosion frequently occurs, during intensified rainfall, on the shoulders of county roads and highways. The local Board also provides county officials with available technical knowledge

with prevention and curtailment of these problems.

E. Water Use and Magement. Ponds, Lakes, and Streams

The Seminole district is very fortunate in having a large number of lakes including Lakes Jessup, Monroe, and Harney; three small or medium size streams, and approximately 35 miles of the St. Johns River. These ponds, lakes, streams, and river provides good fishing boating, water skiing, and other forms of wholesome recreation for over 125,000 people who live within a radius 35 miles. As the population in this area continues to increase at a very rapid rate more and better recreational facilities will be required. The district will encourage and assist individual landowners in developing these needed areas by providing technical assistance and resources made available to the district by the technicians of the Soil Conservation Service.

F. Rural Area Development

The population of this district has more than doubled within the past few years and consequently housing developments, and small farms or part-time farms from 2 to 5 acres are constantly increasing. These rural area developments are creating another problem in this district. Water control, adquate drainage during flooding or peak rainfall and a lack of sufficient good water for irrigation and home consumption during the extremely dry seasons is the major problem. The district will provide guidance and technical assistance to county officials and to the individual groups within the developments in solving these problems with the idea of conserving both soil and water to the maximum extent. Several of the recent hausing developments have been made in areas not adapted for such purposes consequently more problems are created. Many acres of the more productive farm land have also been lost to new developments when there are many areas of well

drained soils in this district that will not produce agricultural crops economically; however, are more favorably adapted for these developments. Proper Zoning of these areas, based on land capability, would aid tremendously in keeping our better farm land for agricultural purposes.

III- Brief History on Progress to date.

A. As of January 1, 1963 this district had on record 366 cooperators with a total of approximately 68,178 acres.

B. As of January 1, 1963 there were 328 Basic conservation farm plans covering approximately 55,578 acres worked out with local cooperators.

C. Two applications for Watershed projects were submitted last year. These applications were for the Econlahatche river basin and for the Wakiva river basin.

D. Some of the major conservation practices being applied on the land in this district are; Cover Cropping, Crop Residue Use, Bedding or crowning to remove excess surface water, Construction of Mains & Laterals, Seepage irrigation systems, Structures for water control, Tile systems for both drainage and irrigation purposes, Sprinkler irrigation systems, Pasture Planting, Construction of firebreaks, Controlled Burning, Planting of Wildlife Food areas, and the stocking of farm family fish ponds.

Agencies assisting with the establishment of these practices include; Extension Service, Farmers Home Administration, ASCS, and the Florida Forest Service.

IV. Resources Available

A. From the County.

For the past two years the Board of County Commissioners of Seminole County have made available to this district funds amounting

to \$495.00 each year. The Vo-ag classes at the Seminole High School and at the Sanford Junior High School have been very helpful in promoting and teaching conservation in their classes. The County School Superintendent served as a district supervisor for several years and has a thorough knowledge of the purposes and objectives of Soil Conservation Districts. Many teachers through-out the public school system teaches conservation to some degree during their regular classroom instruction. The local technicians assigned to this district work very closely with local school officials, and render technical assistance regarding Soil & Water Conservation problems whenever requested. Local civic clubs, Garden clubs, and churches cooperate with the district in the promotion of conservation activities within this district. The county agent and his staff also provides valuable assistance to the district.

B. From the State.

The State Soil Conservation Board provides valuable assistance to the district with the publication of the annual report, by providing information and advice when requested, and by keeping the district board of supervisors informed on Soil and Water activities within the State. The Florida Forestry Service and the local Central Florida Experiment Station also aids greatly towards accomplishments being made by this district.

C. Federal Resources Available to the district are;

Specialists assigned to the Area and State Staffs of the Soil Conservation Service; The local representative of the Farmers Home Administration; and the local & ASCS representative.

V. Proposed objectives and solutions

A. Encourage all cooperators and other land owners to use their land in accordance with its capability and to treat ~~in~~ it in accordance with its needs for protection and improvement. Most of the cropland in this district is class 1V land. In order for these croplands to continue to be productive leguminous cover crops, crop residue use, sod-based rotations, and better water management must be provided. On the pastureland rotational grazing, better management in fertilization and maintenance, and more adequate water control measures must be provided. Natural reforestation, fire break construction, and controlled burning are the conservation practices needed on the woodland areas in this district. The district will provide technical assistance and guidance to these land owners in the proper care and use of their lands with technicians provided by the Soil Conservation Service.

B. Water management-individual farms

Upon receiving requests from cooperators and other land owners for technical assistance with drainage, irrigation, wildlife and recreational, and other requests on water management priorities will be established by the board of supervisors. The local technicians assigned to this district will be given the requests and instructed to proceed with the servicing and application of the requests. This will include preliminary investigations, topographical surveys, design and staking out of the system, supervision during construction, and gathering other information that may be needed to insure proper use and treatment of land and water resources.

C. Watershed Protection and Flood Prevention

There are three major watersheds that are potential watershed projects in this district. All three of these watersheds extends over

into Orange county. The Little Wekiva River Basin has a watershed area of approximately 97,325 acres of which approximately 22,125 acres are in the Seminole district. The Econlockhatchee River ~~basin~~ basin contains a watershed of approximately 156,167 acres of which 29,767 acres are in this district. The Howell Creek Basin has a watershed area of approximately 38,800 acres. Applications for Federal assistance under the Watershed Protection and Flood Prevention Act P/L - 566 were submitted last year, jointly with the Orange District, for the Wekiva River and the Econlockhatchee River Watersheds.

Proper treatment of these watersheds will insure adequate drainage, alleviate the hazards of flooding, provide reservoirs and water storage areas, improve wildlife and recreational facilities, and insure an adequate supply of good quality water for industrial and municipal uses.

Severe damages to homes, roads, and farm lands by recent floods have caused, the majority of the local people, to realize the needs for developing watersheds. The over-all interest is greater now than ~~ever~~ ~~has~~ before in an overall or county-wide water control program. The local legislators have been instructed to enact the necessary measures that will enable this district to have a county-wide water control program.

D. Operation Procedures

The Board of Supervisors of this district will inform all landowners of the services available to them through the following media; News articles and informational reports, Talks to the various civic organizations, Planned tours and demonstrations, Sponsoring speaking contests in local schools, Providing educational materials for schools in teaching conservation of resources, and by personal contacts

with individuals and with groups of landowners.

Applications will be received by mail or by personal delivery from any landowner, or group of landowners to any one of the supervisors or to the local work unit office. After receiving the applications they will be reviewed, and when the work load indicate a need for setting priorities this will be accomplished by the board.

Technical assistance will be provided the landowners in working out basic conservation farm plans for their farms. These plans will be based on the soil surveys and the capability of the land and will include the decisions of the owner as to how the land will be used and what conservation practices will be applied on the land.

The district will provide the necessary technical advice and assistance in the application of conservation practices to the district cooperators. These technical assistances include; Advice on vegetative practices and management, Engineering assistance with topographical surveys, design, lay-out, and supervision of installation of drainage systems, irrigation systems, water control structures, and technical assistance with the development and proper management of woodland, wildlife, and recreational areas.

Cooperators will be advised about the availability of cost sharing and credit for conservation practices, Watershed protection and flood prevention ~~in~~ projects by the district supervisors.

District owned equipment will be made available to all cooperators and landowners in the district. This equipment presently consists of one rotor-type mower and one martin-type ditcher and is rented to any landowner who needs the equipment and will pay a small fee to help off-set the costs of repair and depreciation.

The district has co-sponsored two watershed projects last year and will either sponsor or co-sponsor the remaining watershed.

The district will cooperate and work closely with the Area Re-development Administration and Rural Area Development Program. The population in this district has more than doubled in the past few years, new industries and housing developments are rapidly increasing each year. And as these transformations take place more land and water problems are created. Proper development and treatment of these Rural areas is a vital link in the over-all conservation program in this District.

The Board of supervisors of this district will hold regularly scheduled meetings each month.

VI. Obtaining assistance

The local county commissioners and other county officials cooperates with the district and for the past two/have/the district with \$ 495.00 in county funds to help with the operations of the district. No State or Federal funds are received by this district.

VII. Revision

This program will continue to be revised from time to time as the need arises and as additional information becomes available. The supervisors will welcome any suggestions or comments regarding the revisions of this program from any individuals, groups, or agencies. Such revisions will be incorporated as a part of the district program when adapted by the supervisors.

VIII. Adoption

Recognizing the Seminole Soil Conservation District as a governmental subdivision of the State of Florida, a body and politic, organized in accordance with the provisions of the Florida Soil Conservation Districts Law, chapter 582, Acts of 1937, as amended in 1939 and subsequent amendments, for the purpose, with the powers, and subject to the restrictions set forth therein, the supervisors hereby adopt this program which describes the general conditions existing in the district.

3/15/63 Copied
 (Signed) James Kenyon
 Date
 Witness
 " C. A. Hales
 Secretary
 " H. E. Keyser
 Witness

Adopted: Board of Supervisors

Seminole Soil Conservation District

(Signed) Ralph N. Hammond
 Chairman
 (") W W Ling
 (") Elbert Cammack
 (") Jack Slod
 (") [Signature]