

# STEELE COUNTY SOIL & WATER CONSERVATION DISTRICT

COMPREHENSIVE REPORT  
2006-2010

I. **INTRODUCTION:**

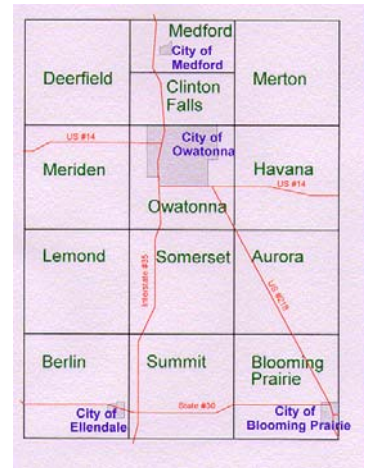
A. **PURPOSE OF THE COMPREHENSIVE PLAN**

The District has written this Comprehensive Plan as a guide in carrying out its activities in the years 2006 to 2010.

B. **AUTHORIZATION AND JURISDICTION**

The prime responsibilities of the Steele County Soil and Water Conservation District is to coordinate assistance on private lands to control erosion, prevent flooding, enhance wildlife, develop recreation, build the economic base and protect the welfare of the public.

The Steele County Soil and Water Conservation District is located entirely within Steele County and includes all land, public and private, towns and villages. The District was organized by local landowners under provisions of Minnesota State Law Chapter 40. It is a legal subdivision of State Government, operating under a charter issued by the Secretary of State on March 28, 1946.



C. **ORGANIZATIONAL HISTORY**

Originally, the District consisted of Medford, Clinton Falls, Owatonna, Meriden, Somerset, Havana and Merton Townships. The remaining townships were included in 1947. Cities and villages were included in 1972. The District is governed by a five-member board of elected supervisors who are responsible for directing all district activities.

II. **CLIMATE, WATER SUPPLY & GEOLOGY AND SOIL SURVEY:**

A. **CLIMATE**

Steele County has a cool, sub-humid, continental type of climate with wide variations in temperature from summer to winter. Generally, the soils are frozen to a depth of 2 to 3 feet for four to five months of the year. The depth to which frost penetrates depends mostly on the amount of snowfall late in the fall or early in the winter. The climate is essentially uniform for the county; however, differences in vegetation soil materials, and relief can cause variations in the microclimate. Soils in the prairie regions are exposed to greater variations in temperature than those in the forest regions. Fine textured soils such as: Marna and Lura, warm up more slowly than moderately coarse textured soils such as: Esterville and Dickinson, because they contain more moisture. Dark colored soils such as: Clarion and Nicollet, absorb more heat from the sunlight than light colored Hayden soils. Soils on south and west facing slopes receive more sunlight than soils on north and east facing slopes; therefore, they tend to be drier.

## **B. WATER SUPPLIES AND GEOLOGY**

Water supplies in Steele County are directly related to the thickness of the mantle of glacial drift and to the kind of rock formations that underlie the soils. The Paleozoic rocks that underlie the soils of Steele County are mainly of Cambrian and Ordovician Age. The rock formations directly beneath the glacial drift mantle are limestone and shale. The northern margin of Devonian (Cedar Valley) limestone that covers most of Freeborn and Mower Counties extends a short distance into the southern part of Steele County. These rocks all dip southwestward toward the trough of the Albert Lea-Austin basin. In the northern part of the county, the top of the Jordan sandstone is about 600 feet above sea level, but in the southwestern corner the same stratigraphic horizon is at an elevation of 300 feet. Since these rocks continue to upslope northeastward toward Red Wing, where the Jordan sandstone is 900 feet above sea level, the water in them is under high artesian pressure in this area of Steele County.

## **C. SOIL SURVEY**

A soil association is a landscape that has a distinctive proportional pattern of soils. It normally consists of one or more major soils and at least one minor soil, and it is named for the major soils. The soils in one association may occur in another, but in a different pattern.

A map showing soil associations is useful to people who want a general idea of the soils in a county, who want to compare different parts of a county, or who want to know the location of large tracts that are suitable for a certain kind of land use. Such a map is a useful guide in managing a watershed, a wooded tract, or a wildlife area, or in planning engineering works, recreational facilities and community developments. It is not a suitable map for planning the management of a farm or field, or for selecting the exact location of a road, building, or similar structures because the soils in any one association ordinarily differ in slope, depth, stoniness, drainage and other characteristics that effect their management.

The six soil associations in Steele County are each described in the following pages. The terms for textures used in the descriptive heading for several of the associations apply to the surface layer. For example, in the title for Association I, the word "loamy" refers to the texture of the surface layer.

The names of soil associations in Steele County do not match those of Dodge County, the adjoining county to the east, because of refinements in classification and redefinition of series descriptions. Soils along the county line are similar except for the difference in name.

## **SOIL ASSOCIATIONS:**

1. **WEBSTER-CLARION-NICOLLET ASSOCIATION.** Poorly drained to well drained, nearly level to rolling, loamy soils.

This association consists of nearly level to rolling or undulating soils that have short, complex slopes. These soils are intermingled with soils in depressions and in low-gradient swales. Summits of the rises commonly are only ten to twenty feet higher than the bottoms of the swales. Areas of this association in southwestern Berlin Township contain somewhat circular hills that have smooth side slopes and nearly level tops. A small lacustrine area is west and south of Havana station. This association occupies about 26% of the county.

The major soils formed in calcareous, loamy glacial tills, and they have a black or very dark brown surface layer. The poorly drained, nearly level Webster soils occupy about 31% of the association; the well-drained, gently undulating and rolling Clarion soils occupy about 28%; and the moderately well-drained or somewhat poorly drained, gently undulating and nearly level Nicollet soils occupy about 14%. The calcareous Storden soils occur with the Clarion soils in some of the steeper areas where the slopes are convex.

Very poorly drained Glencoe soils in depressions occupy about 10% of the association. The remaining 17% of the association consists of small areas of poorly drained and very poorly drained Biscay, Canisteo, Madelia soils and Muck: well-drained Dakota, Lester and Wadena soils; somewhat excessively drained Esterville and Storden soils; and moderately well-drained or somewhat poorly drained LeSueur soils. Corn and soybeans are the principal field crops and canning peas, green beans and squash are grown as special crops. Management consists of controlling erosion and the height of the water table, keeping the surface layer in good tilth, and properly fertilizing the organic soils.

2. **LESTER-WEBSTER-LESUEUR ASSOCIATION.** Well drained to poorly drained, nearly level to rolling, loamy soils.

This association consists of gently undulating, rolling, and nearly level soils that have short slopes and that are intermingled with soils in depressions and in low-gradient swales. Summits commonly rise 10 to 40 feet above the low areas. In southwestern Berlin Township, there are somewhat circular hills with smoothly sloping sides and nearly level tops. This association occupies about 35% of the county. The major soils are formed in calcareous, loamy glacial till, and they have a very dark gray or black surface layer. The well drained, gently undulating to rolling Lester soils occupy about 34% of the association. The calcareous Storden soils occur with the Lester soils in some of the steeper areas where slopes are convex. The poorly-drained, nearly level Webster soils occupy about 24% of the association, and the moderately well drained to somewhat poorly drained, nearly level to gently undulating LeSueur soils occupy about 16%.

Glencoe soils make up about 6% of the association. The remaining 20% consists of poorly drained Biscay and Dundas soils; very poorly drained Muck; well-drained

Bixby, Hayden, and Wadena soils; and somewhat excessively drained Burnsville, Storden and Esterville soils.

Corn, soybeans oats and alfalfa are the principal field crops and canning peas, green beans and squash are grown as special crops. Management needs consist of erosion and the height of the water table, keeping the surface layer in good tilth, and properly fertilizing the organic soils.

3. **LERDAL-KILKENNY-SHIELDS ASSOCIATION.** Poorly-drained to well-drained, nearly level to rolling, loamy and clayey soils.

This association consists of nearly level, rolling and gently undulating soils that have short complex slopes. These soils are intermingled with soils in depressions and low-gradient swales. Summits of the rises commonly are 10 to 20 feet higher than the nearly level soils and swales in the more sloping areas and 2-10 feet above them in the more nearly level areas. This association makes up about 4% of the county. The major soils formed in 3-10 feet of shaly, calcareous, fine-textured till. Their surface layer is black or very dark gray. The somewhat poorly drained, gently undulating Lerdal soils occupy about 25% of the association; the well-drained, gently undulating to rolling Kilkenny soils occupy about 20%; the somewhat poorly-drained, nearly level Shields soils occupy about 12%; and the poorly-drained, nearly level Marna soils occupy about 11%.

The remaining 32% of the association consists of poorly-drained Canisteo, Dundas and Webster soils; very poorly-drained Glencoe and Lura soils and Muck; moderately well-drained and somewhat poorly-drained LeSueur soils; and well-drained Lester and Hayden soils.

Corn, soybeans, alfalfa, and oats are the main crops. Management needs consist of controlling erosion and the height of the water table and keeping the surface layer in good tilth.

4. **HAYDEN-WEBSTER-LESTER ASSOCIATION.** Well-drained and poorly drained, nearly level to steep, loamy soils.

This soil association consists of nearly level, gently undulating, rolling, and steep soils that have short, complex slopes. These soils are intermingled with soils in depressions and in low-gradient swales. Summits of the rises commonly are from 15 to 40 feet higher than the bottoms of the swales. Adjacent to the valley of the Straight River, slopes are longer and are dissected at intervals by deep, narrow ravines. This association occupies approximately 13% of the county.

The major soils formed in calcareous, loamy glacial till. They have a dark grayish-brown, very dark gray, or black surface layer. The well-drained, gently undulating to steep Hayden soils occupy about 44% of the association; the poorly-drained, nearly level Webster soils occupy about 14%; and the well-drained, gently undulating to steep Lester soils occupy about 10%.

The remaining 32% of the association consists of well-drained Bixby and Lamont soils; somewhat excessively drained Burnsville, Esterville and Storden soils; excessively drained Chelsea soils; moderately well-drained to somewhat poorly-drained LeSueur soils; poorly-drained Dundas and Canisteo soils; and very poorly drained Glencoe soils and Muck.

Corn, soybeans, alfalfa and oats are the principal crops. Management needs consist of controlling erosion and the height of the water table, keeping the surface layer in good tilth and properly fertilizing the organic soils.

5. **MAXCREEK-MOLAND-MERTON ASSOCIATION.** Poorly-drained to well-drained, nearly level to gently undulating, mainly silty soils.

This soil association consists of nearly level, gently undulating, and rolling soils that are intermingled with soils in moderate-gradient swales and in a few closed drainage ways. Summits commonly are from 5 to 15 feet above the swales. This association occupies approximately 7% of the county.

The major soils formed in a silty mantle and the underlying friable, calcareous loam or light clay loam till. A coarse textured layer, or pebble band, commonly separates these two materials. The major soils have a black surface layer. The poorly drained, nearly level Maxcreek soils occupy about 31% of the association. The well-drained Moland soils occupy about 18%; they are gently undulating in most places, but are nearly level near the village of Blooming Prairie. The moderately well drained, nearly level to gently undulating Merton soils occupy about 17% of the association.

The well drained; gently undulating to rolling Blooming soils occupies about 10% of the association and occurs near lakes and major drainage ways. The remaining 24% consist of poorly drained Canisteo soils; somewhat poorly drained Havana soils, and moderately well drained to somewhat poorly drained Newry soils.

Corn and soybeans are the principal field crops. Canning peas, green beans and squash are grown as special crops. Management needs consist of: controlling erosion, height of the water table and keeping the surface layer in good tilth.

6. **BIXBY-DAKOTA-BISCAY-ESTERVILLE ASSOCIATION.** Poorly-drained to somewhat excessively drained, nearly level loamy soils. This association consists of dominantly nearly level soils that are intermingled with soils in swales and depressions. Slopes are gently undulating and rolling in a few areas near streams and drainage ways and where the broad areas of nearly level, poorly drained soils. This association occupies about 15% of the county.

The major soils are formed in medium textured and moderately coarse textured material and the underlying sand or sand and gravel. They have a dark grayish-brown to black surface layer. Soils that have a surface layer of dark grayish brown are mostly along the eastern edge of the county. The well-drained Bixby, Dakota,

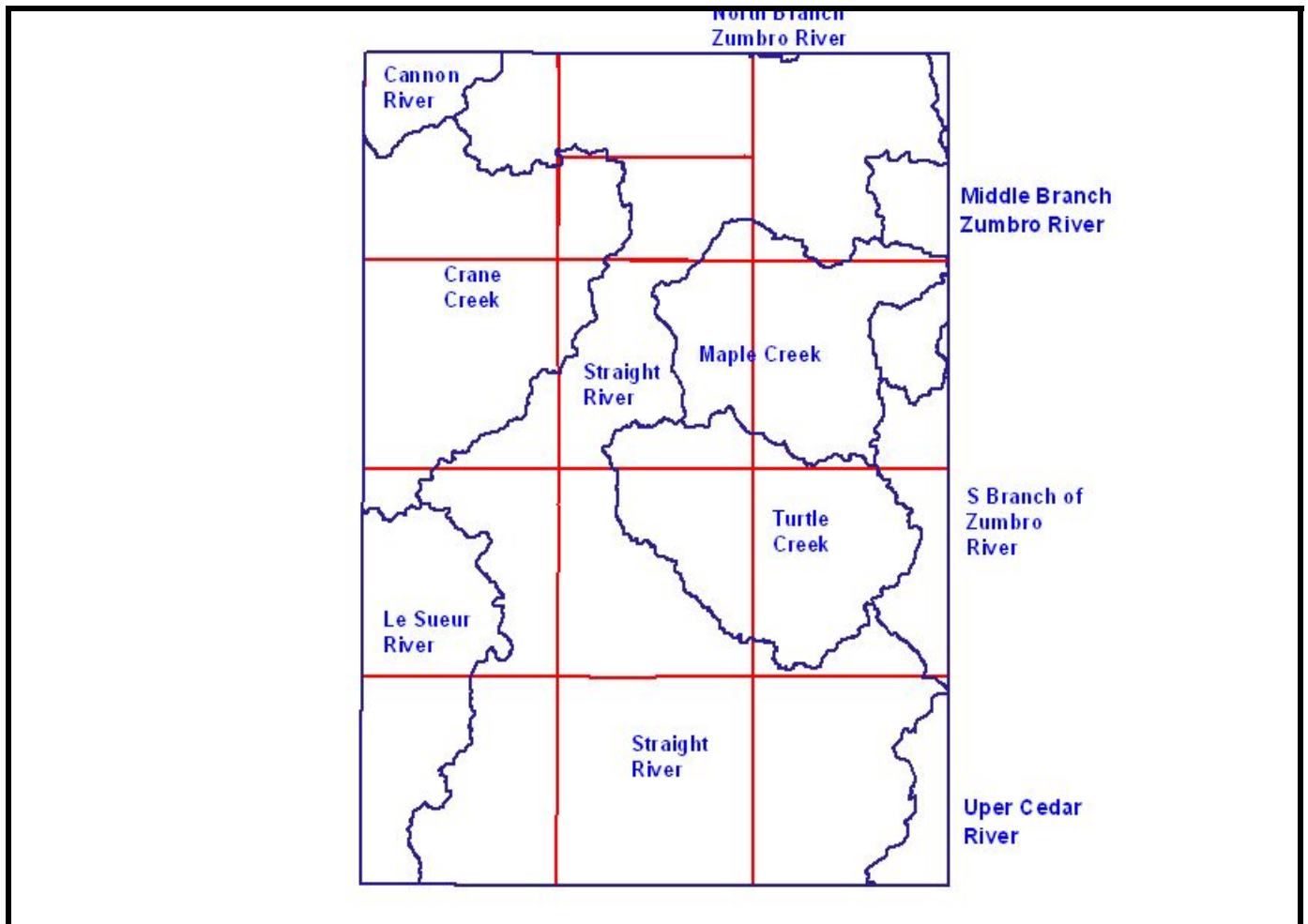
Wadena, and Waukegan soils and the moderately well drained to somewhat poorly drained.

Hayfield soils occupy about 29% of the association. The poorly-drained Biscay, Colo, Hanska, and Kato soils and the somewhat poorly-drained Udolpho soils occupy about 23%; and the somewhat excessively-drained Esterville, Burnsville, and Dickinson soils occupy about 20%.

The poorly drained to very poorly drained, calcareous Kato, Calco, Lemond, and Mayer soils occupy about 10% of the association; and Alluvial land and the Terril soils occupy about 10%. Muck occupies about 8% of the association and, in a few places, is in tracts about 600 acres in size. In most places many of the soils, including droughty and wet soils, are intermingled, but a few large areas of nearly level soils are making up dominantly of one or two soils. The Hayfield, Kato, and Waukegan soils are along the eastern edge of the county.

Corn, soybeans, alfalfa, and oats are principal crops. The larger areas of Muck and Esterville soils are used for truck crops. Management needs consist of adequate drainage where needed, control of soil blowing, irrigation, diversification of crops and crop use, and proper fertilization of mucky and calcareous soils.

# WATERSHED MAP OF STEELE COUNTY



Straight River = 211.1 sq. mi.  
Crane Creek = 55.4 sq. mi.  
Turtle Creek = 40.2 sq. mi.  
Maple Creek = 40.1 sq. mi.  
Little LeSueur River = 37.4 sq. mi.  
S. Branch of Zumbro River = 20.9 sq. mi.  
Middle Branch of Zumbro River = 7.8 sq. mi.  
Upper Cannon River = 7.5 sq. mi.  
Upper Cedar River = 6.5 sq. mi.  
N. Branch of Zumbro River = .1 sq. mi.



**III. SOIL AND WATER CONSERVATION PROBLEMS:**

During the past quarter century, agricultural land use in Steele County has changed from the general farm to the highly specialized operation. The farm of 25 years ago had some pasture, some hay, some corn, a dairy herd, some hogs, and some chickens. Today's farmer is trending toward specialization: whether it is in cash crops of corn and soybeans, or in the case of livestock, confinement buildings for hogs, dairy, or turkeys.

A new crop is also appearing on the landscape of the county. It is the homes of city dwellers, replacing cornfields and woodlots. Also, there is an increasing demand for parks and natural areas for recreational use.

**A. LAND RESOURCES OF THE DISTRICT**

RESOURCES APPRAISAL

	<u>ACRES</u>
Cropland	220,026
Conservation Easements	14,755
Permanent Conservation Easements	325
Roads	10,035
Urban & Built Up Land	9,035
Pasture	8,000
Woodland	7,000
State Wildlife & Public Waters	1,600
Water	1,195
Railroads	<u>945</u>
TOTAL	272,880

**B. EVALUATION OF PAST EFFORTS AND FUTURE PROGRAM CHANGES**

The past two years has been a time of transition for the District. Emphasis has continued to change from agricultural oriented practices to more environmental practices.

The District continued to strive for its goal of developing and implementing a conservation plan on every acre in the county. Soil erosion from unusually heavy spring rains is evidence that we must continue to strive for this goal. The District will encourage the County to address this problem during the County Comprehensive Plan Revision process. It is evident that some landowners refuse to adopt conservation practices where severe erosion is occurring. Therefore, the District will encourage the County to adopt an erosion control ordinance. With the assistance of our cooperating agencies, private groups and the landowners of Steele County we are hope full that this goal can eventually be realized.

The Continuous CRP Program has been very popular with county landowners. In an effort to help landowners implement their plans the District offers two no-till type drills for rent. The District delivers and calibrates the drills according to the

landowners seeding plan. Landowners have taken advantage of this service resulting in several thousand acres being seeded.

The State Revolving Loan fund for best management practices has been in existence for several years. The purpose of this program is to offer low interest financing for best management practices. Several landowners in the county have taken advantage of this program. The most popular practices have been conservation tillage, manure application equipment and animal waste control facilities. Mark Ihlenfeld is a member of and is very active in the SE MN SRF Joint Powers Board. This Board governs the activities of the program in SE MN.

The District's Tree Program is a very popular one with County landowners. Trees are planted for windbreaks, wildlife habitat and erosion control. Weed and grass control in new tree plantings has always been a serious problem. After many years experimenting with various forms of control, we discovered weed barrier matting. Weed barrier matting which is a polypropelene type material has been used for several years with excellent results. We have proven that even though other methods of weed control can be effective, matting is by far the best method.

The District assists the County with implementation of the 110B Comprehensive Water Plan. Water Plan activities include the administration of the MN Wetland Conservation Act. Other activities include assisting landowners with development of Manure Application Plans, installation of animal waste control systems, continuation of the Observation Well Network and participating in the Cannon River Watershed Partnership.

The Straight River has been identified by the Environmental Protection Agency as impaired waters. High fecal Coliform levels were confirmed at several locations on the river. The District in cooperation with the County and the Cannon River Watershed Partnership has joined in an effort to address this problem. The group has been awarded a 319 grant to accelerate Continuous CRP through the implementation of filterstrips, buffer strips, farmed wetland, waterways and animal waste control system. Our hope is that through the implementation of the practices fecal Coliform levels and other pollutants entering the Straight River will be reduced.

The State Cost-Share Program was established in 1977 to give Districts a means to solve high priority soil erosion and water quality problems. Since the inception of the program, Steele County has had great success in targeting and solving high priority erosion and pollution problems.

Soil and Water Conservation awareness by the public continues to be a priority of the District. We have continued to promote and educate the public by publishing a Conservation Calendar. The calendar features Outstanding Conservationists and projects throughout the county. We also have continued our youth education program by offering a poster and essay contest, 4-H Conservation trophy, promoting the Envirothon, sponsoring a youth to Conservation Camp and making a Land Use Model available.

The District's supervisors continue to be involved with soil and water conservation activities not just on a District level, but on an area and state level as well. Some of

these activities include: State Revolving Loan Fund JPB, Cannon River Watershed Partnership Board, Hiawatha Resource Conservation and Development Council, Feedlot Committee, Steele County Water Planning Advisory Board, Blue Earth River Basin Board, Green Source 20/20 and the SE Area MASWCD Association of Supervisors.

It was pointed out that the 2000 population census indicated that the counties population has grown to 33,680 a 10 percent increase since 1990. County zoning regulation changes should be considered to address our growing population and loss of prime farmland. The District will assist the county in this effort.

Agricultural sustainability was also identified as a concern. Future direction to address this concern will be the promotion of alternative cropping systems, organic farming and nutrient management planning. The District will also continue to promote no-till and strip-till practices.

**C. NATURE, EXTENT, AND SEVERITY OF PROBLEMS IN ORDER OF PRIORITY:**

1. WATER QUALITY

Both surface water and ground water problems are evident throughout the District. Water quality problems are result of several other resource problems. Ground water quality problems have been identified through well water testing.

SEDIMENTATION

Eroding streambanks on the Straight River, Turtle Creek, Rush Creek, Maple Creek and Medford Creek are a problem and is causing sedimentation. Surface water entering the 224 miles of open drainage ditches causes bank erosion and sedimentation. Excessive sedimentation increases ditch maintenance costs. Measures that will reduce these problems include: berm and bank seeding, filter strips, erosion control structures, riprapping and controlled grazing.

POLLUTION FROM FEEDLOTS & NON CONFORMING SEPTIC SYSTEMS

In some locations, livestock waste, livestock and human is entering streams and ditches resulting in water quality problems. The problem is two-fold: direct runoff from an estimated 40 feedlots in the County which are within 300 feet of a stream or 1000 feet of a lake: runoff from manure spread on sloping lands near streams or ditches. Also, human waste is out-letting from non-conforming septic systems. Management plans to minimize these problems might include diversions, holding tanks, settling ponds and stacking areas. An accelerated effort to address non-conforming septic systems is necessary to upgrade those systems.

2. EROSION BY WATER

Erosion by water is a problem occurring throughout the County. Sheet erosion, which is the removal of a uniform layer of soil, is not readily visible, but can result in great soil loss. Rill erosion is visible and consists of a series of shallow rills several inches deep. Gully erosion, the most evident and visible, occurs most often near streams and ditches where a large difference in elevation exists. Gully erosion also occurs where a concentration of water flows over unprotected soil. Erosion by water on development sites and road construction sites is also a problem.

The Steele County Soil Survey indicates that 79,000 acres in the County have a potential toward slight to moderate erosion, and that 32,000 acres have a potential of moderate to severe erosion. Conservation practices, which will control this problem, are waterways, terraces, conservation tillage, erosion control structures, contour farming, crop rotation, and sediment control basins. Permanent cover consisting of grass or trees as a result of the Conservation Reserve or RIM Reserve Programs will greatly reduce water erosion.

### 3. DRAINAGE PROBLEMS

#### WET CROPLAND

Poorly-drained soils, which have a high water table, are a problem for crop production. Approximately 65% of the cropland acres (160,000 ac.) in the county are considered wet soils. Approximately 80,000 of these acres are in need of adequate drainage systems today. Drainage is an ongoing need with old systems being replaced and additions to existing systems being made. Drainage systems are also essential to the successful operation of other conservation practices such as: waterways, terraces and conservation tillage systems.

#### LACK OF DRAINAGE OUTLETS

Several areas of the county have a drainage problem due to lack of an outlet. These outlets need to be improved in order for the affected landowners to farm efficiently. Most of these areas involve group action, while some may require the establishment of a legal drainage system. Tile mains and open ditches in combination with the necessary erosion control practices provide the solutions to this problem.

### 4. EROSION BY WIND

Wind erosion is a problem throughout the county, but is most severe in areas of sandy and peat soils. The Steele County Soil Survey indicates that there are 26,000 acres of sandy and peat soils in Steele County. Field windbreaks, farmstead windbreaks and conservation tillage are the key practices targeted to control wind erosion. Permanent cover consisting of grass or trees as a result of the Conservation Reserve or RIM Reserve Programs will greatly reduce wind erosion.

### 5. PUBLIC AWARENESS

Awareness of resource problems by the public is a problem. The District will conduct an education and information program. It will include: tours, newsletters, contests, awards programs, research projects and presentations.

6. LOSS OF WETLANDS

For many years, wetlands have been considered wastelands, and have been drained or filled to make way for development and agricultural production. However, over the last few years, the public has become more and more aware of the important niche wetlands fill in our ecological system. Wetland benefits include: floodwater storage and retention, groundwater recharge, aesthetics and recreation, nutrient assimilation, sediment entrapment and wildlife habitat.

In the future wetlands will be protected because of the Minnesota Wetland Conservation Act of 1991. The goal of the act is a net gain in the number of wetlands. Federal programs such as swampbuster also protect our remaining wetlands. Landowner will be compensated for maintaining, improving and increasing the number of wetlands through several different programs now available.

7. FLOODING

Flooding occurs on the Straight River and its' tributaries generally during spring breakup and is most severe when rainfall occurs during snowmelt.

8. OTHER PROBLEMS

a. Loss of Prime Farmland:

Loss of prime farmland and farmland being fragmented by development are serious problems. The District will assist the county in development of a new County Comprehensive Plan that will address this problem.

b. Wildlife Habitat and Natural Areas:

Loss of wildlife habitat due to intense farming methods is a problem. Practices that enhance wildlife populations are: food plots, farmstead windbreaks, field windbreaks, seeded ditch berms and long term set-aside or reserve programs.

## STEELE COUNTY SWCD COMPREHENSIVE PLAN

2006- 2010

### **FUTURE STRATEGY:**

Proper land use and resource planning will be promoted: technical and financial assistance will be made available to cooperators. We will assist with the implementation of the County 110B Comprehensive Water Plan. We will encourage the use of best management practices and application of conservation practices to all land in the District. Because it is recognized that our natural resources are fundamental and essential to a permanent and prosperous economy.

#### Objectives:

#### **I. Maintain and Improve Surface and Ground Water Quality.**

##### Goals:

- A. Control Sedimentation to streams, ditches and lakes.
  - 1. Install vegetative grass filter strips on all streams, ditches and wetlands in Steele Co.
  - 2. Install 10 side inlet structures on private ditches by 2010.
- B. Identify all Sensitive Groundwater Areas in the County.
- C. Address nutrient management in all Resource Management System Plans.
- D. Install 4 animal waste runoff control system on 2 high priority feedlots by 2010.
- E. Continue Implementation of a well water monitoring program in cooperation with the Department of Natural Resources.
- F. Participate in the Cannon River Watershed Partnership programs.
  - 1. Continue implementation of the 319 TMDL impaired waters initiative.

**II. Though conservation planning, establish Resource Management Systems that reduce soil erosion by water to the tolerable levels on all land in the County.**

Goals:

- A. Install 6,000 feet of terraces, 10 sediment basins and 40 acres of waterways by 2010.
- B. Assist landowners with all aspects of the 2002 Farm Bill.
  - 1. Enroll 3,000 acres of highly erodible and riparian land in the Conservation Reserve Program by 2010.
  - 2. Enroll 3000 acres of wet cropland into the CRP farmed wetland program.
- C. Assist landowners with developing strip-till and no-till systems on 50,000 acres by 2010.
- D. Enroll 250 acres of sensitive cropland in the Conservation Reserve Enhancement Program by 2010.
- E. Assist landowners with the establishment of diverse native prairie seedings.
  - 1. Make available – a no-till drill to aid landowners in proper establishment of native prairie.

**III. To adequately drain wet cropland for efficient crop production and successful operation of all conservation practices.**

Goals:

- A. Assist five drainage groups with the development of group agreements and design of tile mains.
  - 1. Encourage drainage groups to establish legal recorded agreements.

**IV. Reduce wind erosion to a tolerable (T Value) on all land.**

Goals:

- A. Install 4,000 feet of field windbreaks in areas of sandy and peat soils on property lines where possible by 2010.
- B. Install 50 acres of farmstead windbreaks throughout the County by 2010.

**V. To inform all people of the County about soil and water resource problems and solutions to the problems.**

Goals:

- A. Will publish a semi-annual Conservation Newsletter. The newsletter will be distributed to all landowners, cooperating agencies and news media.
- B. Sponsor soil and water conservation awareness programs for students including:
  1. A Poster Contest, Essay Contest and 4-H Conservation Trophy.
  2. Sponsor a student to the Long Lake Conservation Center each year.
  3. Will promote the use of the Steele County Land Use Model in all county school curriculums.
- C. Recognize an Outstanding Conservation Farmer, Outstanding Farmer Sportsman and Outstanding Farmstead Windbreak each year.
- D. Support the Cannon River Watershed Partnership Organization.
- E. Conduct a Conservation Tour.
- F. Inform cooperators about DNR forestry practices and assistance available.
- G. Inform landowners about EQIP and State Cost-Sharing Programs.
- H. Publish an Annual Report Calendar each year.
- I. Sponsor a District Fair Booth at the Steele County Fair each year.
- J. Maintain contacts with legislators and inform them of soil and water conservation needs and priorities.
- K. Sponsor a Tree Day Open House for the promotion of tree planting.
- L. Develop a SWCD handout. The handout will include an explanation of the District's purpose and an explanation of services and Programs available through the District.
- M. Consider hosting an Annual Awards Banquet.
- N. Promote Soil Stewardship Week each year.

**VI. Protect, improve the quality and increase the number, of wetlands in Steele County.**

Goals:

- A. Assist the county with implementation of the Minnesota Wetland Conservation Act.
  - 1. Process all wetland related requests in a timely manner.
  - 2. Provide technical assistance such as site reviews, wetland delineations and restoration plans as requested.
- B. Assist landowners with enrollment in wetland compensation programs.
  - 1. Process CREP easements on 2 previously drained wetlands including adjacent upland resulting in a net gain of county wetland area.
  - 2. Assist wetland owners with enrollment in federally funded programs including: Wetland Reserve, and the Fish and Wildlife Wetland Restoration Program.
  - 3. Will continue to promote and co-sponsor the Straight River Marsh Wetland Restoration Project.
    - a. Will coordinate WRP/RIM on key parcels with the local Ducks Unlimited representative.

**VII. Strengthen Flood Plain Management Programs.**

Goals:

- A. Assist the County with revising its floodplain ordinance.

**VIII. To improve wildlife habitat so that adequate wildlife populations exist for recreational enjoyment.**

Goals:

- A. Inform landowners of DNR wildlife programs.
- B. Promote the sale of trees for wildlife purposes.
- C. Inform landowners of programs that the Minnesota Pheasants Group has to offer.
- D. Promote native grasses, controlled burns, tree planting and food plots on CRP and RIM Reserve lands to improve the wildlife value of these lands.

- E. Work jointly with other agencies, sportsmen clubs, and wildlife groups keeping them informed of the wildlife provisions of the Government Programs.

**IX. Cooperate with other agencies to promote soil and water conservation and to research solutions to related resource problems.**

Goals:

- A. Work closely with the County Commissioners, County Highway Department and Planning, Zoning and Environmental Health Departments to solve local resource problems.
  - 1. Assist with implementing the County 110B Comprehensive Water Management Plan.
  - 2. Complete 10 nutrient management plans by 2010.
  - 3. Implement a (GIS) Graphic Information System in cooperation with other agencies.
  - 4. Promote an update of the Steele County soil survey.
- B. Work closely with the County Extension Service to promote information about soil and water conservation and related problems.
  - 1. Research Low-Input, Sustainable Agriculture alternatives.
  - 2. Research these resource problems.
    - Loss of prime farmland and woodland.
    - Soil compaction.

**DISTRICT POLICY:**

- A. It shall be the policy of the District to work with individuals, groups, and units of government on a request basis.
- B. Conservation practices will be established when critical erosion and drainage problems affecting the practices are solved.
- C. Cost-Sharing funds under the administration of the District will be allocated to high priority erosion, water quality and sedimentation problems.
- D. All programs and services of the Soil and Water Conservation District will be offered on a non-discriminatory basis, without regard to race, color, national origin, religion, sex, age, marital status or handicap.

**BUDGET FORECAST:**

See following chart.

**STEELE COUNTY SWCD PROJECTED FIVE YEAR BUDGET**

June 2006

	Amounts 2004 **	Amounts 2005**	Projected Amounts 2006*	Projected Amounts 2007	Projected Amounts 2008	Projected Amounts 2008	Projected Amounts 2010
<b>REVENUES:</b>							
Intergovernmental Rev.:							
State Grant	66093	43038	45513	50064	50064	50064	50064
Federal (TSP work)	0	9877	11529	5000	5000	5000	5000
County Allocation	100658	118389	122554	122554	122554	122554	122554
WCA and MAP Alloc.	12000	12000	12000	12000	12000	12000	12000
Charges for Services	66621	62348	64800	98254	118899	114948	123312
319 Monies (D.J. salary)	19000	21624	22000	0	0	0	0
Miscellaneous Revenue:	0	0	0	0	0	0	0
Interest	2072	4045	2000	3500	3500	3500	3500
Other Taken from Savings	607	0	5000	0	13000 ***	0	0
<b>TOTAL REVENUES:</b>	<b>267051</b>	<b>271321</b>	<b>285396</b>	<b>291372</b>	<b>325017</b>	<b>308066</b>	<b>316430</b>
<b>EXPENDITURES:</b>							
District Operations:							
Personal Services	180112	157260	182569	189872	197467	205366	213580
319 Monies (C.S. salary)	0.00	3500	0	0	0	0	0
Other Services	35424	33971	33883	34000	34000	34000	34000
Supplies	2429	1551	1450	1500	1550	1600	1650
Capital Outlay	2130	0	0	0	***25000	0	0
Project Expenses - State	0	0	0	0	0	0	0
C/S Project	14002	19791	13558	17000	17000	17000	17000
Project Expense District	44781	41368	48936	49000	50000	50100	50200
Other	0	0	5000	0	0	0	0
<b>TOTAL EXPENSES:</b>	<b>278878</b>	<b>257441</b>	<b>285396</b>	<b>291372</b>	<b>325017</b>	<b>308066</b>	<b>316430</b>
<b>Excess of Rev. Over (Under) Expenditures</b>	<b>(11,827)</b>	<b>13,880</b>	<b>Balanced</b>	<b>Balanced</b>	<b>Balanced</b>	<b>Balanced</b>	<b>Balanced</b>

\*(Approved) \*\*(Actual Reports sent to BWSR) \*\*\* Taken from Designated Savings Account for New Truck