PROGRAM

of
DES MOINES COUNTY
Soil Conservation District
State of Iowa

DES MOINES COUNTY SOIL CONSERVATION

DISTRICT PROGRAM

Introduction

This program attempts to set forth soil conservation and land use problems of Des Moines County and to state what the district desires to achieve. The program will serve as a basis of cooperation between the land owners as well as other cooperating organizations and agencies.

Purpose

The Des Moines County Soil Conservation District was organized early in 1946 to give land owners and operators an opportunity to work together to meet their erosion control, drainage and land use problems. It should also awaken an interest in the stewardship of the soil and other natural resources.

When Organized

In August, 1945 the Des Moines County Farm Bureau Board considered the matter of a soil conservation district after the provision of the state soil conservation law had been presented by Walter B. Eyre, County Extension Director. The board immediately appointed a committee consisting of William Parrott of Danville, Hugh Jamison of Mediapolis, George Eversman and Ira Lee of Burlington to make plans to organize. A meeting was called Saturday, September 29 in Burlington at which time forty men representing most of the townships in the county were present. Earl Elijah, Chairman of the State Soil Conservation Committee, spoke to the group regarding the organization of a district in Des Moines County. Petition carriers were chosen and a splendid start was made to get signers. After petitions were signed they were submitted to the State Conservation Committee. A hearing was held on December 27 at the City Hall Auditorium in Burlington. Earl Elijah, Clark W. Huntley, Chris H. Jensen of the State Committee; Clyde Spry, Assistant Secretary of Agriculture; Morris Soults and Walter B. Eyre of the Extension Service attended. Due to adverse weather conditions only a small group of farmers attended. Nevertheless, they were emphatic that organized action should be taken.

Saturday afternoon from 1 to 4, January 26, 1946 was the time selected for the referendum to be held. Thirteen polling places were set up. On that date 201 farmers voted for the district with only 8 voting against it. Three commissioners were elected as follows: Noah Schrock of Huron township received 108 votes for a 6 year term; John L. Blaul of Yarmouth received 101 votes for a 4 year term and Edwin Cling of Mediapolis received 96 votes for a 2 year term.

The commissioners met to organize on February 14, 1946 with Lester Clapp of the Extension Service, Floyd S. Yetter of the Soil Conservation Service and Walter B. Eyre, County Extension Director. Noah Schrock was elected chairman of the group and Walter B. Eyre was appointed secretary. Officers are to serve a 2 year term and the board is to reorganize following the election of a new commissioner.

History

Des Moines County was one of the first in the state of Iowa to be organized. Self government was set up in Burlington in 1833. This part of the present state of Iowa was made part of the Michigan Territory in 1834. At that time Des Moines County extended from a line west from Rock Island, south to the Missouri line - a strip fifty miles wide. On April 20, 1836 it was made part of the Wisconsin Territory. Temporary capital for the entire Wisconsin Territory was set up in Burlington. Formal organization of the county was made in 1837, the year that the city of Burlington was incorporated.

The early agricultural history of Des Moines County is rather meager. Not until 1914 did the farmers of this territory really much concern themselves about soil problems. The virgin soil was rich and the plow had not made too deep an imprint. The Des Moines County Agricultural Association was formed and was soon changed to the Des Moines County Farm Bureau which was incorporated in April, 1914. The County Agent's reports from 1914 to 1918 recognized the growing soil problems, particularly that of soil acidity. In 1919 several farmers signed petitions for soil surveys of the county. During the period from 1914 to 1936 a few farmers were sufficiently interested to cooperate with the County Agent in holding a few demonstrations on erosion control, terracing and tree planting. Also, the CC camp located in Oakville from 1933 to 1942 made a number of soil surveys and aided a few farmers in erosion control.

During the winters of 1936 and 1937 sixteen farmers headed by Ray Redfern as the chairman and known as the Des Moines County Agricultural Planning Committee made a comprehensive study of the soil situation in the county. These men made some constructive recommendations for the guidance of land owners and operators. They are to be commended for their initiative and foresight and for their careful analysis of the needs in the area to maintain a permanent and profitable agriculture.

Legal Description

Des Moines County is located on the Mississippi River which forms its east boundary. It is bordered by the Skunk River on the south, by Henry County on the west and by Louisa County on the north. Des Moines County comprises an area of 409 square miles or 261,760 acres. A soil survey report shows that of this area 93% is used for agricultural purposes. Of the 409 square miles slightly more than 33 square miles were taken out for the purpose of building the Iowa Ordinance Plant. At the present time approximately one-half of this land is leased for agricultural purposes. The Des Moines County Soil Conservation District includes all the land in Des Moines County exclusive of land within incorporated cities and towns.

Types of Soil and Existing Conditions

The topography of Des Moines County is a gentle, undulating upland plain having a general slope to the south, southeast and southwest becoming quite rough and broken as the several streams reach the bottom lands of the Mississippi and Skunk rivers.

The upland soils of the county are the Grundy silt and clay loams and Tama silt loams. These soils are level to gently rolling and except for the steeper Tama soils do not present a complicated erosion problem. Most of the light colored upland soils were originally wooded. They are located on the bluffs of the Mississippi and Skunk Rivers and along Flint Creek and the smaller streams and are for the most part, Clinton and Lindley silt loams. These are quite erosive.

Most of the bottom lands are found in the alluvial belt along the Mississippi, Skunk and Flint Rivers and are composed of the Wabash silty clay loams and similar soils. These lands are for the most part protected from overflow by levees and drained by an extensive system of drainage, consisting of several large pumping plants and many miles of drainage canals, feeder ditches and drain tile.

While erosion control and good land use and conservation practices are important the most critical problems of erosion control are presented in the Tama, Clinton, Lindley silt loams. (See County Soil Survey for location).

A second major problem due to erosion is found in the bottom lands where the streams from the upland discharge their silt laden waters into the drainage districts or into the diversion ditches constructed from the bluffs to the river. In times of heavy rainfall the streams in the upland rise rapidly; the runoff is unobstructed; erosion is serious; the water rushes down the steep slopes and when the stream channels flatten as they strike the bottomlands, they drop much of their silt load obstructing the drainage outlets, overtopping levees and diversions and spreading silt on crops and cropland. Thus, a two-fold menace occurs: first, in the loss of thousands of tons of fertile soil washed off the upland and second, the damage caused when this same soil is deposited in the bottomlands where it must be handled and removed constantly at huge expense.

Special Problems

Drainage

Drainage is needed under at least two conditions within the district. Approximately 60,000 acres along the Mississippi River are protected by levees. The surplus rainfall on these areas, plus some seepage from the river, plus rainfall on part of the upland areas that drain down into the bottomland are collected in open ditches and tile under-drains and the water pumped over the levees. This requires and necessitates an extensive drainage system.

At least another 20,000 acres of level to gently rolling upland has been tiled to provide drainage. There is need for additional drainage in numerous places.

Erosion

There are approximately 130,000 acres in the county or slightly over one-half the area in farms subject to moderate to severe erosion. The larger portion of this land lies along Flint River and its tributaries and from 2 to 4 miles back from the bluffs facing the Mississippi and to a smaller degree the Skunk River.

Flood Area

Flint River presents a special flood hazard. The fertile fields in the one-fourth to one mile wide flood plain of Flint River and its major tributaries are flooded by heavy rains. Many tons of soil are washed from the banks in the bends of the stream.

Sand

A limited area of sandy soil on the Mississippi River terraces in the southern part of Union Township and to a limited extent in the bottom land area in Jackson and Huron Townships offer special soil problems.

Proposed Soil Conservation Plans and Objectives

The Des Moines County Soil Conservation District, through its commissioners, desires to formulate a long range program and list of objectives in order to obtain aid from the various local, government and state agencies. As a major objective, we hope to bring about a better land use and the conservation of soil and water.

Many farmers are unaware of the seriousness of erosion and soil wastage. As a group they are unwilling to try new methods, unless proven to be sound and practical. It is our purpose to prove to them that such practices are sound and can be accomplished. In order to do this we propose to use:

1. Demonstrations of practices such as contouring, terraces, ponds, strip cropping, fertility plots, proper rotations, etc.

2. Cooperation with business firms and individuals.

3. Cooperation with farm organizations, civic clubs, cooperatives, Chamber of Commerce, etc.

4. Cooperation with state and government agencies, such as Extension Service, AAA, Soil Conservation Service, FSA, State Conservation Commission, etc.

5. Cooperation with churches and schools.

6. Holding soil institutes, training schools, etc.

7. The help of newspapers, magazines, radio, etc.

It is our hope that this will reach not only the owners and operators of the farm land, but those living in the cities and towns as well so that their influence can be directed to the saving of our natural resources.

We want all farmers and land owners to use, in fact, encourage them to seek information that not only will help for higher incomes by maintaining soil fertility but to build a more permanent community. The program is not to be compulsory; the owners or user of the land is to be the "jury" of his own particular problem. The commissioners and other agencies are to furnish suggestions and aid in the development and carrying out of sound farm plans.

It will be the objective of the district to promote cooperation between landlords and lending agencies with soil conservation, to execute leases that will encourage proper land use, to encourage loans for erosion control, fertilizer, ditches, dams and ponds. After all, a worn out farm is a poor security.

We recommend for each particular farm a soil survey in order that the proper type of farming can be planned and carried out for the highest possible income. This may prevent expensive rehabilitation later by making low cost changes now.

It is our purpose to work with the Board of Supervisors and the Highway Commission. Large sums are spent annually for cleaning out ditches along roadways due to sloughing of banks and the washing away of road grades. Damage often occurs to farm land both above and below a highway, due to faulty design or improper construction. If road plans were made in relation to the adjoining fields much erosion could be prevented.

Because drainage projects are often impaired by silt and debris, we will encourage soil erosion work by groups along the streams that empty on to these bottom lands, thereby causing a more moderate flow of water. This will lower the cost of maintenance and give protection of the bottom lands.

Summing up the foregoing objectives the commissioners feel that in order to maintain a better standard of living, a fuller life, and to maintain our soil fertility we must and should practice good soil conservation. Land that is worn out affects the community from many standpoints. It tends to lower living standards of the whole neighborhood. The local tax base is lowered, affecting schools and roads and public improvements. Its wildlife is seriously affected. Birds, the great destroyers of insects, soon leave. Wasteful cutting of timber should be discouraged, especially in the rougher parts; tree planting should be encouraged where it will do real good.

We have numerous and serious problems that confront us and to make a final and complete statement of conditions now would be impossible. We propose to make revisions in this program as additional problems come to our attention.

In closing it might be said, "We want to work with Nature - not against her".

Des Moines County Soil Conservation District

By _____
Noah Schrock
Chairman, District Governing Body

Date June 21, 1946

The signing of this district's program was authorized by a resolution of the district governing body adopted at a meeting held on June 21, 1946

_____
Walter B. Eyre
Secretary, District Governing Body