

Chisago County Comprehensive Plan



FEBRUARY 2007

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CHISAGO COUNTY COMPREHENSIVE PLAN

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Approved by the Chisago County Board of Commissioners - Effective Date:
February 21, 2007

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INTRODUCTION

Purpose, Process, History & Demographics

February, 2007



Chisago County Comprehensive Plan

2007

Purpose

Chisago County adopted its first Comprehensive Plan in 1970. A successive plan was completed in 1987, prepared in response to increasing growth and development activity in the County and to provide updated data from the 1980 U.S. Census. The goals and policies in the 1987 Plan were basically the same as the 1970 Plan, which was viewed primarily as an update of the previous Plan. The Plan was again updated in 1995 in recognition of rapid development in many areas of the County.

In the spring of 2003, the County Board of Commissioners authorized an update of the Comprehensive Plan to conduct a critical review of the growth trends and projections for the County. The policies of this Plan will provide specific direction regarding future decisions on growth while allowing flexibility for the County to adapt to changing conditions. Chisago County is at a critical point in terms of growth and must continue to identify and implement ways in which the growth can best be managed in the future.

Chisago County has authority to plan under Minnesota Statutes 394.21-394.37. The County is governed by an elected Board of Commissioners, consisting of five members. The County Administrator undertakes many of the administrative responsibilities on behalf of the County Board. The Planning Commission, which consists of seven members, advises the Board regarding planning and zoning activities within the County.

There are ten cities and ten townships in Chisago County. The County land use planning authority includes all of the unincorporated areas in the County, except Wyoming Township which has adopted its own Comprehensive Plan and Land Use Regulations. Participation by townships is a critical part of the planning process, since establishing a sound direction for future development in the townships is the primary purpose of this Plan. It is also the intent of the County Board to implement a Comprehensive Plan that reflects the values and goals of the majority of residents of the County.

This plan provides a framework for how the County and its citizens will guide growth and development in the County over the next twenty to thirty years. It is the intent of the Chisago County Board of Commissioners that this Plan be viewed as the primary growth management tool for the County. This Comprehensive Plan is intended to be flexible so that it can respond to changing conditions, yet static enough so that long-term land use and related policies are maintained and ad hoc decision making is avoided.

There are some important questions that the Comprehensive Plan process has explored. These included: What will be the population of Chisago County in 2010, 2020, 2030? How fast will the population grow or decline in the future? Will the growth or decline be uniform across the County or will changes be focused in certain locations? What are and will be household characteristics and size? What will the impacts be of population changes on the County's economy? On housing? On land use? On employers and employment conditions? On local governments and the services they

provide? The narrative for each of the chapters of the Comprehensive Plan should help to establish a context for addressing these and many other important questions facing the future of Chisago County; and the goal and policy statements of each chapter should provide guidance for directing the future of Chisago County.

Process

A three phase process was established to update the comprehensive plan. Throughout each phase citizen input was gathered to aid in directing the content of the Plan. A total of nine meetings were conducted throughout the three phases.

The following phases were designed for this process:

- Phase I: Issue Identification, Background Research and Mapping
- Phase II: Development of Plan Goals & Policies, Review of Alternatives, & Land Use Conceptualization
- Phase III: Plan Refinement and Adoption of Revised Plan

Phase I of the process (which took place from March 2003 to August 2003) consisted of preliminary meetings with each of the townships, a joint meeting with municipalities in the County, and meetings with other key players and organizations; such as the County's Economic Development Authority and various Lake Associations. For general public input on issues and opportunities of Chisago County four "Planning Areas" were established throughout the County based on proximity and similar issues of concern. These Planning Areas were used to conduct public input meetings during Phase I to collect information from citizens on the Assets & Opportunities and the Threats & Challenges facing the County. Over 230 people attended the Phase I Public Input meetings.

In addition during Phase I, a Steering Committee of 25 people representing various groups, agencies and opinions was appointed by the Board of Commissioners. This citizen based Steering Committee was established to act as a "sounding board" to give County staff direction and feedback on revisions to issues and policies outlined in the draft Comprehensive Plan. In addition, meetings were held with each township and a meeting with all the municipalities took place.

Phase II of the process took place from September 2003 to September 2004. During this phase the steering committee discussed issues, and goals and policies related to the following chapters: natural resources, cultural resources, recreation and open space, agriculture, transportation, infrastructure, economic development, intergovernmental coordination and land use/growth management. A series of Public Open Houses, in which over 80 people attended, were conducted in May and June 2004 to display the information gathered to date and to receive comments and suggestions from the general public. Again meetings were held with all municipalities and with various townships.

In addition during this time frame, the County Board authorized a full transportation plan to be incorporated into the overall Comprehensive Plan. This transportation plan component was led by the Public Works department with the assistance of Bonestroo, Rosene, Anderlik and Associates. The process for the Transportation plan included a Technical Advisory Committee in which each city and township was provided an opportunity to have a representative on the committee. The full transportation plan will be incorporated into this Comprehensive Plan.

Phase III of the process took place from October 2004 – November 2006. The plan was further revised based on public input and the final draft presented to the public, Planning Commission and County Board as follows:

- Meet with Township Officers Association in October, 2006
- Host three Township Public Input meetings in November, 2006 (and invite Cities to these meetings as well):
 - Shafer, Amador, Sunrise
 - Franconia, Chisago Lakes, Lent
 - Nessel, Rushseba, Fish Lake
 - (Wyoming Twp is not subject to Chisago County zoning authority.)
- Planning Commission consideration and of the document and recommendation to the County Board in December, 2006
- County Board holds public hearing and adopts Comprehensive Plan in December 2006 contingent upon review and comments by other jurisdictions
- Send to other jurisdictions for comment in January 2007 (DNR, DOT, SWCD, local government units, etc.)
- County Board adopts final Comprehensive Plan in February, 2007
- Begin work on revising Zoning Ordinance in March, 2007

History

The area now known as Chisago County was derived by early settlers from the Indian word Ki-Chi-Saga which means “fair and lovely waters”. In the early 1800s, the area was a vast area of forests, lakes, wetlands, and prairies. The Chippewa people were the primary residents. However, in accordance with an 1837 treaty, the Chippewa moved out of the area and an influx of European-American settlers arrived. Chisago County was organized in 1851. Logging became the key industry in the area. Sawmills developed in Taylors Falls, Sunrise, and Kost, but by 1914, most of the forests had been cleared and the logging industry declined. Agriculture then became the dominant industry.

Today, agriculture is still the primary land use in the county, but the county is rapidly changing. It is one of the fastest growing non-metropolitan counties in Minnesota, in part, because of its proximity and accessibility to the Minneapolis/Saint Paul metropolitan area and, in part, because of the attraction of its abundant natural amenities. While much has changed over the years, Chisago County is still known for its natural amenities – its rivers, lakes, wetlands, and forests. One goal of this Comprehensive Plan is to help guide the County in preserving and enhancing the natural amenities that have historically been important, and will continue to be important, to the residents of the county.

Sieur duLuth, a French Canadian, was the first known white man to enter Chisago County in his travels down the St. Croix River in 1679. During the next one hundred years the French and English established trading posts at what are now known as Taylors Falls and Sunrise.

The 1837 treaty in which the Ojibway and Dakota Indians ceded all lands between the St. Croix and Mississippi Rivers opened the Chisago County area to settlement by the white man. In 1837 as well, a man named Jesse Taylor arrived in the location that would later bear his name, Taylors Falls. The first steamboats arrived at Taylors Falls a year later in 1838.

During the remaining decades of the century, logging became the key industry in the Chisago County area. There were mills in Taylors Falls, Sunrise and Kost. Transporting the logs down the river to the mills caused navigational difficulty with the steamboats coming up river, as well as causing erosion to the banks of the rivers and numerous log jams. Nevers Dam, the largest wooden dam ever built, began operation in 1890 and controlled the flow of logs down the river until 1912.

In 1848, the Chisago Lakes Area (Chisago City, Lindstrom and Center City) was surveyed for the federal government. The County was officially founded in 1851, and Taylors Falls became the first county seat. The first mail delivery to Taylors Falls took place in 1851.

In 1853, the road from Stillwater to Taylors Falls was completed, and a stage run opened. The first bridge to cross the St. Croix River was completed at Taylors Falls in 1856. Ferry boats crossed the St. Croix River at Sunrise and Rush City. In 1868, the military road, which traversed the entire County from north to south was opened. Railroads followed as an important method of transportation. The St. Paul-Duluth Railroad, which crossed the County from north to south, was completed in 1870.

In 1865, the County seat was moved from Taylors Falls to Chisago City. It was later moved to Center City in 1875, and a courthouse was built. Although the County seat remains in Center City, two subsequent votes to move it have failed – in 1899 to move to North Branch, and in 1989 to move to Branch.

Although there were at one time 62 school districts in the County, today there are only seven. Agriculture was and still is to a large degree, the prime industry in the County, with livestock, row crops, vegetables and turf being the primary activities. One of the largest potato equipment manufacturers of its time, the Splittstoser Company, was based in North Branch. Many creameries were opened in the County to serve the dairy herds. Today, beef cattle have replaced many of the dairy herds.

The Swedes and other Scandinavian ethnic groups are the most known settlers in Chisago County; however, the Germans, French, English and other groups helped to develop the County as well.

Regional Context

Chisago County is in east-central Minnesota on the Wisconsin border. It is roughly 35 miles north of the Minneapolis/Saint Paul metropolitan area. The county is well served and accessed by several major highways. Interstate Highway 35 runs north-south through the western portion of the county and US Highway 8 runs east-west through the southern portion of the county.

The population of the county is expected to grow, in part, because of the proximity of the county to the metropolitan area. The county attracts residents who work in the metropolitan area, but who seek the quality of life that the county offers. The county also attracts tourists (many of whom are from the metropolitan area) who visit the county to enjoy its scenery and recreation opportunities. In particular, Wild River State Park, Interstate State Park, the Saint Croix River, Chengwatana State Forest, Carlos Avery Wildlife Management Area, and the lakes attract many recreation enthusiasts to the county. Although Chisago County is a rural county, its proximity to the metropolitan area and its natural amenities contribute to its significance in the region.

Demographic Analysis

Not only is it important to know how many people live in Chisago County, but it is also important to know key characteristics of the population and the households in the county as well. For example, their age, household status, employment status, and where they

live in the county. It is also important to look at future projections of population and households to determine what impacts may occur. This section briefly describes population and household characteristics of the county.

Historical Population Patterns

There are three significant periods related to population growth in Chisago County: 1) 1850 to 1900, 2) 1900 to 1960, and 3) 1970 to the present. From 1850 to 1900, the population of the County grew 87%. This tremendous growth relates to an influx of European-American settlers and to the growth of the logging industry in the area.

By the early 1900s, most of the forests in the county had been cleared, sawmills began to close, and lumberjacks left the county for other employment opportunities. Also, farming practices significantly changed during the 1900s. Advances in farm machinery required fewer people to farm larger areas. As a result, from 1900 to 1960, the population of Chisago County declined by 1%.

From 1970 to 2000, the population of Chisago County increased by 135%. Several factors contributed to this growth. Improvements in the transportation system allowed cities along Interstate Highway 35 and U.S. Highway 8 to have easy access to a greater area. Consequently, businesses and industries prospered in these areas. In addition, people seeking a rural lifestyle moved to the county from the Twin Cities metropolitan area. Many of these people were attracted to the natural and rural amenities of the county. Due to the relatively easy commute to the Twin Cities area, many of these people were able to live in the county, but work in the metropolitan area. In essence, the natural resources that attracted European-American settlers to the county in the 1800s also attracted residents in the 1960s to the present.

The U.S. Census shows that in the year 2000, Chisago County had a population of 41,101. This is an increase of 35% from the 1990 population of 30,521 and an increase of 60% from the 1980 population of 25,717 as shown in the table below. In recent years, Chisago County has been one of the fastest growing counties in the State and is likely to continue to be one of the fastest growing counties.

Chisago County Historical Population

1970	1980	1990	2000	% Change 1970-1980	% Change 1980-1990	% Change 1990-2000	% Change 1970-2000
17,492	25,717	30,521	41,101	47	19	35	135

Source: U.S. Census 1970, 1980, 1990 & 2000

Population Projections

Chisago County is rapidly becoming one of the fastest growing non-metropolitan area counties in the State. It is projected that between 2000 – 2030, Chisago County will be the 4th fastest growing county in the State. The County’s proximity and accessibility to the Twin Cities Metropolitan Area and its natural amenities are two factors that are greatly influencing this growth. There are expected to be increased pressures for more

growth in the County in the next 10-20 years, as people continue to view larger lots in the rural areas as an attractive alternative to suburban development.

The State's population projections through 2030 show Chisago County as the fourth fastest growing county in the state with Chisago County projections showing a population of 51,640 in 2010 (a 26% increase from 2000-2010), a population of 61,170 in 2020 (a 49% increase from the 2000 Census population) and a population of 69,540 in 2030 (a 69% increase from 2000-2030).

Chisago County Population Projection

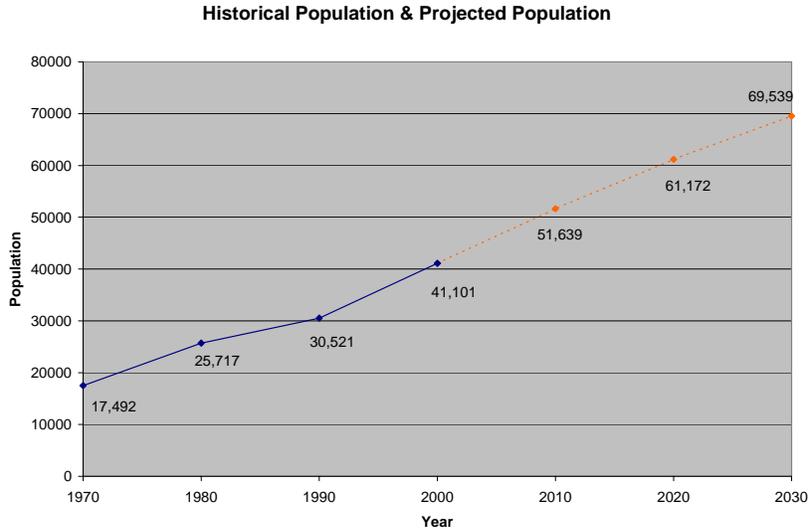
2000	2010	2020	2030	% Change 2000-2010	% Change 2010-2020	% Change 2020-2030	% Change 2000-2030
41,101	51,639	61,172	69,539	26	19	14	69

Source: Minnesota State Demographic Center

Before the 2000 U.S. Census data was released, the State Demographic Office estimated the population of Chisago County was 39,860 in the year 2000. As discussed above, the U.S. Census shows that the 2000 population was actually 41,101. Consequently, the State's estimate was conservative and it follows that its population projections are also conservative. Therefore, the following population projection from the State is likely conservative and should likely be adjusted upward.

If it is assumed that the population growth rate will be the same between the years 2000 and 2020 as it was between 1980 and 2000, then using a 60% increase per 20 year period, it could be assumed that the population of Chisago County would be roughly 68,500 in the year 2020. Or using a 30% increase per 10 year period (90% in 30 years), it could be assumed the population of Chisago County will be roughly 78,092 in 2030. (Note: The increase from 1970 to 2000 was actually over 135%).

This growth may affect the County in several ways: 1) pressure to develop in the rural and natural areas will likely increase, 2) infrastructure needs will likely increase significantly, and 3) pressure to provide more urban amenities will likely increase.



Age Composition

The State Demographic Office’s projections show the population across the state will be older, largely to the continued aging of the baby boom generation. The projections also show a more modest growth in the younger age groups. The tables below show the age composition for Chisago County. As indicated by the data in the tables, the greatest increase in percentages from 2000 to 2030 will be seen in the 65 to 74 age group.

2000 Age Composition

Age	Number	Percent
Under 5 years	3,118	7.6
5 to 9 years	3,513	8.5
10 to 14 years	3,678	8.9
15 to 19 years	3,047	7.4
20 to 24 years	1,938	4.7
25 to 34 years	5,717	13.9
35 to 44 years	7,533	18.3
45 to 54 years	5,283	12.9
55 to 59 years	1,862	4.5
60 to 64 years	1,365	3.3
65 to 74 years	2,114	5.1
75 to 84 years	1,377	3.4
85 yrs and over	556	1.4

Source: US Census 2000

2030 Age Composition

Age	Number	Percent
Under 5 years	4,430	6.4
5 to 9 years	4,840	7.0
10 to 14 years	5,140	7.4
15 to 19 years	4,460	6.4
20 to 24 years	3,170	4.6
25 to 34 years	7,920	11.4
35 to 44 years	9,600	13.8
45 to 54 years	8,730	12.6
55 to 59 years	3,740	5.4
60 to 64 years	4,010	5.8
65 to 74 years	7,450	10.7
75 to 84 years	4,330	6.2
85 yrs and over	1,700	2.4

Source: MN State Demographer

Households

As the baby boom generation continues to age, the number of married couples without children living at home will grow. Another trend related to baby boom aging will be that the number of one-person households headed by a person 65 and older will grow.

Statewide it is projected that between 2000 and 2010 the number of married couples with children will actually fall by almost 9,000. Statewide the number of households is projected to grow 15% between 2000 and 2010 and 40% between 2000 and 2030. This overall gain is the product of a growing aging population. Households will grow faster than population mainly because the population is getting older. As the baby boomers age, more people will be living in small one-person or two-person households instead of in larger families.

The increasing number of households will be accompanied by a shift in household type. The number of married couples with children will not change much, while the number of non-family households and married couples without children will increase rapidly. These changes reflect both the aging of the population and changes in social customs and lifestyles, and they will affect all areas of the state.

As the population ages, the proportion of people in their child-bearing and child-rearing years will decline. This is the major reason for the stagnant number of married couples with children. In addition, the projections assume that more of the people who have young children will be single parents or will be in a cohabiting relationship rather than marriage.

The number of single parent families has risen dramatically in recent decades. Projections show this household type will grow, but at a rate slightly below the overall rate of household growth.

A big surge in elderly one-person households will occur after 2010, when the effect of the baby boom will become evident. Household size will decline because the number of households is projected to grow faster than the number of people. This reflects the aging of the population and the growing prevalence of smaller types of households, such as empty nesters and one-person households.

Household Projections

2000	2010	2020	2030
14,454	19,110	23,560	27,620

The total number of households in Chisago County is projected to increase approximately 32% from 2000 to 2010 (14,454 to 19,110) and 91% from 2000 to 2030 (14,454 to 27,620).

The majority of households in the county involve married couples with children. However, in the future a larger percentage of married couples will not have children living with them. There will also be more households with children that will have only one parent in the household. More households will involve a single person living alone or sharing a dwelling unit with other single, unrelated people. Given the trend for more single person households and smaller family sizes, it follows that household size will also decrease. Therefore, because the county’s population will continue to grow and household size will likely decrease, the County will need to plan accordingly to allow for development of an adequate amount and variety of housing. This in turn will affect the type and location of parks, trails, and open space in the county.

Housing Units

A large majority of the housing units in Chisago County are single family homes (approximately 80%). The number of households in the County is expected to rise 24% between the years 2000 and 2020. Future homes in the County will be predominately single family. With the projections of steady growth for the future, it is important that Chisago County be well prepared for the increased demands that will be put on the County and its resources.

An Overall Housing Study for Chisago County was prepared for the Chisago County Housing and Redevelopment Authority in September 2000. This study analyzed housing needs and conditions for the County. The multiple goals of the study included:

1. Evaluating the need for additional rental housing in Chisago County.
2. Providing an analysis of the current housing stock and inventory.
3. Determining gaps and unmet needs.
4. Examining future housing trends and predictions that Chisago County can expect to address in the coming years.
5. Providing a summary of existing resources for housing and resource providers.
6. Supplying recommendations for new single-family and multi-family housing.

The study divided the county into seven geographic regions. By reviewing the employment conditions, population characteristics and projections, household characteristics and projections and existing housing, the study then recommended the market need of housing (number and types) in each demographic area. Those recommendations are detailed in the document "Overall Housing Study for Chisago County" published in September 2000.

The housing study is to be considered a part of this Comprehensive Plan but will remain as a separate document. Due to the fact that this housing study's projections and recommendations were based on a time period up to 2004, it is recommended that in the near future the County re-evaluate those projections and recommendations by updating the study with current information and projections to 2010, 2020 and 2030 based on the more current population and household projections.

NATURAL RESOURCES CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Natural Resources

Chisago County is endowed with a variety of natural amenities that offer scenic and recreational opportunities for residents and visitors in the County. Rivers, lakes, streams, wetlands, bluffs and woodlands create growth and development opportunities, but require careful management to prevent misuse and overcrowding.

There is a considerable amount of undeveloped land in Chisago County; much of it is subject to various environmental constraints to potential development. There are environmental factors that need to be addressed in order to ensure protection of the natural resources in the County. These include: surficial geology and soils; aquifers, aquifer recharge areas and groundwater supply and quality; surface waters, wetlands and drainage; erosion control; shoreland management overlay areas; woodlands; wildlife habitat corridors; native plant communities, rare species and sites of biodiversity; and aggregate resources.

Surficial Geology & Soils

The generalized soils are shown in Figure 1 (page 2-14). The soils and surface geology are important factors that need to be identified in order to understand the occurrence and movement of groundwater and its relation to the aquifers in the County. Present soil features are an important consideration affecting land use decisions, including on-site sewage treatment systems design, agriculture and irrigation practices.

The surface geology in the County is dominated by two underlying geologic features: the Grantsburg Sublobe Till deposits (an extension of the Des Moines Lobe) and the Superior Lobe Outwash deposits. The Superior Lobe consists of well-drained sand and gravel. The Grantsburg Sublobe consists of gray till with fine sandy loam or silty clay loam surface textures. The Anoka Sand Plain located in the west central part of the County resulted from the large amounts of Lacustrine Sand deposited by the Grantsburg Sublobe. The Grantsburg Sublobe, including the present day Anoka Sand Plain, covers the majority of the County from the northwestern corner to the southeastern corner, excluding the St. Croix River Valley in the northeast-central part of the County.

Soils in the County range from excessively well drained to very poorly drained. The Anoka Sand Plain regions in the western part of the County are where many of the excessively well-drained soils are located; this parallels the area where the sensitivity of the aquifer contamination is the highest. Evaluation of soil suitability as it relates to on-site sewage treatment systems is also dependent upon the level of the water table in the area; a higher water table will accentuate the circumstances, whereas a lower water table could reduce the impact of less suitable soils on potential groundwater contamination.

The majority of the soils in the southeastern part of the County are the Nebish-Talmoon Association. These soils are nearly level to very steep, well drained and very poorly drained loamy soils. Major uses of these soils are cropland, hayland and pasture. Main management concerns on these soils are erosion on slopes and wetness.

The soils mentioned above make up 43% of the soils in the County. There is one organic soil association in the County that is found around Carlos Avery Wildlife Management Area, Rush Lake and close to the St. Croix River in Sunrise Township. These are very poorly drained soils, with primary uses being specialty crops, sod, pasture and wildlife land. These soils are also considered to have severe soil limitations for on-site sewage treatment systems as they typically have poor percolation rates and “ponding” may occur.

Aquifers, Aquifer Recharge Areas & Groundwater Supply and Quality

An aquifer is a sedimentary (limestone, dolomite or sandstone) rock formation, which holds and yields large amounts of groundwater. An aquifer recharge area is the area of interchange between the surface water and the aquifer. It is the principal area of adding water to the groundwater resource. Figure 2 (page 2-15) shows the locations of the various aquifers in Chisago County. Two principal aquifers, the Jordan Aquifer and Mount Simon-Hinckley Aquifer, exist in the County. The Jordan Aquifer is located in the southeast portion of the County near the St. Croix River. The Mount Simon-Hinckley Aquifer exists below the entire County and is found closest to the surface (just below the top soils) in the northern half of the County. The principal recharge area for this aquifer is the St. Croix River and large parts of the cities of North Branch and Harris; along with Sunrise and Lent Townships. The characteristics of the two principal aquifers are as follows:

	<u>Jordan</u>	<u>Mount Simon-Hinckley</u>
Water Yields	large volumes	large volumes
Importance	principal water source- Twin Cities Metro area	principal water source - Chisago County secondary water source - Twin Cities Metro Area
Thickness	0-50 feet	N/A
Depth from surface	0-100 feet	100-400 feet

Probably the most important aspect of the aquifers underlying Chisago County is domestic water supply. The county is on the northern edge of the unique geological Twin City Artesian Basin. Both the Jordan Aquifer and the Mount Simon-Hinckley Aquifer are part of the Artesian Basin. Seventy-five percent of the groundwater supplied to the Twin City area comes from the Jordan and Paire-de-Chien formations to the Artesian Basin. The Jordan is partially recharged (surface water added to it) in Chisago County. Essentially all large domestic water users in the County obtain their water from the Mount Simon-Hinckley Aquifer.

Use of surface water and groundwater for irrigation is also a significant use in the county. At the present time, 27 irrigation well permits have been issued by DNR for groundwater sources and 18 permits for surface water sources. Much of this water returns to the aquifer through percolation and there is no evidence to date of groundwater “mining” that is, extraction of such large volumes that results in drawdowns and actual loss of aquifer capacity. Even if irrigation was to increase in the county in years ahead, quality of water resources from both ground and surface water quality is a more immediate environmental issue than depletion of the resource.

The aquifer recharge area provides a critical interchange of surface water to groundwater and of groundwater to surface water. Not only are the groundwater supplies replenished through the recharge area but also the movement of groundwater to the surface contributes water to streams, lakes and rivers sustaining them through drought periods. Critical aquifer recharge areas occur in coarse soils and peat where percolation is rapid.

Figure 3 (page 2-16) identifies areas in the County that have different degrees of susceptibility of groundwater contamination. The ratings are based on characteristics of the overlying soils of the aquifer. Susceptibility is based upon the ability of the soil to absorb contaminants, transform them into inert substances, dilute them to be inactive or control the rate at which they flow to the aquifer. As indicated by Figure 3, a significant area of land in Chisago County is highly or very highly susceptible to groundwater contamination in a relatively short period of time from when potential contaminants are introduced to the soil. This is an area of concern for the County, and supports a need to adopt strong policies that will provide protection of groundwater in the County and the surrounding areas.

The Mount Simon Hinckley/Fond du Lac bedrock aquifer is the main source of groundwater for the County. The Franconia/Ironton/Galesville aquifer extends into the southern part of the County and serves the Chisago Lakes area, a part of Franconia Township and southern Wyoming Township. A part of the Mount Simon Hinkley aquifer underlies the Anoka Sand Plain, has moderate (years to decades) to low (decades to a century) sensitive ratings to water-borne contaminants (Figure 3). The sandy soils aggravate aquifer contamination at a much faster rate than loam or clay soils. This becomes more of a concern for future development with individual sewage treatment systems in areas such as the Anoka Sand Plain where the sensitivity rating is very high (hours to months) to high (weeks to years).

The impact of actions within Chisago County regarding groundwater extends beyond the county’s boundaries. Contamination of groundwater in the County from herbicides, fertilizers or ineffective on-site septic systems can greatly affect the quality of water retrieved from wells located in and outside Chisago County. Alternately, indiscriminate use of groundwater supply in more urbanized areas can impact the availability of groundwater used for private wells in Chisago County.

Chisago County adopted its first Comprehensive Local Water Plan in January 1993 and updated the plan in 1998. The plan was again updated and received State approval in the fall of 2006. The local water plan provides an ongoing process for addressing water related issues such as land use impact on groundwater, water wells and well head protection, groundwater recharge areas, individual sewage treatment systems, groundwater monitoring and surface water.

Chisago County adopted its Individual Sewage Treatment System (ISTS) Ordinance in 1988. The Ordinance requires inspection of new sewage treatment systems as well as point of sale inspections. The ISTS Ordinance also requires systems classified as imminent health threats to be upgraded or discontinued within 60 days. As of January 1, 1996, the State mandates that all counties adopt and enforce Minnesota Rules Chapter 7080 regarding on-site sewage treatment system standards.

More information pertaining to wastewater treatment options and groundwater use and supply is included in the infrastructure chapter of this plan.

Surface Water, Wetlands & Drainage

There are extensive waters and wetlands in Chisago County. The County has primary responsibility for the enforcement of regulations to protect these waters through administration of the County Shoreland and Floodplain Management Regulations. The County regulations conform to the most current shoreland rules established by the Department of Natural Resources.

The Wetlands Conservation Act of 1991 provided the County with responsibility for administration of the Act. This includes a review and approval of all applications for altering wetland areas in the county as well as permitting, monitoring and assistance with mitigation.

One primary function of wetlands is their ability to act as groundwater recharge zones. They serve the function of storing runoff from storms or snowmelt; if they are developed, more severe flooding of watershed is likely. In addition to development concerns associated with wetlands, they serve as habitat for various unique or endangered species. Chisago County has a variety of endangered species that make wetlands their habitat. Among these are the Blandings Turtle, Lake Sturgeon, Butterfly Mussel, American Bittern and the Wood Turtle. It is for these reasons that wetlands should be protected as permanent open space with no development allowed.

Some major concerns relating to surface water quality and drainage are: erosion control, current drainage practices and regulations, and chemical pollution and sedimentation from runoff.

Non-point source pollutants can be traced to two primary sources: land development and agricultural practices. Urbanized land development generally increases the volume of runoff, as well as the concentration of pollutants in the runoff. Detention ponds are a means of mitigating these impacts. Even well-designed ponds will not reduce the

volume of runoff resulting from urbanization; however, a pond designed with best management practices such as mulch or silt fences, may reduce the amount of runoff actually entering the pond by increasing infiltration through the soil.

Agriculture is also a contributor of non-point source pollutants. Non-point source pollution occurs as a result of intensive land cultivation and husbandry practices, and appears in three different forms: soil erosion; agriculture supplements such as nutrients, pesticides and herbicides; and animal waste products.

Each of the sources, when allowed in water bodies, smother aquatic bodies changing the aquatic environment by limiting light penetration of the water and resulting in the transmissions of toxins to area water bodies.

Many of the lakes in the County have already been widely developed; the Lindstrom, Center City and Chisago City lakes area being a good example. Although it is inevitable that the desire for further development around water bodies will continue into the future, it is important to recognize the impacts of development on the surface and groundwater quality of the lakes, rivers and wetlands and to prevent further degradation. There are specific issues dealing with future development that will impact the County related to surface water management that the County will need to address or participate in, in the future.

Erosion Control

Two main causes of erosion are inadequate farming practices and insufficient protection of exposed soils during construction. It results in the loss of valuable topsoil and clogs drainage ways and culverts, causes sedimentation that reduces water quality, and reduces storage capacity of lakes and ponds. Careful planning and regulation related to conservation of soils, water and natural vegetation can reduce erosion, runoff and sedimentation. Mineral extraction operations are found in several locations in the County. Extraction sites may potentially result in erosion, sedimentation and groundwater problems if they are not adequately planned and regulated.

Steep slopes, defined as eighteen percent or greater, are generally not suitable for any type of development, as they are very susceptible to erosion. If they are not properly managed, they may result in foundation problems in development. At present, steep slopes in the county are fairly limited, located primarily in the areas along the St. Croix River.

Shoreland Management Overlay Areas

With the many water bodies in the County come miles of shoreland and floodplains. Regulations regarding shoreland and floodplain areas that supplement the County's zoning regulations are in effect and administered by Chisago County. Nearly all of the waters and wetlands in the County are DNR-protected.

There are three types of lake classification and five river classifications that exist in Chisago County:

General Development Lakes have greater than 225 acres of water per mile of shoreline, over 25 dwellings per mile of shoreline, and are over 15 feet deep.

Recreational Development Lakes have between 60 and 225 acres of water per mile of shoreline, between 3 and 25 dwellings per mile of shoreline and are over 15 feet deep.

Natural Environment Lakes have less than 150 total acres, less than 60 acres per mile of shoreline, less than three dwellings per mile of shoreline and are less than 15 feet deep.

Forested Rivers are in forested, sparsely to moderately populated areas with some roads.

Transition Rivers are in a mixture of cultivated, pasture and forested lands.

Agricultural Rivers are in intensively cultivated areas.

Tributary Rivers are all other rivers in the Protected Water Inventory.

State Designated Wild and Scenic River (St. Croix River from the dam at Taylors Falls to the southern border of the County.)

Figure 4 (page 2-17) shows the State Shoreland classifications of lakes and rivers in the County. In addition to the State classifications, the St. Croix River is also federally protected. The Upper and Lower St. Croix were established National Scenic Riverways at different times. At the time the Lower St. Croix was established to be a National Scenic Riverway, the State concurred with the decision and as a result federal and state governments protect that portion of the River.

Recognition of the County's unique amenities and need for special management have resulted in previous actions by the County, State and U.S. government to protect the natural systems. The Federal government enacted legislation establishing the St. Croix Wild and Scenic River and St. Croix National Scenic Riverway. The State of Minnesota has developed Interstate and St. Croix Wild River state parks along the river. The State has also acquired extensive property in Chisago and Anoka Counties, designated as the Carlos Avery Wildlife Management area.

The Federal government has acquired extensive shoreland property along the St. Croix River; however, the majority of land protected near the river is regulated through overlay management districts in the County Zoning Ordinance. The State owns title to and manages the state parks and wildlife management areas. A portion of the Upper St. Croix River in northern Chisago County is designated as the Chengwatana State Forest. Chisago County has adopted overlay management standards for all other protected waters in the County. Special management concerns and programs have been established for the St. Croix River, Sunrise River, Sunrise Lake, and Carlos Avery Wildlife Management Area.

Woodlands

The 1990 Minnesota Land Use and Cover Statistics show 80,198 acres of scattered woodland areas exist in the county. The general locations of woodlands are shown on Figure 5 (page 2-18). The most contiguous woodland areas exist along the St. Croix River. Besides wildlife and recreation areas, the County woodland areas are a source of commercial agriculture. This agriculture includes Christmas tree production and pine plantations.

The principal types of woodlands and their locations are as follows:

- Hardwoods – southeast to central and northeast
- Oak and Oak Savannah – west to north central
- White and Red Pine – central reaches of the St. Croix
- Swamp Conifers – Carlos Avery, Stacy area, north central & Rush Lake area
- Mixture Hardwoods and Pine – northwest area

Wildlife Areas

There are seven state and federal wildlife areas in the county: the Carlos Avery Wildlife Management Area, the St. Croix Wild and Scenic River Area, the Lindstrom Wildlife Preserve in Chisago Lakes Township, Nessel WMA, Rush Lake WMA, Wild Rose WMA, and the Janet Johnson Wildlife Management Area in North Branch. Wildlife areas have been important recreational functions in the County, providing breeding areas for wildlife and in some cases, excellent hunting areas. With urbanization, the nature and extent of wildlife areas is threatened. A method to insure continuous wildlife habitat is purchase and management of the property, which the State has done.

In 2004 the Metro Wildlife Corridor Program expanded to include Chisago County. The Metro Wildlife Corridors is a program that was established in 2003 to provide funding for habitat protection and restoration in the seven county Twin Cities Metro Area. It is a partnership of 13 private and public organizations including: Ducks Unlimited, Friends of Minnesota Valley, Friends of Mississippi River, Great River Greening, Minnesota Land Trust, Minnesota Valley NWR Trust, Pheasants Forever, The Trust for Public Land, and various DNR Divisions. The program uses a strategy for accelerating and enhancing habitat focus areas and better coordinating efforts of conservation organizations. (The 2005 proposal for legislative funding included expanding focus areas into Sherburne, Isanti, Chisago and Goodhue counties.) Only projects with willing and interested landowners and located within the designated Focus Areas can be funded. As a part of this program wildlife corridor areas were mapped for Chisago County as shown in Figure 6 (page 2-19).

Native Plant Communities, Rare Species and Site of Biodiversity

The Minnesota County Biological Survey (MCBS) began in 1987 as a systematic survey of rare biological features. The goal of the survey is to identify significant natural areas and to collect and interpret data on the distribution and ecology of rare plants, rare animals, and native plant communities.

Native habitats surveyed by MCBS contribute to a sustainable economy and society because they:

- Provide reservoirs of genetic materials potentially useful in agriculture, medicine, and industry.
- Provide ecological services that contribute to the quality of air, soil, and water.
- Provide opportunities for research and monitoring on landscapes, native plant communities, plants, animals and their relationships within the range of natural variation.
- Serve as benchmarks for comparison of the effects of resource management activities.
- Are part of natural ecosystems that represent Minnesota's natural heritage and are sources of recreation, beauty and inspiration.

A survey of biodiversity significance, native plant and rare species mapping has been conducted by the Department of Natural Resources for Chisago County. See Figures 7 and 8 (pages 2-20 and 2-21).

Aggregate Resources

The DNR's Aggregate Mapping Program provides citizens, local government land use planners, the construction industry, and environmental groups with specific county-wide information on the location and quality of aggregate resources. This information supports long-term comprehensive planning that takes into account needed sand and gravel resources.

In 1993 the Minnesota Department of Natural Resources – Division of Minerals conducted a compendium of Mineral Resource Information for East-Central Minnesota. This study was conducted with assistance from the University of Minnesota and Minnesota Geological Survey and involved mapping of aggregate endowment in which there is a reasonable probability of discovering and developing economically viable aggregate deposits. The aggregate endowment mapping is shown in Figure 9 (Page 2-22).

Special Preservation Areas

Special preservation areas are land areas that are environmentally sensitive, possess outstanding scenic views or rural character, or have outstanding historic, geologic or public recreational significance, defined and mapped through public process, and that warrant special protection from impairment of their defining qualities by commercial or residential development. Special Preservation Areas may be nominated at the township or local level as well as higher levels of government. These areas are prime candidates for designation as TDC sending areas, for public or private purchase of development rights, scenic easements or fee acquisition as a means of ensuring selected open space areas free of development

Natural Resources Goals & Policies:

Goal: Encourage the preservation of natural resources in the County including amenities such as unspoiled rural landscapes and outstanding scenic features for use and enjoyment of present and future generations and to serve as an economic development tool and asset for the County.

Policies:

1. Establish minimum lot sizes, development densities and standards to protect environmentally sensitive areas (ESA's). ESA's are as higher quality terrestrial and wetland habitats (including ephemeral wetlands); aquatic habitat such as trout streams, natural environment lakes, floodplains, and wild and scenic rivers; slopes over 18% and areas with high surface and ground water mixing rates.
2. Prohibit or severely restrict development on floodplains, steep slopes (18% or greater), wetlands and other environmentally sensitive areas.
3. Allow development sites to use other strategies such as infiltration, filtration, and biofiltration to allow developers the flexibility needed to ensure that stormwater management can be effectively accomplished on all types of sites and increase the feasibility of innovative designs that the County would like to encourage.
4. Identify and protect gravel deposits for future use subject to compatibility with other County land use goals.
5. The County should work on developing a natural resource inventory and mapping of environmentally sensitive areas. This will be accomplished by drawing together information, most of which has already been identified, created and mapped by the County, its project partners, various state agencies, environmental organizations and collaboratives. Until this inventory is completed, the County should consider the immediate requirement to conduct an inventory of all new developments until such time as a larger scale, countywide inventory is available. An inventory of all new developments would entail looking at new proposals regarding natural resource impacts such as preserving woodlots, protecting ponds or waterways, vegetation management, and setbacks from wetlands for new construction.

Goal: Development shall conform to natural limitations of topography and soil to create the least potential for soil erosion and development on slopes.

Policies:

1. Plats will require dedication of drainage easements and ponding areas.
2. Plats will require minimum buildable areas in addition to minimum lot sizes.
3. Regulations will be established restricting development on steep slopes and unstable soils.
4. Development of specific sites shall incorporate appropriate water management practices that minimize runoff and transport of sediments and nutrients, including, but not limited to, the use of temporary and permanent

sediment/retention ponds, avoidance of steep slopes, vegetated buffers, natural infiltration areas and vegetated stream corridors. The use of newly constructed ponds will be required to meet the design standards of the National Urban Runoff Program (NURP). Individual site plans shall be designed to reduce post development runoff to meet or exceed pre-development conditions.

5. Encourage and promote the use of vegetated buffers and rain gardens in slope areas.

Goal: *Protect surface waters, groundwater and wetlands to promote recreational opportunities, aesthetic qualities, natural habitats and groundwater recharge.*

Policies:

1. Delineate wetlands.
2. Density increases shall be allocated based on use of clustering of building sites that preserve natural features (mature woodlands, wetlands, natural prairie, steep slopes); maintain a percentage of common open spaces; minimize grading and filling of natural topography; utilize stormwater management practices that protect lakes, streams and wetlands; and minimize fragmentation of wildlife corridors by integrating open space of adjacent developments/property.
3. Enforce Minnesota Rules Chapter 7080 relating to Individual Sewage Treatment Systems and Minnesota Rules Chapter 8420 relating to wetlands.
4. Lakes without current shoreland classification should be protected by measures such as increased setbacks.
5. As a condition of issuance of certain permits, conditional uses and variances, measures shall be required to mitigate the effects of development, nonconforming structures or uses in shoreland areas. (i.e. ISTS evaluation and upgrade, restoration of native vegetation buffer in shoreland impact zone and bluff impact zone, removal of nonconforming accessory structures, and/or consolidation of docks and mooring facilities if applicable).
6. Establish regulations requiring structure and sewage treatment system setback from wetlands.
7. The natural drainage of the unincorporated areas in the County will be used to the extent possible for storage and flow of runoff. Wetlands should be used as natural discharge areas. Presettling of runoff will be required prior to discharge to wetlands.
8. The County will require an erosion control plan that provides preventive measures for erosion and sedimentation for proposed development and follow-up that those plans are being implemented.
9. Activities on wet soils and high water table areas will continue to be regulated through the County Zoning Ordinance.
10. Identify incentives to be offered for increasing awareness and utilization of low impact development methods to aid in reducing non-point source pollution.

Goal: Sand and gravel will be recognized as an important local and an increasingly desirable export commodity that is vital to the local economy.

Policies:

1. Sand and gravel deposits shall be identified and protected for future use.
2. Educational information will be provided to raise public awareness of the fact that gravel is a natural resource that is essential for construction activities.
3. Provide incentives for preserving sand and gravel deposits, which have been identified on the Aggregate Endowment Mapping, from development in order to utilize this essential construction material.
4. Restore depleted mining areas to a pleasing topography, natural state or built environment.
5. The County will continue to enforce performance standards for mineral extraction operations within the County Zoning Ordinance.
6. Potential areas for sand and gravel mining operations shall be delineated for wetlands according to the Corps of Engineers 1987 Manual prior to any permits or other authorizations.

Goal: Recognize, preserve and enhance the significance of the St. Croix River, which has been identified as a national Wild and Scenic River.

Policies:

1. The County will continue to include the Upper and Lower St. Croix Overlay District regulations as required by State Statute.
2. Determine incentives for promoting the transfer of development rights in sending areas adjacent to the St. Croix Riverway Valley.

Goal: Prime scenic views and historic landscapes will be recognized as an important local amenity and an increasingly desirable local amenity drawing outside revenue from visitors that is vital to the local economy.

Policies:

1. Identify and protect quality of visitor experience of prime scenic features, areas of exceptional rural ambience, important historic sites and their surrounding settings, and prime areas for flora study and wildlife viewing, and public spaces open to low impact outdoors recreation.

Goal: Protect woodlands to promote recreational opportunities, natural habitat, aesthetic qualities, ground water recharge, screening, windbreaks, sound barriers and a source of wood products.

Policies:

1. Continue to support woodland preservation standards of: 1) structures shall be located in a manner that preserves the maximum number of trees; 2) forestation, reforestation or landscaping shall utilize a variety of tree species and shall not utilize any species presently under disease epidemic; and 3)

- development including grading and contouring shall take place in such a manner that remaining trees are minimally affected.
2. Development shall be required to be conducted in such a manner as to cause the least disturbance to woodland ecosystems.
 3. The County shall consider a shade tree ordinance to protect (mostly private) forestlands from insect and disease pests.
 4. The County shall provide information to its Public Works Dept. so that cutting/trimming/removal/clearing of trees for upcoming County Road projects/improvements be completed before April 1 of every year, or after July 15 of every year.
 5. When the County is faced with cleaning up tax forfeited properties of junk, debris, and waste, the County should consider adoption of a policy to have these same properties inspected for tree disease & insect problems, and, if necessary, stop the spread of the problem before the property gets sold.

In addition to the above mentioned natural resources goals and policies the entire Chisago County Local Water Management Plan 2006-2011 goals and policies shall be considered a part of this Comprehensive Plan. Following is the vision statement, goals, priority concerns and ongoing action items from the County Local Water Management Plan:

Vision

The vision of this Plan is adapted from the 1998 Chisago County Comprehensive Local Water Plan goals to ensure that:

Water quality and quantity in Chisago County is preserved, protected and enhanced.

Goals

The goals of this plan, adapted from the 1998 Chisago County Comprehensive Local Water Plan goals, are that:

1. Ground and surface water is safe and available for human consumption, recreational use, and wildlife habitat.
2. Environmentally sound and economically viable water management practices are factored into land use, growth, economic development, and agriculture decisions.
3. Residents and visitors are educated about the value of our water resources.
4. Information on water quality and quantity is being collected and used in decision making.

Description of Priority Concerns

Priority Concerns were identified through a series of public meetings, internal forums, and surveys. From this process, the following priority concerns were identified:

1. Phosphorus loading from Chisago County into the St. Croix River is reduced by 20% by 2020.
2. Projects and practices recommended in the North Branch of the Sunrise Total Maximum Daily Load (TMDL) study are implemented.
3. Projects and practices recommended in additional TMDL studies are implemented.
4. Recommendations of the Chisago County Waste Water Task Force are implemented.
5. Obligations of the Chisago County Individual Sewage Treatment System pilot program are fulfilled.
6. The Abandoned Well Sealing Program continues.
7. Storm water management standards and erosion control projects are implemented in developing areas, especially in the Chisago Lakes Improvement District.
8. School children and new homeowners are educated about water resources.

Description of Ongoing Action Items

In addition to the above mentioned Priority Concerns, a number of Ongoing Action Items were identified. These are:

1. Control of exotic species is promoted.
2. Assistance and cooperation is provided to cities as they develop and implement Wellhead Protection Plans.
3. The Wetland Conservation Act is enforced and wetland mitigation sites are identified.
4. Water Plan goals and objectives are incorporated into the County Comprehensive Management Plan.
5. County planning and zoning criteria are established which will effectively minimize high impact industries (i.e. gravel mining) in areas with sensitive ground water.
6. Biological diversity, critical ecosystems and wildlife habitat is protected through measures adopted in the County Comprehensive Plan, especially in areas identified in the County Green Corridor Study.
7. Education and training on water quality concerns is provided to lake associations, townships, and volunteers.
8. County Household Hazardous Waste and Recycling programs are promoted.
9. County water well testing takes place on a semi-annual basis.
10. On-going monitoring of lakes and streams is promoted.

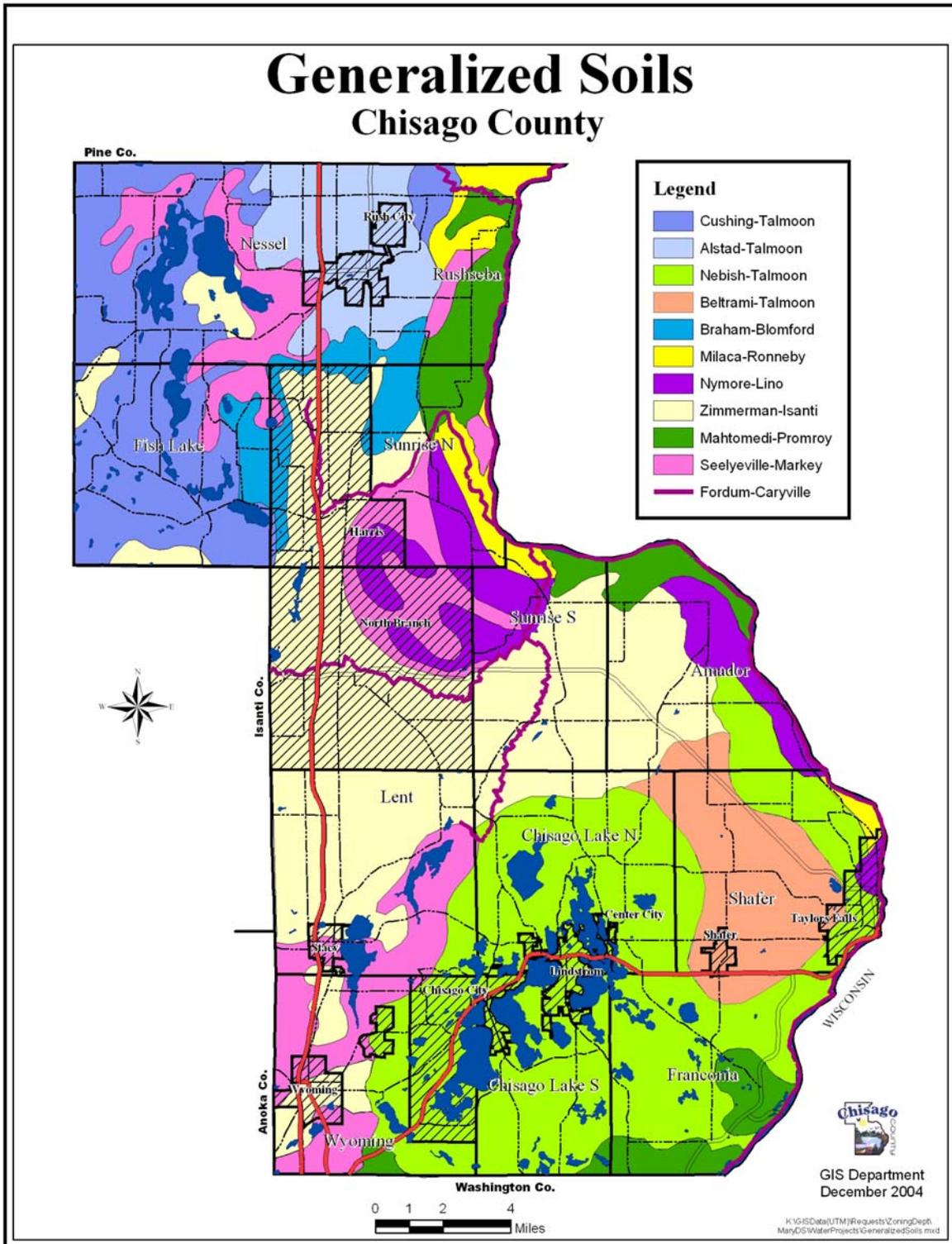


Figure 1

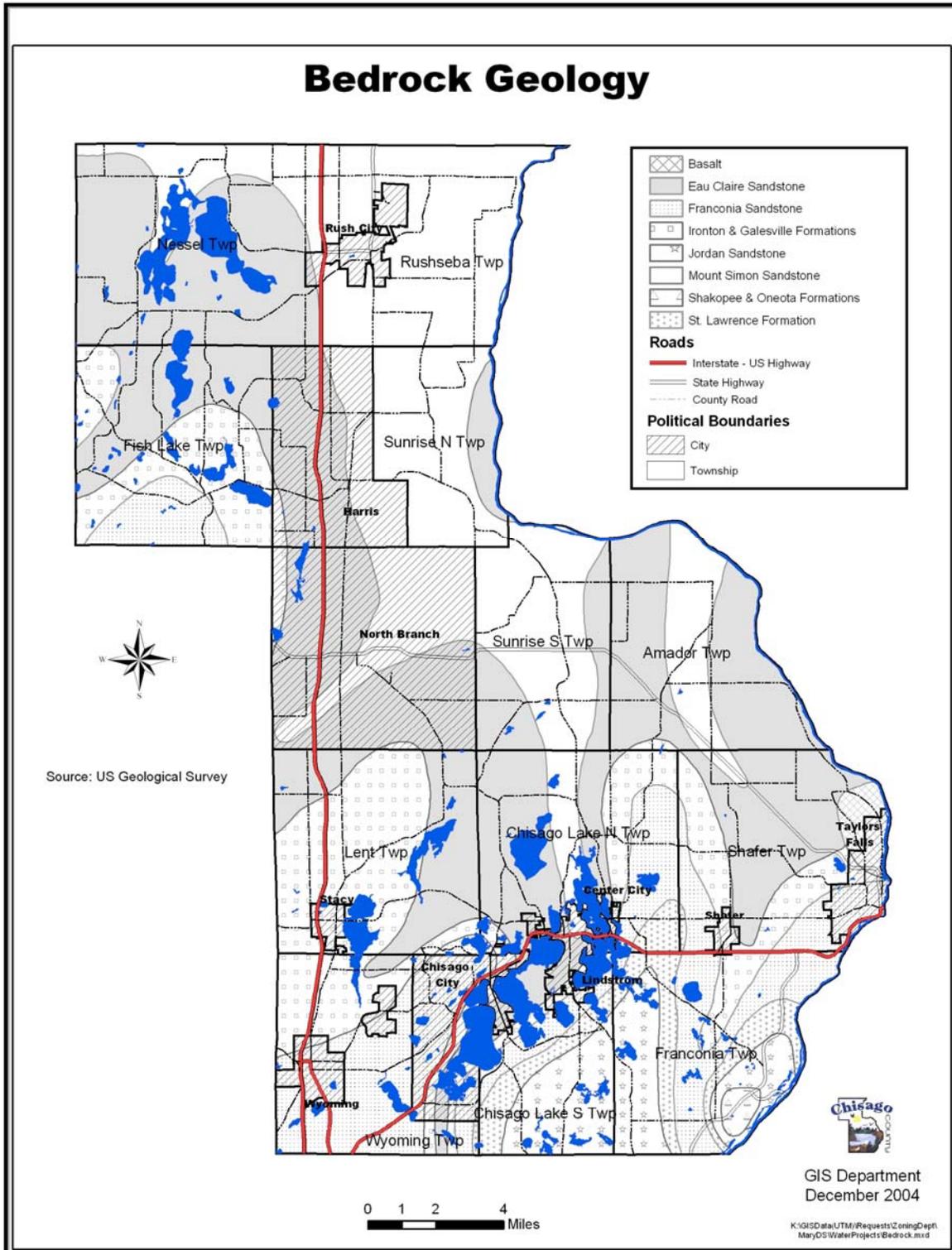


Figure 2

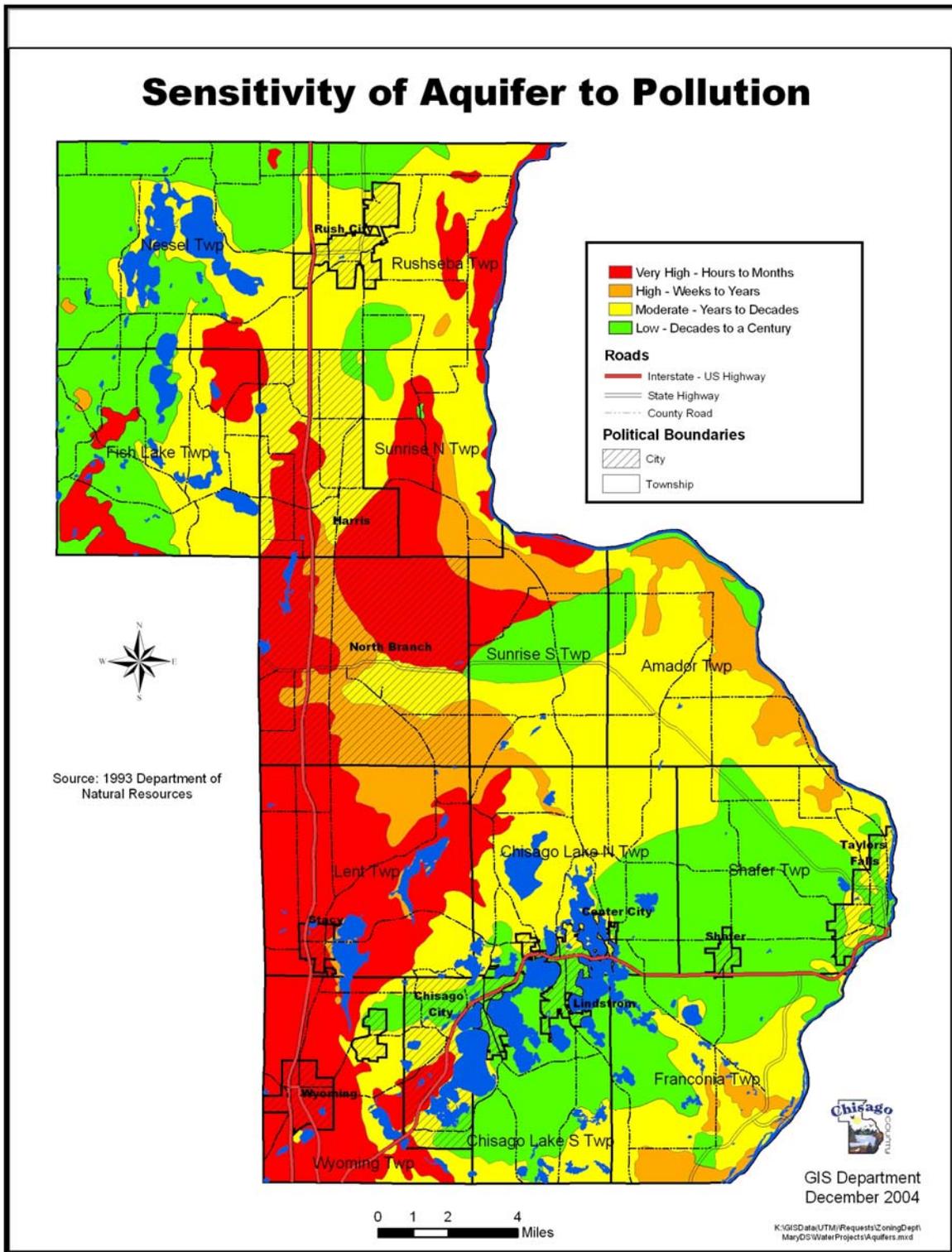


Figure 3

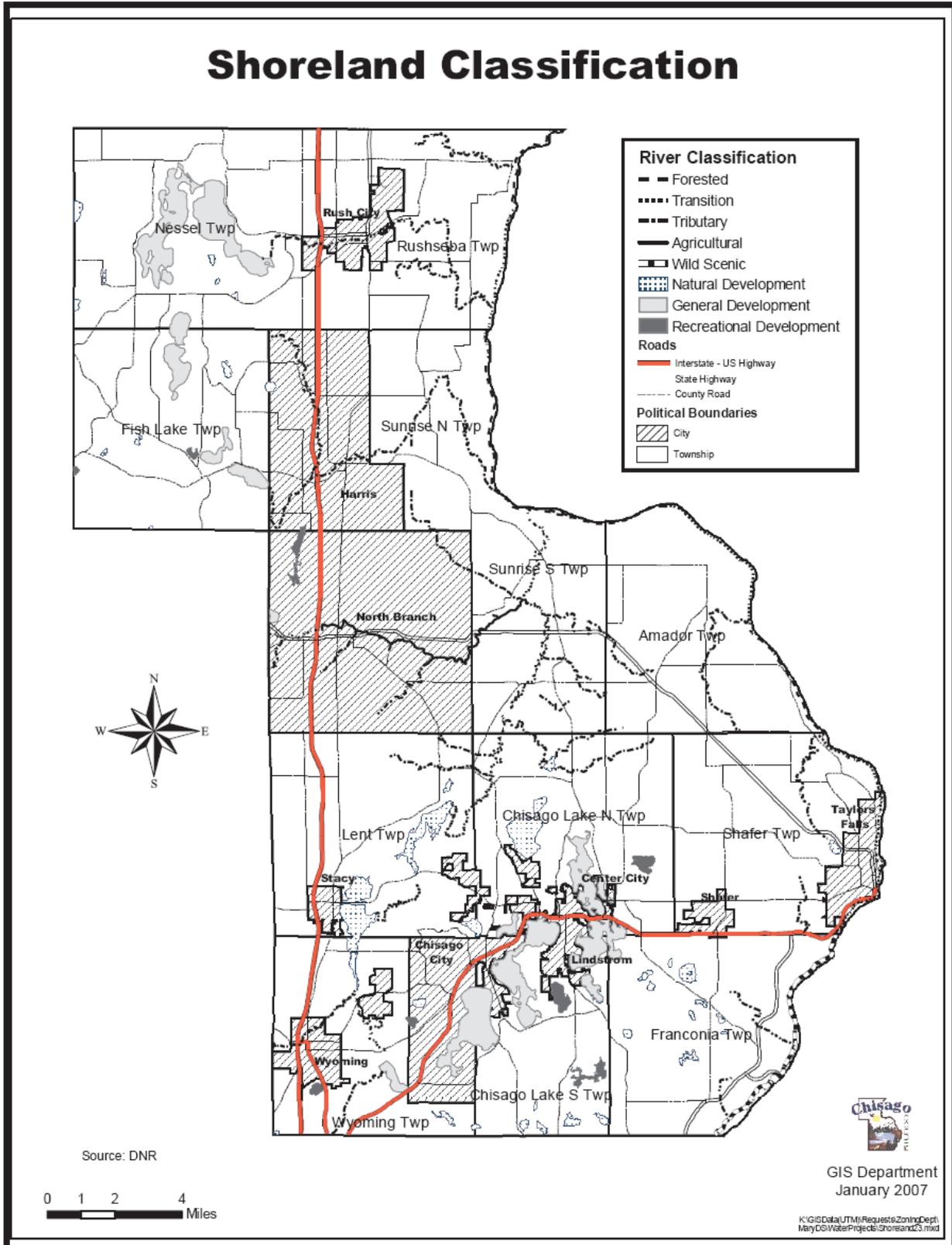


Figure 4

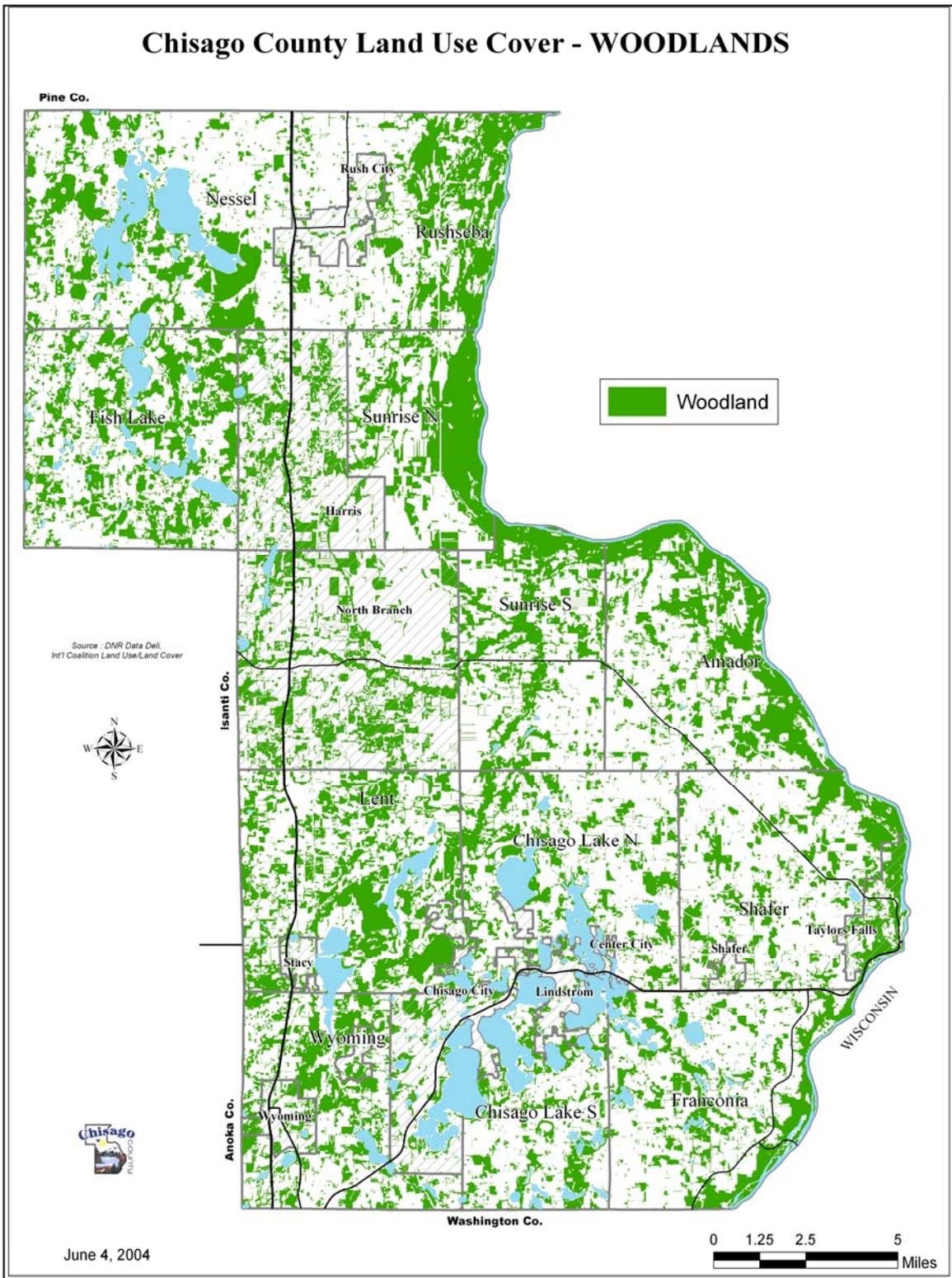


Figure 5

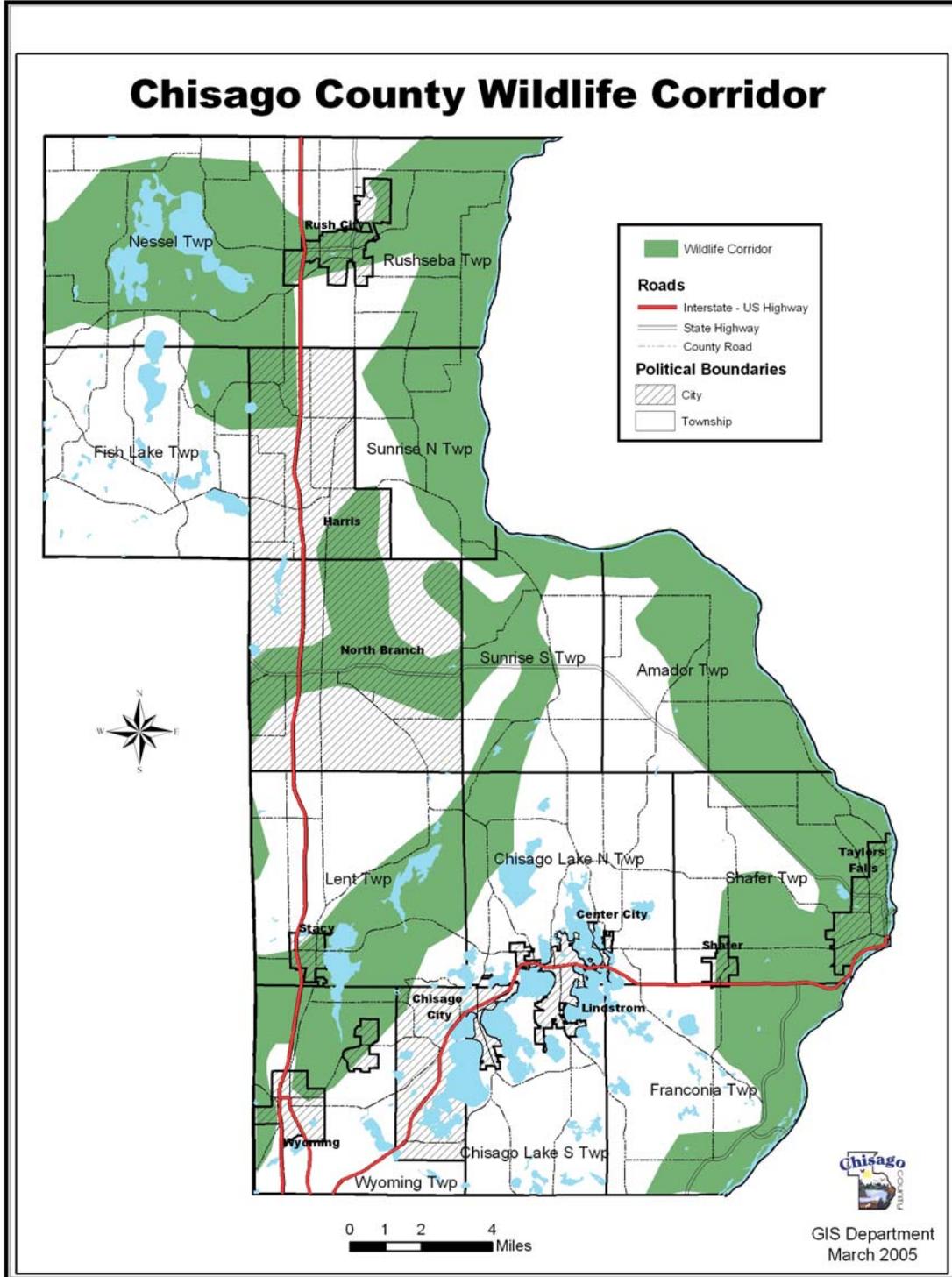


Figure 6

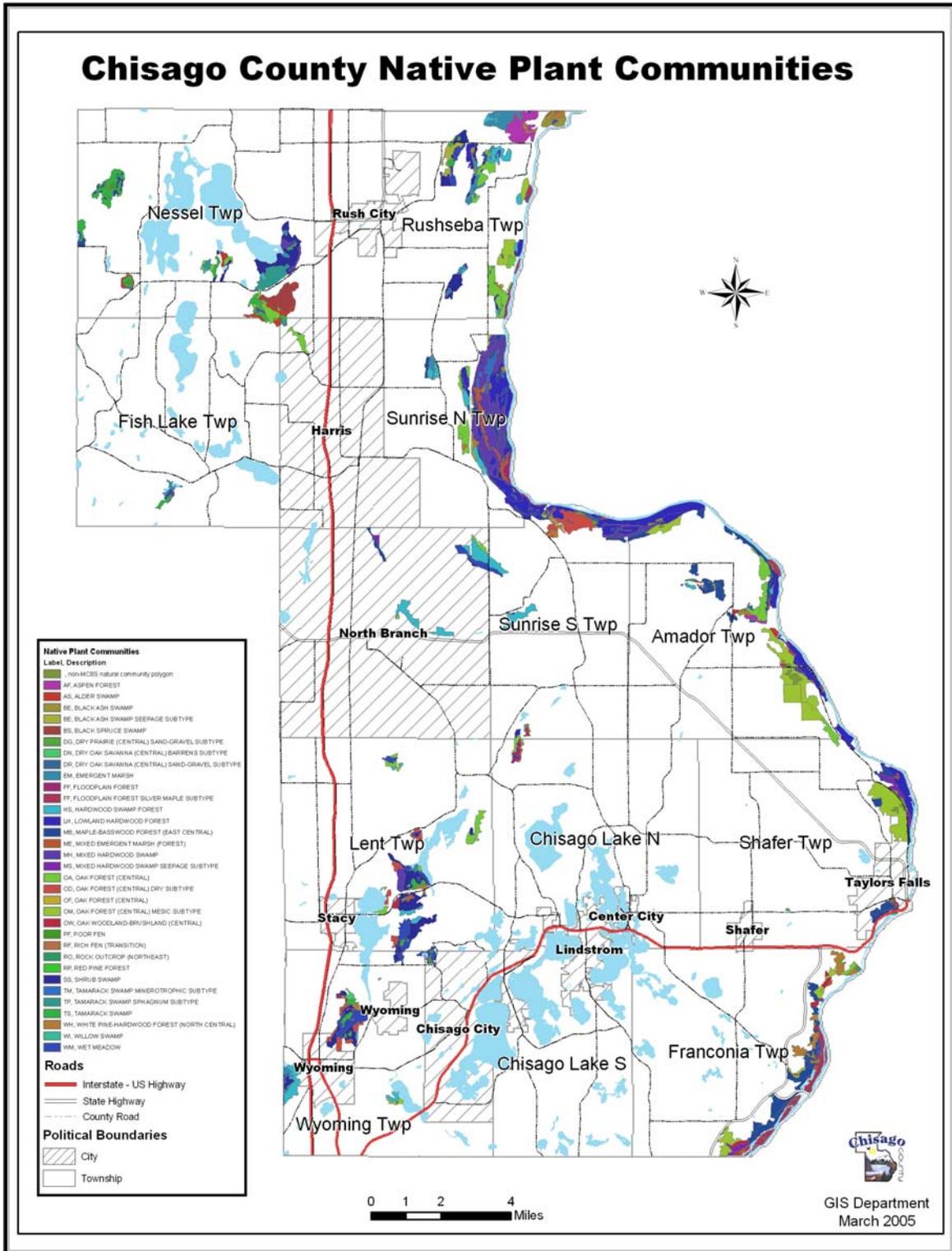


Figure 7

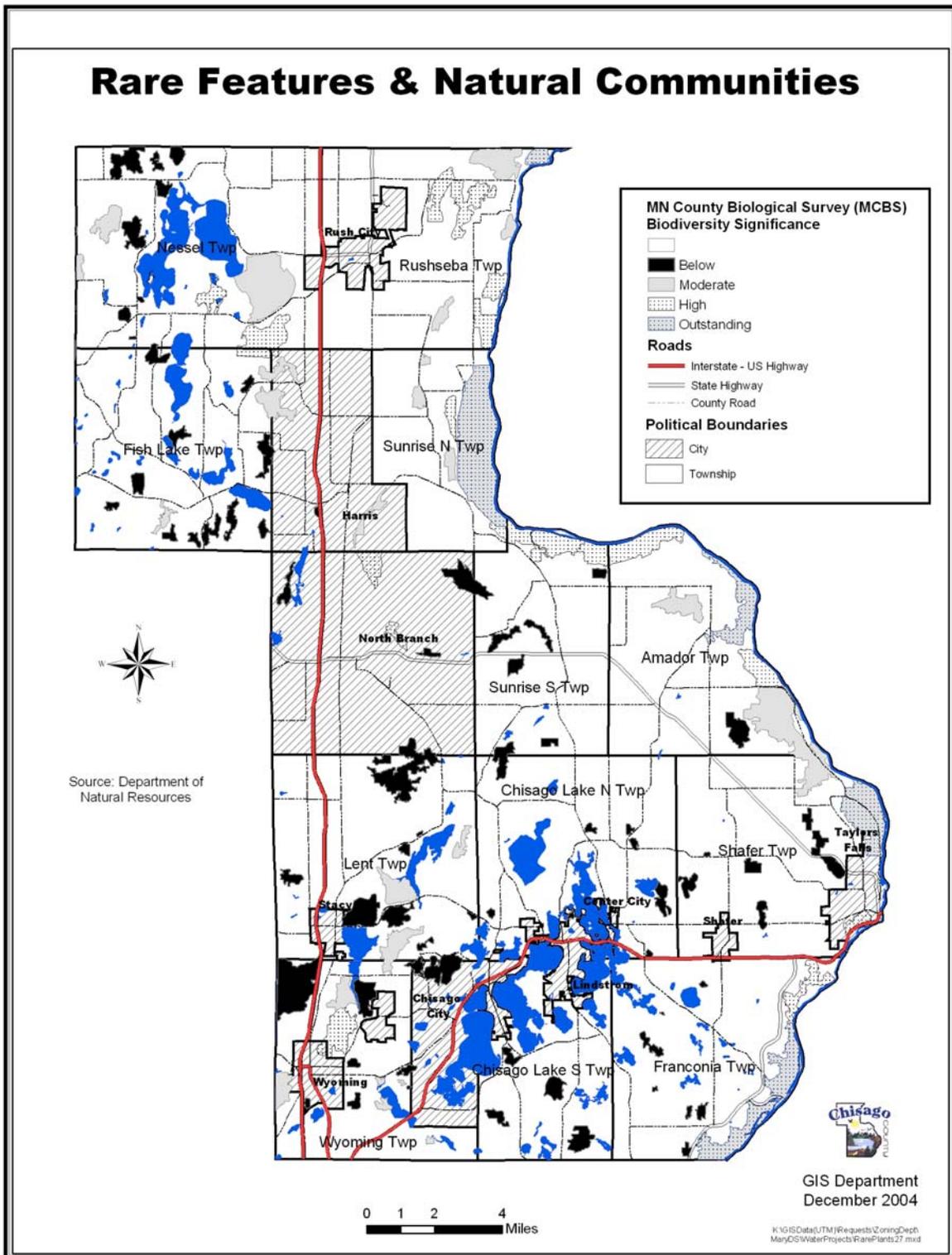


Figure 8

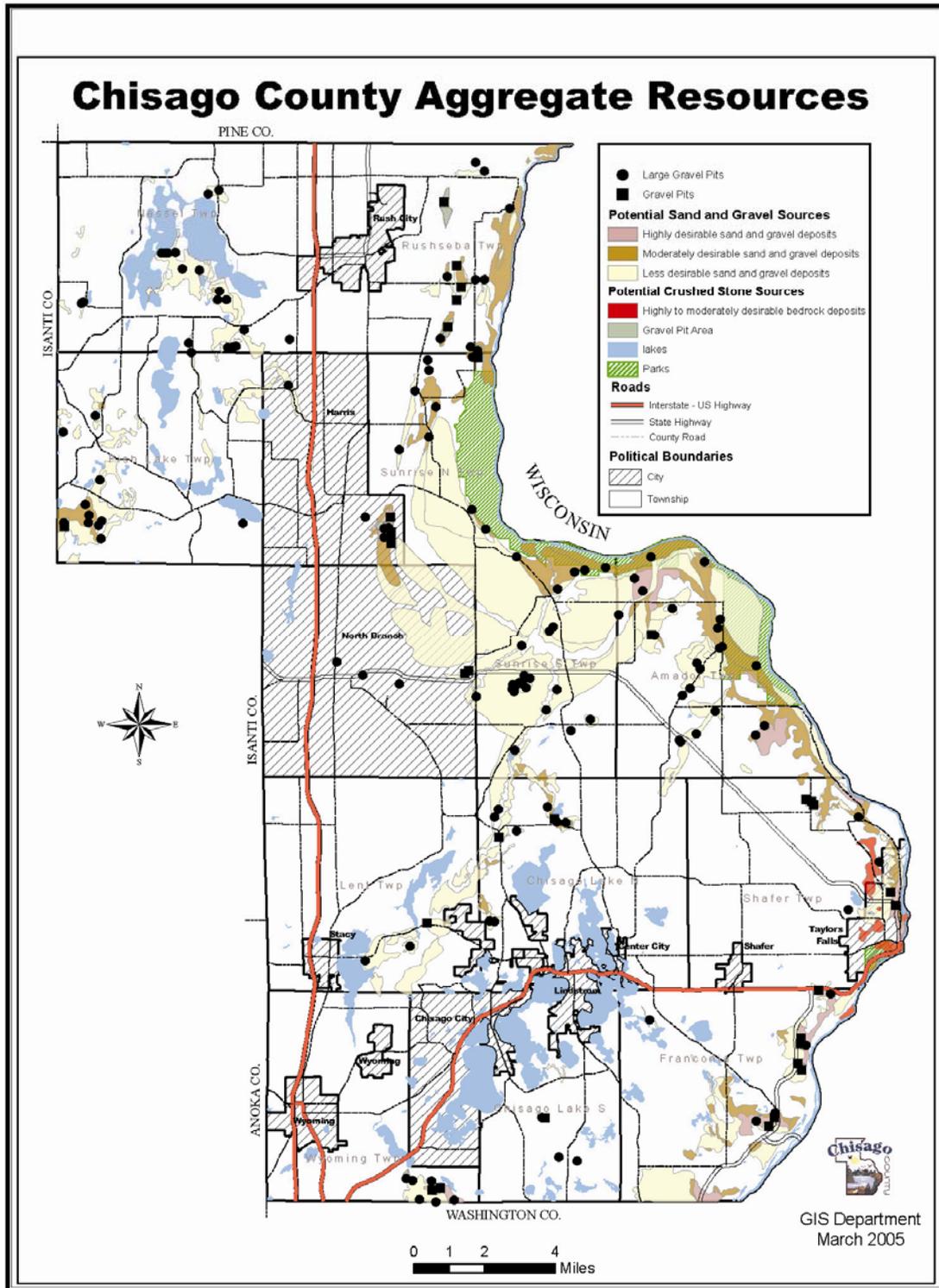


Figure 9

CULTURAL RESOURCES CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Cultural Resources

Chisago County is an area rich in history and heritage. The St. Croix and Sunrise rivers and their adjacent fertile banks provided much for early travelers and settlers. An archaeological excavation done in the summer of 1972 in Interstate Park provided evidence of Kathio Phase pottery (1000-1300 AD). However, remnants of those very early residences in Chisago County are fast disappearing. There is little evidence remaining of the Fox, Ojibwa and Lakota Indians who lived and traveled through this area. Only one such pre-contact archaeological site (#21CH23) is listed on the National Register of Historic Sites. The remainder of the sites identified in Newton Winchell's *The Aborigines of Minnesota* (1911) have been disturbed or destroyed. About the only evidence left of the original Indian inhabitants are place names including the name of the county.

The fur trading era has left only two significant sites Captain Maurice Samuel's Fur Post (1847) near the entrance of the Sunrise River into the St Croix River and Thomas Connors Fur Post (1844-1847) near the entrance of Goose Creek in the St. Croix River. Both are located within the confines of Wild River State Park.

The logging era also has left minimal artifacts. The Nevers Dam, on the St Croix River north of Taylors Falls, was the world's largest wooden pile driven dam when it was constructed in 1889. The last log drive on the river occurred in 1913 and the dam was destroyed in 1955. An earthen dike still exists on the Minnesota side of the river to mark the crossing.

The heritage of the early settlers can best be seen in the small farms, villages and rural churches that dot the county. The first non-native settlers to the area came from the New England area and settled in the Taylors Falls and Sunrise area. They were followed by a large population of Swedish immigrants to the Chisago Lakes area and German and Irish immigrants to the Rush City area.

Little remains of the river boat and railways systems used by these settlers. Freight is no longer hauled up and down the St. Croix River and the only river boat passengers today are on scenic tours. The original St. Paul-Duluth (1868) rail line is still in operation only from North Branch to the north. The railroad bed to the south with its tracks removed exists as a multi-use trail. The rest of the railroads have had their tracks removed and only limited earthen beams remain from the Wyoming - Taylors Falls line (1880-1948), the Rush City - Grantsburg Blueberry (1882-1951) line, and the ill-fated Arrow Line from Stacy to Sunrise (1906-1908). In 1990, Highway 8, which was built largely over portions of the Wyoming - Taylors Falls line, was designed as the Moberg Trail in honor of Vilhelm Moberg who traveled the railroad bed in 1948 while researching for his epic novels on the Swedish immigration to the new land.

Fragments of the original Point Douglas to Superior military/government road (1854) as originally constructed through Chisago County still exist. One section located in Wild River State Park is listed on the National Register of Historic Sites. Other sections have

been incorporated into more modern roads - Highway 95 from the south into Taylors Falls, County Road 9 in the Sunrise area, and the Government Road north from the Harris area. In 2005, major sections of that road system from Highway 95/Highway 243 in the south to Highway 36/Highway 70 in the north were designated as Minnesota newest Scenic Byway.

It is this total heritage, which has created the type of environment that holds an appeal for residents, and newcomers that are drawn to the rural atmosphere. As Chisago County grows, many of these qualities may be destroyed unless careful planning and consideration is used in governing this growth. City and county planning commissions are a key factor in the determination of what should be preserved in Chisago County, and zoning is a useful tool in this respect.

As the County continues to grow and develop there is concern for three cultural resources in particular: archaeological properties, rural and agricultural heritage, and historic landscapes. Increased road and housing developments, as well as direct and indirect impacts can affect all of these types of resources. It is the intent of this chapter to identify areas of significant cultural resource value not to stop growth from occurring in areas where significant cultural resources are located but to provide incentives for development to occur in such a manner that the cultural resources are preserved.

As Chisago County continues to experience growth pressure throughout the County, preserving the area's history will become increasingly important. The preservation of historical resources is significant in developing and enhancing the county's identity and remembering past heritage. Chisago County recognizes the importance in preserving the history and traditions of the area. Historical areas in need of preservation have been identified and continue to be discovered throughout the County. Areas in need of preservation include a variety of types ranging from buildings to cemeteries.

Historical Associations in Chisago County

There are a number of available organizations in Chisago County aiding in providing communities with a sense of their historical place. Most of the following organizations are volunteer-based and donation funded. Addresses are subject to change. Some groups are not incorporated and thus not recognized as historical organizations by the Minnesota Historical Society. Others are not formally recognized by the Internal Revenue Service or the Minnesota Attorney General office as tax-deductible charitable organizations.

Minnesota Historical Society State Historic Preservation Office
345 Kellogg Blvd West, St Paul, MN 55111
651-296-6126 www.mnhs.org

Chisago County Historical Society
13100 Third Avenue North (PO Box 146), Lindstrom, MN 55045
651-257-5310 www.ChisagoCountyHistory.org

Center City Historic Preservation Commission
PO Box 245, Center City, MN 55012

Taylor's Falls Heritage Preservation Commission
637 First Street, Taylor's Falls, MN 55084

Center City Historical Society
PO Box 366, Center City, MN 55012

Chisago City Heritage Association
PO Box 413, Chisago City, MN 55013

Friends of Amador Heritage Center
168 North Lakes Street, Forest Lake, MN 55025

Lindstrom Historical Society
PO Box 12, Lindstrom, MN 55045

North Chisago Historical Society
PO Box 556, Rush City, MN 55069

Taylor's Falls Historical Society
PO Box 333, Taylor's Falls, MN 55084

Wyoming Area Historical Society
PO Box 308, Wyoming, MN 55092

Almelund Threshing Company
17760 St. Croix Trail, Taylor's Falls, MN 55084

Iron Horse Central Railroad Museum
24880 Morgan Ave, Chisago City, MN 55013
651-336-4531 www.IronHorseCentral.com

Sunrise/Richard Widmark Museum
41237 Sunrise Road, North Branch, MN 55056

Wild River State Park
Naturalist Office, Park Trail, Center City, MN 55012
651-583-2125

Inventory of Resources of Historical Significance

Numerous surveys have been conducted in Chisago County to identify sites of cultural and historical importance in Chisago County. The results of two such inventories – Archaeology and Standing Structures are on file at the State Historic Preservation office at the Minnesota Historical Society.

The Archaeology inventory includes prehistoric and historic archaeology sites. These sites date from the earliest occupation of the state through the recent historic past and describe the sites by type, function, temporal period, artifacts and general location. Most of the properties listed in this inventory have not been evaluated to nomination to the National Register of Historic Places.

The Standing Structure inventory lists buildings, sites, structures, objects and districts which are of significance. Buildings are properties created principally to shelter human activity. Sites mark the location of a significant event or activity where the location itself possesses historical or archaeological value. Structures are functional constructions such as a water tower or bridge. Objects are constructions other than buildings and structures which are primarily artistic in nature such as a milestone or monument. Districts are locations which possess a significant concentration of historical resources. The most recent countywide survey was done in the early 1980's. Most of the properties listed in this inventory have not been evaluated for nomination to the National Register of Historic Places.

Our historical and cultural resources continue to be a risk whether they are listed on an inventory or register. Sites may lose their eligibility for listings when they are vandalized beyond recovery, destroyed by fire or storm, moved from their original site, severely altered or damaged by human activity. Three such examples, formerly on the National Register, in Chisago County are the Johnson Block in Rush City which burned in 1981, the Aaron Diffenbacher Farmhouse in Rushseba township which burned in 1985, and the County Wood Frame Courthouse which was moved from Center City in 1990.

Other sites may have been overlooked during initial surveys and only come to light now as they are threatened by development or being destroyed. Examples are the Poor Farm cemetery located on the former Green Acres property near North Branch, the Swedish milestone near the intersection of Furuby and Redwing Avenues north of Shafer, the Kost Dam millstone, and the Franconia Old Settlers monument at the old Post Office site on Franconia Trail.

National Register of Historic Places

The Minnesota Historical Society maintains a list of all Minnesota properties included in the National Register of Historic Places. The following is a list of those located in Chisago County that are included on the registry:



*Anderson, Gustaf, House (added 1980 - Building - #80002000)
Also known as Chisago County Historical Society,
13045 Lake Blvd., Lindstrom*



*Angel's Hill Historic District ** (added 1972 - District - #72000675)
Also known as Angel's Hill
Roughly bounded by Military Rd., Mill, Mulberry and Government Sts., Taylors Falls*

PHOTO NOT AVAILABLE

Archeological Site No. 21CH23 (added 1989 - Site - #88003129)

Also known as 21CH23

Address Restricted, Taylors Falls - Amador Township



*Carlson, J. C., House (added 1980 - Building - #80002004)
Bremer and 6th Sts., Rush City*

PHOTO NOT AVAILABLE

Center City Historic District (added 1980 - District - #80001996)

Summit Ave., Center City



*Daubney, John, House (added 1980 - Building -
#80002008)
Oak and River Sts., Taylors Falls*



*Franconia Historic District (added 1980 - District - #80000406)
Roughly Cornelian, Summer and Henry Sts., Taylors Falls*



*Grant House (added 1980 - Building - #80002005)
4th St. and Bremer, Rush City*



*Interstate State Park CCC/WPA/Rustic Style Campground ** (added 1992 - District - #92000638)
Also known as Interstate State Park
Off US 8 SW of Taylors Falls, Shafer Township,
Taylors Falls*



*Interstate State Park WPA/Rustic Style Historic District (added 1992 - District - #89001664)
Also known as Interstate State Park
Off US 8, Taylors Falls*



*Larson, Frank A., House (added 1980 - Building - #80002001) 12625 Newell Ave, Lindstrom
Also known as Fridhem*



*Moody Barn (added 1980 - Building - #80001998)
Co. Hwy. 24, Chisago City*

PHOTO NOT AVAILABLE

*Munch, Paul, House ** (added 1976 - Building - #76001050)
Summer St., Taylors Falls*



*Munich-Roos House ** (added 1970-Building- #70000289)
Also known as Roos House
360 Bench St., Taylors Falls
PHOTO NOT AVAILABLE*

*Point Douglas to Superior Military Road: Deer Creek Section **
(added 1991 - Structure - #90002200)
Also known as Point Douglas to St. Louis River Road
Off Co. Hwy. 16, St. Croix Wild River State Park, Amador Twp.,
Taylors Falls*



*Sayer House (added 1980 - Building - #80002002)
Co. Hwys. 30 and 9, Harris
Also known as: George Flanders House*



*Taylors Falls Public Library
(added 1970 - Building - #70000290)
417 Bench St., Taylors Falls*



*Victor, Charles A., House (added 1980 - Building - #80002003)
30495 Park St., Lindstrom*

Century Farms

Each year since 1976 the University of Minnesota Extension Service recognizes century farms in Minnesota. The following is a list of the century farms recognized in Chisago County since 1976. (Note: The year in parenthesis is the year of original ownership by a member of that family.) Figure 10 locates the century farms within the county.

1976	<i>None</i>
1977	<i>Eugene & Alice Anderson, Lindstrom (1853)</i>
1978	<i>Lloyd & Lois Colliander, Harris (1870) Alice Philip & Dale Hawkinson, Shafer (1869)</i>
1979	<i>Paul E.L Peterson, Chisago City (1869)</i>
1980	<i>Alfred Macheledt, Rush City (1873)</i>
1981	<i>Shirley Ann Harer Abrahamson, Rush City (1867) Chester A. Carlson, Lindstrom (1877) Glen G. & Elaine A. Danger, Braham (1880) Willard Nystrom, Rush City (1850) Lucille Mattson Peterson, Rush City (1870)</i>
1982	<i>Gilmore Boeck, Braham (1877) Filmore Johnson, Harris (1882) Ray W. & Doris E. Johnson, Taylors Falls (1880) Ray E. Rue & Myrtle Rue, Shafer (1882)</i>
1983	<i>Caleb W. Nelson, Harris (1881) Herman & Marie Rothenbacher, Rush City (1883)</i>
1984	<i>Bruce A. & Barbara J. Carlson, Rush City (1876) Rudolph Chester Peterson, Harris (1877)</i>
1985	<i>William A. Strelow, Braham (1876) Donald L. & Nancy L. Zachrison, Branch (1882)</i>
1986	<i>George P. & Harriet F. Peterson, Blaine (1884)</i>

- 1987 *Dale F. Sandberg, Taylors Falls (1884)*
Donald R. Wilcox, Harris (1885)
- 1988 *Boyce Sunnycrest Farm, North Branch (1887)*
- 1989 *Allan & Carol Gustafson, North Branch (1888)*
- 1990 *Leland & Charlotte Herberg, Shafer (1889)*
Donald & Shirley Johnson, Center City (1878)
Alma (Mrs. Henry) Lendt, Wyoming (1870)
Wilbur Magnison, North Branch (1885)
Amanda McNeil, Maynard (1890)
Roger & Bernice Medin, Center City (1883)
G. Rodger & Marvin Nelson, Center City (1885)
Arlie & Mary Sederberg, North Branch (1890)
- 1991 *Leland & Charlotte Herberg, Shafer (1889)*
Nels Nelson, North Branch (1891)
Everett Larson, Harris (1890)
Wilbur Magnison, North Branch (1890)
Harold A. Nelson, North Branch (1885)
- 1992 *Joesph & Audrey Blom, Harris (1889)*
Mrs. Philip C. Johnson, Lindstrom (1892)
- 1993 *Sybrandt Century Farm, Harris (1872)*
- 1994 *Abner Swenson (Life Estate to Janice Shaffer), Chisago City (1894)*
- 1995 *Edna M. Goranson, Shafer (1895)*
- 1996 *None*
- 1997 *Harland & Goldie Carlson, North Branch (1885)*
Jeff Elsenpeter, Rush City (1894)
Loren & Marlene Peterson, Stacy (1885)
- 1998 *James Mattson, Harris (1989)*
- 1999 *None*
- 2000 *Mary Ruth Welshons Lelwica, Lindstrom (1857)*
- 2001 *Dennis and Christine Johnson*
Orville and Lorraine Anderson
Harold Eklund
John and Sandra Miller
- 2002 *Johnson Farm, North Branch*
Lulu M Jackson, Shafer
Harold & Yvanne Lund, Rush City
Craig Leon Mattson, Chisago City
- 2003 *Daniel & Valerie Anderson, North Branch*
Alan Holmgren, Chisago City

- 2004 *Delano and Barbara Olson, Harris*
- 2005 *James Carlborn, Harris*
- 2006 *Katherine Flynn and O. Craig Anderson, Chisago Lake Twp.*

Chisago County Century Farms

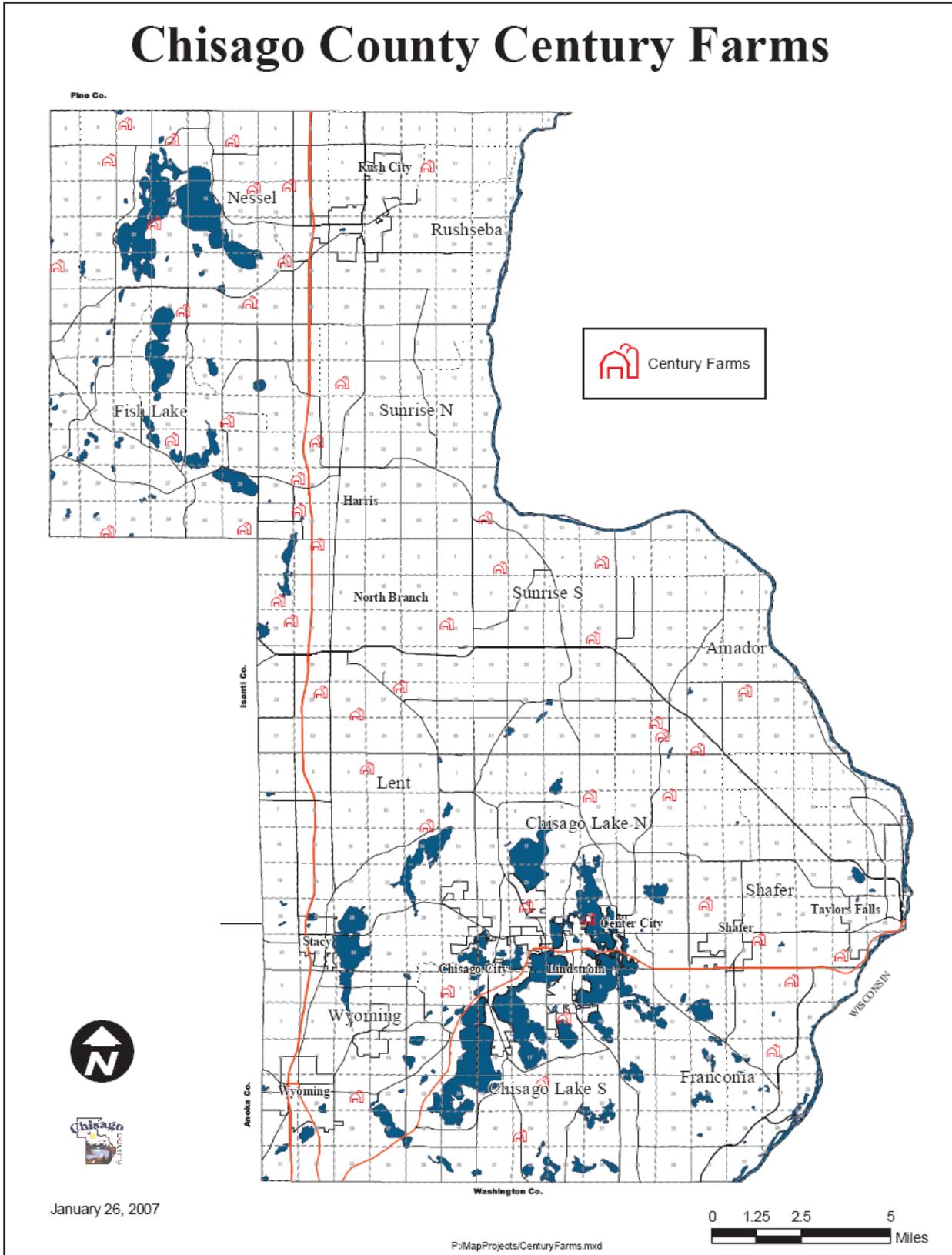


Figure 10

Cultural Resources Goals & Policies

Goal: *Chisago County will strive to maintain its rural character and historic resources while allowing for reasonable growth and development by: 1) encouraging the protection of valuable historical sites to preserve the County's sense of history and 2) protecting, preserving and enhancing the County's significant scenic and archaeological sites.*

Policies:

1. Every effort shall be made to identify and protect historic sites, which meet national, state and local criteria for historic designation from destruction and harmful alteration.
 - Local criteria shall be developed.
 - A comprehensive historic sites survey shall be conducted which identifies the resources of historic significance within the County.
 - Once a comprehensive list is established an annual review shall be conducted.
2. The County shall encourage inter-jurisdictional cooperation to further the goals of historic and archaeological preservation.
3. The County shall further the goal of cultural resource preservation using primarily education and incentives.
 - A committee should be established to research incentives.
4. Coordinate review of any developments that may have a potential to impact historical sites with affected communities and with the Chisago County Historical Society and the State Historical Society.
5. Billboard regulations should continue to be implemented to prevent incompatibility with the rural character and scenic areas.

COMPREHENSIVE PARKS & TRAILS CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Comprehensive Parks and Trails Plan

This portion of the Comprehensive Parks and Trails chapter is adapted from the Chisago County Comprehensive Parks and Trails Plan adopted in June 2002. The intent of this chapter is to summarize the complete Comprehensive Parks and Trails Plan which shall be considered a part of this plan. It includes a general description of the overall County park system, the goals and strategies developed from that plan process and recommendations relating to the future of the County Parks and Trails system.

Purpose, Process & Community Vision

The Chisago County Comprehensive Park and Trails Plan was adopted in June 2002, and was developed with the input of the citizens of Chisago County through five community meetings and the input of the Chisago County Park Board, Parks Department Staff, Parks and Trail Plan Task Force, and local governmental representatives. Community representatives provided information about candidate sites for expansion and activities that should be provided.

The Comprehensive Parks and Trails Plan was developed to help ensure that the County has a plan for preserving, enhancing, and developing parks, trails, and open space for present and future generations and to take into account the demands of the County's growing population, and the need to identify those special areas of the County that should be preserved for future generations.

More specifically, the plan was developed to serve several purposes including the following:

1. Continue the process of updating recreation and planning efforts as the county grows and matures.
2. Provide background information, policies, rationale, and planning guides for those who plan and make decisions regarding recreation and open space affecting the county.
3. Chart a course for future acquisition and development of recreation and open space.
4. Clarify the role of the County in providing recreation and open space as it relates to other recreation providers at the federal, state, local, and private levels.
5. Communicate the County's vision for parks with residents, property owners, other recreation and open space providers, and other units of government.

A summary of the community vision statements discussed and developed at the three community meetings was written as follows:

We envision a park and trail system that recognizes the county's diverse natural resources, and the diverse recreational needs of its growing community. This system provides a variety of passive and active recreational activities accessible to residents, visitors of all ages and abilities. The park system consists of up-to-date facilities equipped with the latest technologies for management and surveillance. Throughout the county, an extensive, well-marked and non-motorized, multi-user trail network connects cities and County Parks, natural areas and water resources and is coordinated with the county's vehicular transportation corridors.

Protection of natural resources and designation of conservation areas are integral components of the entire system. We also envision these natural areas as educational resources for the community and places to learn about community history. Overall, the system is accessible and serves many interests. Built with cost-conscious spending and high concern about safety and maintenance issues, it will serve many families and individuals with recreation and relaxation for many generations to come.

This vision statement established the direction for the County's Comprehensive Park and Trail Plan.

Issues, opportunities and generalized summaries were identified in three areas: trails, parks and conservation areas. Below is an excerpt from the Parks and Trails Plan regarding these.

A. TRAILS.

➤ *Issues*

- The County Comprehensive plan only recommended shoulder trails and thus, it is a fragmented system.
- Trails impact adjacent areas.
- Trails need to be safe.
- The cost of land makes preservation of open spaces and trail areas difficult.
- Sunrise Prairie Trail needs to be connected with future trails.
- Trails should connect communities

➤ *Opportunities*

- Link trails along the existing County Road system, i.e., Blueberry Trail-east/west trail from Dennis Frandsen Park to Rush City.
- Preserve Sunrise Prairie Trail.
- Continue to develop the Swedish Immigrant Trail.
- Provide connection with Gateway Trail

In summary, there appeared to be consensus regarding the development of a well-marked, interconnected County trail system that provides a recreational and transportation pathway for multiple (non-motorized) users throughout the entire county. This trail network should provide non-vehicular transit corridors throughout the county for residents and visitors. This trail network should link County parks, City parks and communities together. Furthermore, this trail system provides coordinated trails along existing transportation corridors and provides trails through natural areas, and to significant water resources.

B. PARKS

- *Issues*
 - Parks are needed in the southeastern area.
 - The County must be pro-active to acquire land.
 - There needs to be cooperation between all the governmental entities.
 - There is the high cost of land.
 - Need inter governmental cooperation.
 - Link together regional and local parks.
 - Population is aging and is more health conscious.
 - Coordinate local and regional parks.
 - Need more facilities i.e. restrooms.
- *Opportunities*
 - Permit private vendors in County Parks.
 - Develop and promote a unique feature for each park.
 - Establish year-round uses and diversify uses in the parks.

Goals that were expressed for the County Park system are that the parks should provide benefits to the community in a number of ways. These benefits are harder to tangibly characterize, but include such things as providing facilities that promote community health, providing access for people with varying mobility to natural areas, increasing tourism revenue, and promoting the welfare of children within the community.

In summary, community residents and representatives desire a County Park system that is up-to-date and provides a variety of recreational activities for residents of all ages and abilities and educational opportunities regarding natural resources and community history. These regional parks should provide specialty recreational experiences and ideally, each park should emphasize a particular theme/focus. The Park system should be pro-active in terms of new acquisitions and park expansion. Parks should also be in balance with nature.

C. CONSERVATION AREAS.

- *Issues:*
 - Lakeshore conservation areas are diminishing.
 - Need to preserve the diverse species.
 - Need more passive spaces and open areas.
 - Need natural resource protection.
 - All open space and conservation areas should be explained with guides, markers and /or interpretative centers.
 - Need areas set aside for the future.
- *Opportunities:*
 - Establish Nessel Twp. parcels as conservation area.
 - Use Camp Ojiketa land as an area sanctuary.
 - Establish a conservation corridor along the Sunrise River from the Carlos Avery Wildlife Management Area to the St. Croix River. Work with County Board to establish a conservation area along Sunrise Dam.

In summary, residents emphasized the importance of conserving more land particularly along creeks and lakes for increased wildlife habitat and resource protection. It is also important for the County to be pro-active and conserve land for the future.

Also taken into account in the Parks and Trails Plan process were the National Recreation and Park Association's Standards, which are listed in the complete Parks and Trails Plan along with regional information. These standards as well as demographics were analyzed to determine findings and recommendations reported in the Plan.

Inventory of Non-County Recreational Providers, Federal & State Areas and County Parks System:

I. Non-County Recreational Providers

There are several "outside resources" influencing recreational opportunities offered to Chisago County residents. In addition to the Chisago County Park system, there exist many municipal parks, state and federal parks/lands and private recreational providers. These are outlined in the Comprehensive Parks and Trails Plan. These providers are private and publicly owned and offer facilities and amenities that may have an influence on future planning for the Chisago County Park and Trail system.

II. Federal and State Managed Parks & Management Areas

Upper and Lower St. Croix National Scenic Riverway

In 1968, the St. Croix River north of Taylor's Falls was designated as a National Wild and Scenic River. Then the portion of the River south of Taylors Falls received the same designation in 1972. As a result, a variety of regulations related to Wild and Scenic Rivers were required to be implemented, including minimum lot size, structure setbacks, vegetative cutting and sewage treatment system standards. The National Park Service and the Minnesota Department of Natural Resources developed management plans for the designated areas. This area offers scenic opportunities.

Carlos Avery Wildlife Management Area

Purchased in 1933 by the Minnesota Conservation Commission and managed by the DNR, the Carlos Avery Wildlife Management Area (WMA) is 23,000 acres of upland forests, grassland, fields and wetland marshes lying on the Anoka Sand Plain. The WMA was established for wildlife production, public hunting and trapping, and "other uses compatible with wildlife management". The area contains fifty-seven miles of roads and more than 23 miles of trails and fire breaks. The forest and grassland areas are managed through selective cutting, controlled mowing and burning, planting of food plots, and tree planting. Wetland areas in the WMA are maintained using a system of dikes and control structures, prescribed burning and level ditching. The overall management goal is to promote diversity in the plant and animal populations present in the area. The main public recreational use of Carlos

Avery WMA is the hunting and trapping of waterfowl, deer, squirrel, mink, muskrat, raccoon and beaver. Bird watching is also a popular activity, due to the presence of almost 250 species of birds. A number of endangered species have been identified in the WMA.

Interstate State Park

Established in 1895, Interstate State Park is one of the oldest state parks in Minnesota. The present day park area is a result of a past of upheavals by earthquakes and eruptions, retreating seas and glaciers. Today, visitors of the park are able to see at least 10 different lava flows, fossil remains of ancient creatures, tracks of various creatures and ripple marks left in stone by the now vanished seas. Interstate Park, with its convenient location on the St. Croix River, served as a small logging and trading town from the late 1600's to the early 1800's. The magnificent glacial formations of the park make rock climbing a favorite pastime for many of the visitors to the park. The park offers activities for a variety of people to enjoy, from canoeing to camping.

Wild River State Park

Wild River State Park derived its name from the fact that the St. Croix River was one of the eight rivers originally protected by the U.S. Congress through the Wild and Scenic Rivers Act of 1968. The park was established in 1978. Nearly 5,000 acres of the park's 7,008 acres were donated by Northern States Power Company. Approximately 10,000 years ago, the melting of the last glacier formed Glacial Lakes Duluth and Grantsburg. These lakes supplied the water power to create the present day St. Croix Valley. Like other parks in the County, this too was a popular logging area years ago. The great logging era resulted in the building of the Nevers Dam which operated until 1912. Among the variety of recreational activities available at the park are over 35 miles of hiking and skiing trails.

Chengwatana State Forest

The Chengwatana State Forest was established in 1953, and encompasses about 29,000 acres in Pine and Chisago Counties. About 17,000 acres are publicly owned land. The area was extensively harvested in the late 1800's, the lumber floated down the Kettle, Snake and St. Croix Rivers to sawmills at Stillwater and other locations. The Chengwatana State Forest contains a variety of outdoor recreation facilities, including Snake River Campground (Pine County), hiking and skiing trails, and snowmobile trails. The Minnesota-Wisconsin Boundary Trail crosses the State Forest and will eventually connect the Twin Cities Metropolitan Area to Duluth. Primary uses for the trail are hiking and snowmobiling, and portions for horseback riding. During the winter, the trail connects Chengwatana, St. Croix State Park, and St. Croix and Nemadji State Forests.

III. County Parks System

Chisago County operates and maintains approximately 793 acres of parks and trails. All of the County Parks are adjacent to water resources, marshes, streams or lakes. A County Park is generally 10 to 200 acres in size and provides a variety of outdoor recreation opportunities for county residents. The park system is proposed to have the following park types:

1. County Park: Areas of natural or ornamental quality for nature-oriented outdoor recreation such as limited primitive camping, picnicking, boating, fishing, swimming and trail uses. Although the service areas are intended to be county-wide, in many cases the County Parks are used primarily by the communities that surround them or are nearby. The park sites can be 10 to 200 acres in size and the settings are generally contiguous to water bodies or water courses.
2. Park Reserve Lands: Areas of unique quality such as watercourses and wetlands that are preserved for environmental or aesthetic benefits to the community and/or because of the negative environmental or economic effects of development in them. The service area may be a municipality, township or county. The site should be sized adequately to protect the resource.

There are currently five County Parks in Chisago County: Fish Lake, Checkerboard, Kost Dam, Ki-Chi-Saga and Dennis Frandsen Park. The total area of the County Parks is 446 acres. In addition, the North Sunrise Reserve Area consists of 150 acres, and over 15,500 acres are dedicated to State Park and open space land. In general, the parks in the northern section of the county are not extensively developed. Parks in the southern section tend to be more developed. The recreational opportunities offered in the northern parks are generally passive and consists of nature viewing and walking. Below is a brief summary of each existing County park. For a complete listing of each park's recreational facilities and proposed improvements/redevelopment please see the complete Parks and Trails Plan. Figure 11 (p. 4A-25) locates the county parks.

Checkerboard Park, four miles east of North Branch on Highway 95, occupies 76 acres and is best known for its unique trails that wind around the numerous swimming ponds. This park is surrounded by residential uses, woods, and wetlands. It is a recreation area serving the local community. It offers water-related recreation opportunities such as playground areas, swimming, and fishing and passive recreation such as picnicking and hiking trails. A proposed regional trail corridor following Trunk Highway 95 will pass through the southeast corner of the park. In addition, because of its location on a regional trail corridor, park development may include a trailhead serving trail users heading north to Willard Munger Trail and East Boundary Trail, West to the Sunrise Prairie Trail, and future trail connections to Kost Dam Park, the Chisago Lakes area, and north to the St. Croix River. Opportunities exist for wetland restoration in the areas to the west and north of the pond where reed canarygrass is dominant. The county may consider acquisition of 40 acres of land located adjacent to the park to the northwest of the pond.

Dennis Frandsen Park is the newest County Park, occupying 117 acres. It was established in July, 1994 at the north end of West Rush Lake. Surrounded by rural residential and agriculture land uses, this park is located in the northwest portion of the county and has the longest expanse of lake shoreline of any the County Parks. It offers water-related recreation opportunities such as boating and fishing and passive recreation such as picnicking. Future improvements to Frandsen Park will continue to focus on providing water-oriented recreational program opportunities for the local community.

Fish Lake Park, located one and one-half miles west of Interstate 35 on County Road 10 near Harris, is the largest County Park occupying 152 acres. Fish Lake offers a variety of activities including swimming, fishing, volleyball, softball, horseshoes and a picnic area with a playground. There are one and one-half miles of hiking trails. This is the most heavily used park within the County Park System. Possible expansion is along the south shoreline. Adjacent land uses include; wetland, wooded and residential. It offers recreation opportunities such as swimming, boat access, softball, playgrounds, picnicking and hiking and has wetland, pond and aspen-oak woods habitat areas. The park is located on Fish Lake and has the best opportunities for water-based recreation of the parks within the system. The park has close proximity to Interstate Highway 35 and has the highest use by visitors outside the county. Expansion opportunities for the park have been informally explored. The abutting parcel to the west provides significant lakeshore frontage on Fish Lake. However, other development options may be occurring on this site. Wetlands abut the park to the southwest, and therefore would not allow for continuous active recreation space. The north shore of Fish Lake is heavily developed with lake homes, making park expansion in this direction very expensive.

Ki-Chi-Saga Park, located south of Lindstrom off County Road 25, occupies 98 acres of park land. This park has a large softball complex, picnic shelter and nature hiking/ski trail. Surrounded by rural residential, agriculture, and a game refuge, Ki-Chi-Saga County Park is located on the south shore of South Center Lake. It is located close to the Chisago Lakes area, which is the county's biggest population center. It is popular for active and passive recreation and has one of the county's historic homes, the Karl Oskar house. The park has the largest number of softball fields within the County Park System. An added attraction is the abutting wildlife refuge, which affords wildlife viewing opportunities from trails within the park. In addition, it offers recreation opportunities such as picnicking, hiking and shore fishing.

The Karl Oskar House is considered to be one of the two significant historic structures within the park system. The structure is being restored to provide period representation of the time of Swedish settlement of eastern Minnesota in the 1850s and 1860s. The house was originally located on another portion of the South Center Lake shoreline and was moved to the park in late 1995. The house is being used as a park interpretive facility. It will provide historical interpretation about Swedish immigration to the Chisago Lakes region. In spite of its semi-rural location, Ki-Chi-

Saga Park has a community identity that focuses on cultural activities such as the Karl Oskar museum and a large softball complex. The future focus of the park should utilize these aspects of the park and incorporate its proximity to the lake and communities of the Chisago Lakes area. Other major proposed improvements include the addition of parking, a fishing pier and a canoe launch at South Center Lake, accessible by an improved pedestrian connection across Glader Boulevard. One proposed development opportunity is to construct a trail connection across Glader Boulevard to the South Center Lake shoreline and Glader Cemetery.

Kost Dam Park, centrally located in the County between North Branch and the Lakes Area off County roads 14 and 15, was the first park created within the County Park System. This Park is the smallest of the County parks occupying 27 acres; however, the most popular for picnicking, fishing and socializing. Kost is a quiet park with convenient bank fishing. Possible park expansion is to the north and east. Adjacent land uses include: agricultural, wooded, and residential. Kost Dam County Park is located on the Sunrise River and is an important historic site.

Kost Dam impounds the Sunrise River creating a pond that extends to the south of the park. The river flows north out of the park through wooded areas. Additional passive activities that tie in well with the picnicking should be added, but the park is not large enough to accommodate significant changes in use. Future improvements to Kost Dam Park will focus on upgrading existing facilities. Expansion opportunities for the park have not been explored. The abutting parcel to the north provides significant frontage on the Sunrise River and lowland and upland forest habitats. Expansion to the south along the pond would involve the acquisition of more parcels, which are mostly residential. One 40-acre parcel abuts the park to the southeast and has a lengthy frontage on the pond.

IV. Potential Park Acquisition Sites

The following locations are identified in the Parks & Trails Plan as potential new park sites:

Lindberg Site, Wyoming Twp. currently comprises 67 acres of farmland and a small camping facility. The site is mostly open with some tree cover along the lakeshore. This site is a private campground located on the west shore of Green Lake. The site would be developed as a campground and lake access point.

Norelius-Anderson site, Lindstrom. This site has shoreline on North Center Lake and North Lindstrom Lake, and has over 100 acres of woodland, wetland, open fields and lakeshore. The site would provide opportunities for lake access and is located in the developed Chisago Lakes area. The site has the potential of providing a green space connection between North Lindstrom Lake and North Center Lake in the heart of the Chisago Lakes area.

Gurtek site, Chisago Lakes Twp. Located on the east shore of Sunrise Lake, this site also has a high recreation potential with its extensive lakeshore. This site is a

136 acres and is one of the largest parcels considered for expansion. It has approximately one-quarter mile of lake frontage and should receive serious consideration for acquisition.

The following locations were identified as potential new Park Reserves sites. These sites would be acquired for passive recreation uses such as walking, nature study and birding:

White Stone Lake, Wyoming Twp. Several adjoining parcels are located along the proposed Swedish Immigrant Trail that have a scenic quality and diverse habitats of woodland, wetland and meadow. The site would have primary access from the Trail.

School Lake, Wyoming Twp. Located in a hilly and scenic area of Wyoming Twp., the recreation value of this site is high.

Pioneer Lake, Chisago Lakes Twp. The site preserves lakeshore and provides an opportunity for a trail encircling Pioneer Lake.

Nessel Township, Several sites within the township contain unique and special habitats such as white pine forests and spruce bogs. These areas are at the southern fringe of their native range and are good candidates for preservation.

Tax forfeiture parcels, Sunrise Twp, Tax forfeiture parcels are good candidates for Park Reserve areas if they are wooded or have wetlands and have not been cultivated extensively. Otherwise they can be sites for restoration of native habitats. These parcels are also good sites for use for wildlife management including hunting if they are of a suitable size.

V. TRAILS

Trails currently provide important connections between population centers in the county. There is one existing trail in Chisago County. The Sunrise Prairie Trail is 24 miles long and connects North Branch, Stacy, and Wyoming with Forest Lake in Washington County. This trail follows the original Burlington Northern Railroad line constructed in 1867-1870. The trail passes through areas of hardwood forest, deep marsh wetlands, the Sunrise River and the towns of Wyoming and Stacy, surrounded by various rural and urban areas. The bituminous trail is for biking, in-line skating, and hiking and the parallel-unpaved trail is for snowmobiles and horses. This trail follows the abandoned Burlington-Northern railroad right-of-way. It connects to the Hardwood Creek Trail in Washington County. Additional trails should connect state, county, and community parks, schools, and major employers within the county.

Trails can take multiple forms within Chisago County. Currently, the Sunrise Prairie Trail is an off-road bituminous paved trail within a former railroad alignment. Extension of this trail to connect with the Willard Munger Trail will likely follow a similar alignment. Other former railroad alignments are being explored for conversion to recreational trail use with the most likely route being the Swedish Immigrant Trail. As county roads and

state trunk highways are reconstructed, bicycle routes have been and should continue to be incorporated into the rights-of-way. Minnesota Highway 95 along the St. Croix River has been reconstructed in several segments from Stillwater to Taylors Falls. Bicycle routes have been typically provided as paved shoulders or as separate trails near the right-of-way boundary. The reconstruction of Chisago County Road 23 has made provisions for a detached trail within the right-of-way. These locations make sense for trail routing since they connect communities, schools, and parks.

The trail system should ultimately be composed of separated trails from roadways. Funding resources may limit the immediate accomplishment of this goal, and therefore, the County should prioritize segments of the trail system for separate off-road locations. For the busiest roadways such as U.S. Highway 8 and Trunk Highway 95, off-road alignments should be developed. Also, local sections of trails linking schools and parks to neighboring residential areas should have off-road routing. Roadways with narrow widths, poor pavement conditions, or poor vertical and horizontal alignments should also be candidate locations for separated trails and roadways. This prioritization would most likely rank corridors such as the Swedish Immigrant Trail, County Road 10 from Harris to Fish Lake County Park, and the alternate routing for Trunk Highway 95 from Taylors Falls to North Branch.

Trails in these locations would provide direct connections to Checkerboard County Park. Other County Parks would have a paved road connection of less than five miles to this trail network.

Proposed trail locations are:

- **Taylors Falls to Wyoming (Swedish Immigrant Trail)**
Off-road trail following existing rail alignment that may require some routing around parcels not wanting to sell. Will ultimately be multi-use, paved trail connecting major destinations within the county such as St. Croix River/Interstate Park, Center City, Lindstrom, Chisago City and Wyoming. The right-of-way traverses some of the most scenic portions of the county and has much public support. Planning efforts have begun. Design for the eastern portion is currently underway.
- **Taylors Falls to North Branch**
This trail would occur mostly along the Trunk Highway 95 right-of-way. Traffic volumes for Highway 95 are marginal for a shoulder route. Off-road routing is preferred. County Road 15 provides an alternate routing closer to Kost Dam County Park. This trail will have road connections to Wild River State Park along County Road 16.
- **North Branch to Hinckley (Willard Munger/Sunrise Prairie Trail connection)**
This trail will provide an extension of the Sunrise Prairie Trail along the same railroad alignment from North Branch through Harris, Rush City, Pine City to Hinckley. It will be an off-road trail and will be paved with bituminous material. Construction of this link will complete the trail from the Twin Cities to Duluth.
- **North Branch to Lindstrom/Chisago City (County Road 14)**

This trail routing was suggested through the community input process. County Road 14 was recently reconstructed with a shoulder bicycle lane. This corridor should be considered for future off-road trail routing. This route connects the communities of North Branch, Sunrise Lake, and Lindstrom.

- **Taylors Falls to Stillwater (Gateway Trail)**
This trail along with the Willard Munger/Gateway Trail would have state-wide importance as regional trail connection. The corridor traverses one of the most scenic parts of the state and has high recreational usage. Vehicular traffic volumes in this corridor are heavy, and an off-road trail alignment would be warranted. Trunk Highway 95 has had recent repaving and will not be reconstructed in the near future. Paved shoulders are generally available along the highway, however off-road trail segments do already exist north of Marine-on-St. Croix. This route has high potential to become a desired bicycling destination.
- **Fish Lake Park to Harris spur (County 10)**
The intent of this 2.5-mile spur would be connect one of the most popular parks with the County trail system. A paved shoulder route would be sufficient, however County Road 10 may need reconstruction to accommodate this.
- **Wild River State Park spur loop**
Utilize existing off-road trails where possible, explore additional off-road alignment paralleling County Road 16 from Taylors Falls north within the St. Croix River Valley, and on-road alignment from the river to Almelund. On-road alignment would be suitable from Almelund to Wild River State Park.
- **Trail extension west along County Road 22 from Sunrise Prairie Trail in Wyoming to Anoka County.** Also provide connection to the south to trail within Linwood Township.
- **Trail connection from Dennis Frandsen County Park to Fish Lake County Park.** Lower traffic volumes along County Road 4 will allow consideration of shoulder route for trail.

FINDINGS AND RECOMMENDATIONS

As a result of review of public participation results and current recreation trends, the Chisago County Park and Trail Plan is expected to emphasize the protection of natural environments, natural resource-based recreation and education and should take into account the following findings and recommendations.

- Population growth and increased free time will create a higher demand for recreation facilities.
- The greatest demand for recreation facilities in Chisago County is generated by the densely populated urban areas. To best serve these population centers and the less mobile, lower income groups, county/regional parks located close to urban centers should be developed to a higher level than the parks located in rural areas. Because the County's primary focus is on resource-based

recreation, the degree to which a park may be developed to respond to projected population increases is usually limited by the desire to protect existing natural resources. As a consequence, the increase in demand for recreation activities requiring more intense development, such as organized sports, will have to be satisfied by the growing municipalities.

- The aging population and the increase in non-family households will increase the demand for more passive recreational activities and the demand for recreational activities such as biking, hiking, picnicing, nature walks, and bird watching.
- Regional parks near the aging and elderly population centers should include facilities for gatherings like picnic shelters and multi-use buildings. The elderly enjoy organized social activities, such as ice cream socials and nature clubs and passive activities such as hiking and bird watching.
- An aging population and increasing environmental awareness offers a strong market for the county's resource-based parks and its open space.
- The growing interest in exercise activities such as hiking, biking, bird watching and walking; the interest in nature and nature-oriented education and recreation activities will provide long term support for the County's role as a recreation provider.
- Although the population is aging, Chisago County has and will continue to have a broad cross-section of age groups. Recreation facilities should focus on providing opportunities for families and multi-generational individuals and groups.
- Partnering between public agencies and private business is becoming more and more common. Purchasing services from private business can often be less expensive than providing equipment and manpower to perform some operating and maintenance tasks in-house.
- Chisago County should continue to partner on projects with other agencies. There is much to gain in the efficiency of sharing personnel, equipment and supplies, as well as skills and technologies, among agencies that are providing similar services.
- Cooperative efforts with other agencies in marketing park and recreation services and in developing educational and recreational programming also provide opportunities for sharing resources.
- Key visions for the park system are to protect natural resources and provide outdoor recreation opportunities. This limits the potential for generating revenues with the system itself and the cost of operations in maintenance will continue to require a major commitment from property tax revenues.
- Watersheds: Water has a large presence in the landscape of Chisago County. The Chisago Lakes, St. Croix River, and Rush Lakes are all focal areas for a different portion of the county. Management of the watersheds of the streams and rivers flowing into these water bodies is critical to maintain water quality and habitats in these areas. Citizens expressed a concern for preserving major watercourses within the county at the community input meetings. Specifically, Goose Creek, Rush Creek, and the Sunrise River were mentioned as key waterways. Land use factors such as setbacks, permitted land uses, vegetative cover, wetland impacts, erosion control measures and best management practices should be reviewed by the County Board of Commissioners and the

communities within the watersheds. In determining suitable conservation measures, municipal and County parklands should be factored in when determining land use policies. This plan does not propose any direct acquisition of park land within these watersheds. It does recommend that the Chisago County Park Board and Parks Department assist the County Board in making decisions regarding the preservation of these corridors.

Goals & Strategies

The goals identify specific accomplishments that the Chisago County Parks Department will strive for during the next 5, 10 and 20 years. The strategies define actions that will be taken by the department to satisfy the intent of the goals. The goal and action statements were also used during the planning process to provide guidance for preparation of Recommendations that are included in the other chapters of the Master Plan.

The goals and strategies were drafted early in the planning process and, along with vision and mission statements, helped to make fundamental decisions on the approach and treatment of most of the other topics included in the Plan. For example, goals that relate to natural resources helped to identify and describe their importance relative to the overall character and quality of the park system. Establishing the need to protect native plant and animal communities gave clear direction on topics such as park development and trail and greenway development.

The goals clearly support the first sentence in the vision statement) drafted for the plan which states: "We envision a park system that reflects a high level of respect and priority for our natural resources and wildlife." The goals and strategies will continue to provide guidance as the plan becomes a tool for decision making in the day to day management and operations of the park system.

Goal

A park classification system should be developed for the Chisago County Parks Department. This classification should be specific to the needs of the department while reflecting standards of the regional park system.

Strategies

- a. The park system provides a variety of experiences.
- b. Each site within the park system takes on a unique identity and role.
- c. The park system places an increasing amount of importance on the respect and priority for natural resources and wildlife.
- d. More natural areas shall be incorporated into the park system. These areas will be enjoyed through passive activities that are compatible with preserving special areas.
- e. Programming reflects the variety of people who use the system.
- f. The park system provides educational opportunities about cultural, natural and historical features.
- g. The park system encourages use by a broad cross-section of the community.

- h. The park system acknowledges the changing population of Chisago County with respect to increasing proportion of seniors, and also the increasing suburban population.
- i. Trails connect system parks, local communities, and points of interest.
- j. The department is committed to providing the most effective results from the work it does.
- k. The department operates in a positive, open and inclusive manner with all stakeholders of the organization.

RECREATION PROVIDERS

Goal

The Chisago County Parks Department should cooperate in the planning and coordination of trails, park facilities, recreation programs, and in marketing with other outdoor recreation providers.

Strategies

- a. Coordination with other recreation providers regarding the use of the Chisago County Parks Department facilities.
- b. Implement strategies to cooperate on the use of equipment, technology, and information across agencies.
- c. Cooperate in the planning and coordination of trails, park facilities, and recreation programs.
- d. Work in cooperation with technical resource agencies such as the Chisago Soil and Water Conservation District, local watershed districts, and Department of Natural Resources to ensure the comprehensive management of the park system's natural landscapes.
- e. Work in cooperation with regional planning authorities toward the vision of creating natural greenways and trail corridors which connect regional parks to other significant natural areas within the county.
- f. Continue to actively pursue outside grant funding from other agencies including the Minnesota Department of Natural Resources, Metropolitan Council, Conservation Districts, Minnesota Historical Society, etc.
- g. Actively pursue technical planning services available through colleges and universities in the areas of resource assessment, resource planning, park planning, and other special research related projects.
- h. Cooperate with other County departments in the provision of maintenance, programming, marketing, and other related projects and services.

NATURAL RESOURCE MANAGEMENT AND PROTECTION

Goal

The Chisago County Parks Department is committed to a comprehensive or holistic approach to natural resource conservation. The intent is to focus on the diverse ecological and social inter-relationships of regional natural systems. This goal should be realized through the following strategies:

Strategies

- a. Identify and delineate greenway corridors containing both significant ecological resources and potential social resource linkages.
- b. Assess and determine the ecological and social benefits and feasibility of the greenway corridor.
- c. Work with landowners to pursue cooperative methods of natural resource stewardship, including conservation easements and land trusts for protecting valuable resources and establishing greenways.
- d. Seek financial and technical assistance from outside natural resource agencies.
- e. Monitor, document, and minimize the cumulative effects of recreation use in the greenway corridors.

Goal

The Chisago County Parks Department is committed to preserving existing pre-settlement landscape communities, protecting unique plants and animals, and restoring remnant communities of native vegetation utilizing an ecologically sound approach to sustainable parks and recreation development.

Strategies

- a. Develop a standardized natural resources classification system to guide park management decisions.
- b. Pursue grants as needed that are available for natural resource management.
- c. Utilize native plant material to restore disturbed natural areas and to integrate into formal landscape settings throughout the park system.
- d. Create meaningful relations with outside groups and agencies to achieve common goals relating to natural resources management.
- e. Educate park staff, contractors, local and regional policy makers and residents on management goals, procedures, and outcomes.
- f. Consider recommendations for reforestation, landscaping, prairie management, wetland preservation, lake restoration, shade tree disease control, wildlife management, and other natural resource management goals.
- g. Develop policy directives to address natural resource issues and long-term sustainable development.
- h. Monitor and document the cumulative effects of natural resource management practices using quantitative analysis. Coordinate with area lake associations and other regulatory agencies to monitor status of water resources and associated projects.

Goal

The Chisago County Parks Department is dedicated to preserving, protecting, and maintaining the water systems in or adjacent to Chisago County park land to provide optimal hydrological functions, aesthetics and recreation, and wildlife habitat utilizing an ecologically sound approach to sustainable parks and recreation management.

Strategies

- a. Develop scoring criteria and a standardized water resources classification system based on desired uses, to address priorities and to guide park management decisions.
- b. Clearly inventory and map existing and pre-settlement wetland types within the Chisago County Parks System using the U.S. Fish and Wildlife Service's Circular 39 classification system
- c. Identify critical habitats and rare or threatened flora and fauna.
- d. Pursue grants which are available for water resource management.
- e. Utilize native plant materials to restore existing wetlands throughout the park system.
- f. Create meaningful relations with outside groups and agencies to facilitate the achievement of common goals relating to water resources management.
- g. Communicate and involve the community in a variety of water resource stewardship projects.
- h. Educate park staff, contractors, local and regional policy makers, residents and park users on management goals, procedures, and outcomes.
- i. Develop an understanding of the cause and effect relationship of past water resource management activities.
- j. Develop written recommendations for lake aeration, erosion control, nutrient loading, riparian vegetation, exotic species control, waterfowl habitat, and other water resource management goals.
- k. Develop policy directives to address water resource issues and long-term sustainable development.
- l. Establish and maintain a database of general indicators to water quality.
- m. Monitor and document the cumulative effects of water resource management projects using quantitative analysis.

PARK MASTER PLANS

Goal

Most of the County's park master plans need to be updated due to changes in recreation use patterns, planning concepts and changes in regulatory requirements. The Chisago County Parks Department should implement the following strategies:

Strategies

- a. Develop a model format or procedures for the master planning process.
- b. Identify and prioritize parks that needs master planning and design.
- c. Identify existing natural resources, development patterns and surrounding land use impacts for each plan.
- d. Inventory existing infrastructure inventory with master plans.
- e. Reflect mission statement, benefits analysis, user needs and park characteristics in a cost- effective manner in each master plan.
- f. Ensure architectural integrity and continuity in master plan designs.

ARCHITECTURAL AND SITE DESIGN

Goal

The Chisago County Parks Department should develop cost efficient design standards that will:

- a. Create a unique, identifiable system-wide image;
- b. Standardize new and redeveloped projects;
- c. Promote public interest in the parks system;
- d. Improve the integrity, safety, and maintenance of park facilities;
- e. Encourage a broad user base through diverse and/or multi-use facilities.

Strategies

- a. Inventory and analyze park facilities within the Parks System which have shown good function, quality, aesthetics, and maintenance durability from past use.
- b. Conduct an inventory and analysis of recreation and support facilities in other recreation provider systems to determine their applicability to the Chisago County Parks System.
- c. Establish baseline design parameters for buildings, recreation facilities, support facilities and site amenities including materials, colors, finishes, and design continuity.
- d. Develop a standard design plate for basic park facilities including roadways, trails, signs, site amenities, picnic shelters, playground perimeters, lighting and other common system elements.
- e. Research and analyze newly emerging technologies and materials used in park facility design and development including recyclable materials, energy efficient systems, and higher technologies.

PARK DEVELOPMENT

Goal

Chisago County must be flexible and diverse in the development of county parks in order to effectively serve current and future residents of the region and county. There must at all times be a balance between new development and redevelopment (maintenance, removal, refurbishing) of land/equipment/facilities such that the county does not miss an opportunity for the future, nor fails to adequately maintain its existing infrastructure.

Strategies

- a. Prepare master plans for individual park sites.
- b. Develop a long-range CIP for parks development and redevelopment.
- c. Respond to current recreation interests and needs
- d. Review improvements periodically after implementation is complete to ensure that benefits are provided.
- e. Coordinate park development with trail and greenway/green corridor planning and design.
- f. Conform with the intent of the vision and mission statements.
- g. Avoid damaging or disturbing sensitive natural resources.
- h. Offer multi-use facilities with the flexibility to provide for or be easily modified to provide for a variety of recreation needs.

- i. Exhibit character and quality that enhance unique attributes of the park sites.
- j. Create park improvements that are attractive, durable, vandal-resistant and safe.
- k. Generate a positive and consistent image of the park system.
- l. Make maximum use of existing park improvements and avoid wasteful removals and demolition.
- m. Make sites and facilities accessible to the disabled so all visitors can enjoy the range of experiences that the park system offers.
- n. Identify and establish easements or other control of additional lands that offer protection of valuable natural resources or provide recreation opportunities that are important to the vision.
- o. Aggressively seek funding through grants and donations and through partnerships with other agencies and organizations, etc.
- p. Efficiently and effectively utilize CIP funds to implement long-range capital improvement projects.

TRAIL AND GREENWAY DEVELOPMENT

Goal

The Chisago County Parks Department will respond to the increasing demand for trails.

The principal users may include: hikers, bikers, in-line skaters, skate-boarders, cross-country skiers, horseback riders, and others.

Strategies

- a. Pursue cooperative efforts to develop a trail system that links the Chisago County Parks System with adjoining local, regional and state trail systems.
- b. Consider the needs of a diverse user base in establishing trails including: multi-use, accessible hard surface trails; natural hiking trails; user-specific trails; horse or mountain bicycle trails; trail connections.
- c. Identify, protect and manage areas for wildlife/trail greenways and critical links between existing public areas.
- d. Closely coordinate greenway efforts with other units of government including the Minnesota Department of Natural Resources, cities, townships, and watershed districts.
- e. Pursue greenway preservation options through cooperation with other public or private land preservation/conservation organizations.
- f. Pursue available funding resources, such as federal and state grants.

ACCESSIBILITY

Goal

The Chisago County Parks Department is committed to complying with applicable codes, laws and design guidelines pertaining to accessibility for all persons with disabilities in order to serve a broader cross-section of the public.

Strategies

- a. Perform a thorough ADA accessibility inventory of all existing park facilities and analysis of programs.
- b. Document all ADA accessibility deficiencies and indicate a time frame to correct these deficiencies.
- c. Prioritize identified ADA accessibility deficiencies and begin implementation of retrofitting activities using available resources and personnel.
- d. Identify financial needs for ADA accessibility retrofitting and incorporate those needs into the parks and recreation Capital Improvements Program and seek financing from other sources.
- e. Design all new park facilities under the principles of “universal design” to ensure the greatest integration of persons with mental or physical challenges in the use of facilities and services.
- f. Make sure all new construction of park facilities and park programming follow the applicable codes, laws and design guidelines currently in force.
- g. Train and educate park personnel on the needs and requirements associated with the ADA guidelines.
- h. Document all ADA upgrading and retrofitting in compliance with federal guidelines.

FACILITY RENOVATION

Goal

To adequately maintain and upgrade existing facilities and infrastructure and to establish a long-term budget for maintenance of facilities.

Strategies

- a. Inventory and identify all facilities and infrastructure, and determine maintenance needs based on this inventory.
- b. Assess maintenance priorities according to cost, timeliness, use, repair or replacement, and common maintenance practices. Priorities should be reviewed and included in the department’s budget process on an annual basis.
- c. Establish maintenance priorities as a part of the five-year CIP report and Maintenance Management Plan and review annually.
- d. Expand exploration of non-traditional funding sources, including federal and state grant opportunities, partnerships, private funding and other unique ways of raising revenue. In addition, Chisago County Parks Department should explore more traditional funding methods, such as, cost depreciation accounts or the earmarking of user fees to a long-term maintenance revolving fund.
- e. Evaluate, prioritize and incorporate ADA and risk assessment into the long-range plan.
- f. Implement, document, and update plans to reflect infrastructure improvements and/or replacements.

FEATURE ATTRACTIONS

Goal

The Chisago County Parks Department should continue to consider and incorporate feature attractions (e.g. man-made vs. natural attractions) where they are appropriate to the overall mission and vision of the parks and recreation system.

Strategies

- a. Complement the park system and be sensitive to the natural character of its ecosystems.
- b. Be consistent with the system values and uses when possible.
- c. Provide a feature that would increase the attractiveness or desired benefits of the park system to its users and be self-supporting or generate revenue sources for the system where appropriate.
- d. Be of quality design and construction while having the capability of being flexible in design to ensure continued future use.
- e. Be appropriate and consistent with the needs and desires of the surrounding land uses.
- f. Utilize the opportunity of possible private enterprise partnerships with the Chisago County Parks Department in their development and operations.

PARKS MAINTENANCE AND OPERATIONS

Goal

The Chisago County Parks Department should strive to provide the public with safe, efficient, and attractive facilities and equipment through a variety of mechanisms including maintenance planning, budgeting, and implementation.

Strategies

- a. Develop a Comprehensive Maintenance Management Plan which addresses maintenance guidelines, standards, and schedules.
- b. Implement, update, and request funding for the department's five-year Capital Improvements Program which includes building and facility rehabilitation.
- c. Implement, update, and request funding for the department's 10-year equipment replacement program.
- d. Actively pursue alternate funding sources, such as grants, to aid in the acquisition and repair of facilities.
- e. Monitor, update, and make recommendations on yearly budgets.
- f. Work actively with other government agencies on programs, such as, equipment and project resource sharing.
- g. Establish a depreciation schedule for equipment and facilities and develop a revolving fund for annual reinvestment.
- h. Develop and maintain an inspection and repair program for all facilities.
- i. Develop and implement programs to train and educate staff on newly emerging concepts and technologies used in parks and landscape maintenance.

Goal

The Chisago County Parks Department should strive to enhance the quality and efficiency of all maintenance services delivered.

- a. Make yearly budget recommendations to ensure funding for full-time and seasonal positions to meet present and future maintenance needs.
- b. Add additional training programs, both in-house and outsourced, to ensure that staff is equipped with the knowledge and skills to meet the demands of all maintenance services.
- c. Pursue all possible venues when recruiting and hiring full-time and seasonal staff. This will help to ensure the hiring of qualified, educated, and skilled staff.
- d. Recruit and make use of volunteers in special projects.
- e. Make use of court-referred laborer services whenever possible.
- f. Fully implement the Comprehensive Maintenance Management Plan.
- g. Delegate responsibility for program implementation to the general foremen and/or the appropriate maintenance staff.
- h. Seek new ways to improve efficiency of maintenance operations through contracting, outsourcing, leasing, improved technologies, etc.
- i. Establish partnerships with other departments to assist in special areas (e.g. bituminous maintenance, road signage, etc.).
- j. Seek ways to optimize use of available resources by eliminating redundant or non-essential maintenance practices such as plowing under used parking areas or moving non-used turf areas.

LIABILITY AND LOSS CONTROL

Goal

The Chisago County Parks Department should ensure the development and implementation of a liability/risk management plan for all park facilities and features.

Strategies

- a. In conjunction with the risk management department, perform a thorough risk liability inventory of all park facilities and features.
- b. Prioritize identified risks and begin implementing corrective measures using available resources and personnel.
- c. Identify financial needs for priority risk liability issues and incorporate those needs into the Parks Capital Improvements Program.
- d. Provide training and education to department personnel regarding appropriate safety procedures, operational policies, and responses to emergency situations.
- e. Train and educate park maintenance personnel on the identification of risks and hazards in parks and recreation and appropriate corrective measures to be taken.
- f. Develop an emergency preparedness plan for the parks and recreation system.

MARKETING AND PUBLICITY

Goal

The Chisago County Parks Department should develop and implement constructive marketing plans for programs and services.

Strategies

- a. Recognize the overall system values and goals.
- b. Emphasize the unique qualities, features and opportunities of the individual system elements.
- c. Identify the strengths and weakness of Chisago County Parks as it relates to the existing facilities offered at other park agencies.
- d. Utilize various promotional methods, including public service announcements, print media, radio, television, internal communications, and special events.
- e. Target market user groups, such as, families, mature head-of-households, etc.
- f. Review and revise marketing programs to determine effectiveness, geographic coverage, and impact.
- g. Expand awareness through merchandising programs.
- h. Continually utilize market research and on-going opinion surveys of users.
- i. Anticipate new innovations of products in outdoor recreation and respond quickly to changing trends and product development.

PARK AND RECREATION FUNDING

Goal

Chisago County Parks needs are significant for both development and redevelopment within the park and recreation system. Funding for capital improvements (CIP) has been unpredictable and competes with fixed-levy operations and maintenance (O&M) funding. Chisago County should research and utilize all appropriate funding resources.

Strategies

- a. Determine appropriate designation of fees towards CIP and O&M budgets. This should be developed on a long-term schedule, based on the Plan, and reviewed and revised with each periodic budget cycle.
- b. Reduce expenditures through facility upgrades, cross-utilization of staff, cooperative use of equipment, technology and information, and outsourcing of maintenance and operations.
- c. Utilize all appropriate non-county funding sources (e.g. grants and donations).
- d. Seek the establishment of a permanent and sufficient CIP funding source from County funds for county park facility expansion and replacement.
- e. Expand the use of appropriate and consistent fee-for-service and/or user fees.
- f. Earmark proceeds from the sale of surplus County property for use in parks development.

PERFORMANCE MEASUREMENT

Goal

A system of performance evaluation for the Chisago County Parks Department should be developed and implemented to evaluate customer perceived benefits of system programs and services. This system should serve to identify steps which must be taken in order to reach and maintain the highest level of user satisfaction and performance efficiency possible.

Strategies

- a. Identify system stakeholders and desired products/services.
- b. Define desired performance outcomes in general terms.
- c. Establish objective and measurable performance criteria for each outcome category.
- d. Select appropriate performance measurement methodologies including, but not limited to: customer surveys; use monitoring; national park and open space standards; national operations standards; best practices review; and trained observer ratings.
- e. Select and implement three or four performance evaluation methods.
- f. Utilize the information and analysis gained through performance measurement to improve the efficiency and/or effectiveness of service delivery.
- g. Evaluate the ability of the system resources to adequately support services, programs, facilities (e.g. staffing levels, employee skill levels, technical system support, etc.) and provide desired benefits.
- h. Continually monitor and make appropriate changes to the department's measurement system to ensure the greatest accuracy in interpretation of customer perceived benefits and internal operations/outputs.

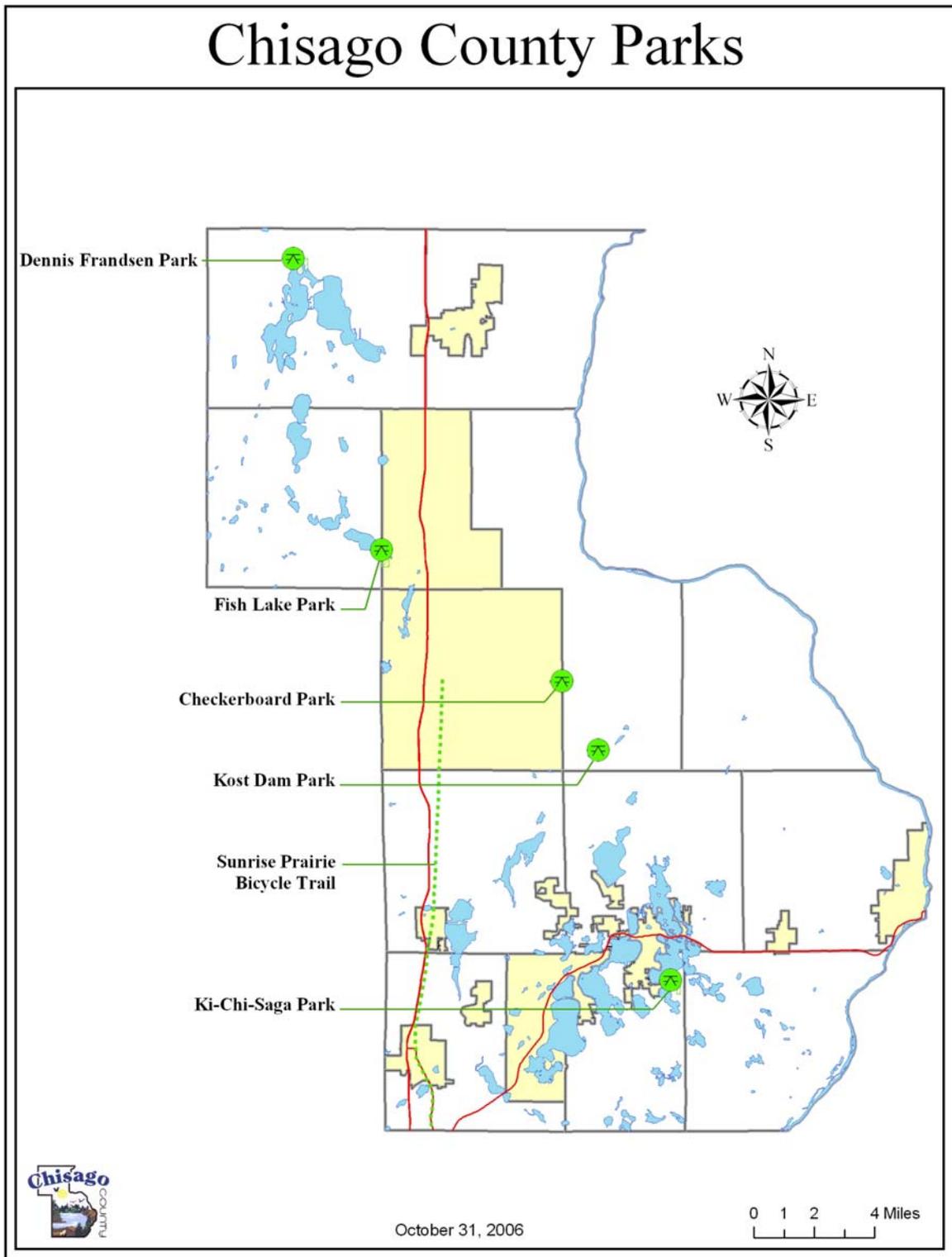


Figure 11

OPEN SPACE AND DEVELOPMENT CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Open Space and Development

County residents have consistently expressed a desire for preservation of natural resources, “rural character”, cultural and historic resources, wildlife habitats and general open space. The majority of citizens of Chisago County would like to have some open space areas remain in the county and would like to see a variety of voluntary options or incentives in place for current landowners to participate in open space preservation.

Chisago County has conducted several studies, organized several different task forces and implemented zoning ordinance changes relating to open space and preservation of natural resources. Some of these include: clustering options for subdivisions, the Green Corridor Study, and the Transfer of Development Credits program which included the Transfer of Development Credits Advisory Committee. Each of these is discussed in further detail below.

Clustering Option for Subdivisions

When the Chisago County Zoning Ordinance was updated in 1997 a clustering option for subdivisions was included. This portion of the ordinance was designed to allow some flexibility in the subdivision of land in the Agricultural District to aid in the preservation of farmland, natural resources, wildlife habitat and open space in the County as long as it does not result in service burden to local governmental units, does not create land use conflicts and does not adversely impact the environment. The clustering option allows for a reduction in lot size to one acre and minimum width of 200 feet as long as the land included in the density calculation has a covenant, deed restriction or development contract recorded against it. The principle tool for protecting open space areas is a conservation easement. In April of 2002 an amendment was made to allow for a density bonus increase of 30%, reduction in lot size to 33,560 square feet, and a minimum lot width of 150 feet if a community sewage treatment system and community water supply is utilized.

The current clustering option zoning ordinance language does not specify the amount of land that must be left as open space nor does it specify in any detail the uses that may be provided for in the open space area. Any clustering proposal should include an open space requirement as well as design requirements for how open space is used for stormwater management, resource protection and integrating green corridors with adjacent parcels.

Green Corridor Study

Green corridors are protected areas of farmland, natural areas, scenic areas and other open spaces linked together throughout the community. Green corridors can help communities keep the natural landscape while accommodating growth. By connecting open spaces, green corridors help wildlife safely move and reproduce in addition to helping preserve the rural character.

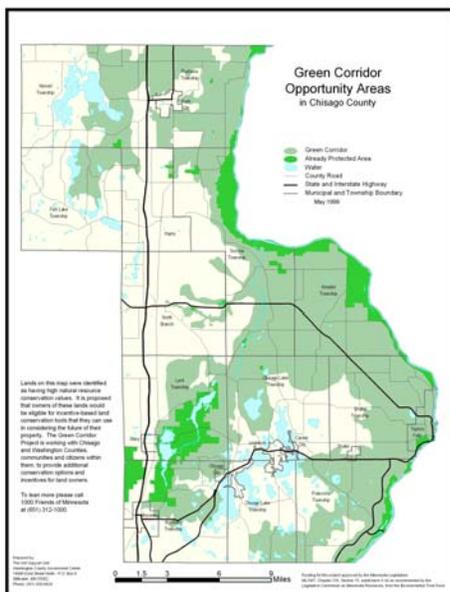
In 1998 and 1999 Chisago County took part in the Green Corridor Project along with Washington County. The Legislative Commission on Minnesota Resources provided funding for a two-year effort to develop green corridors in Chisago and Washington

counties with incentive-based land conservation tools. The Project conducted research, planning, provided technical assistance, convened public forums for education and discussion, and drafted pilot conservation programs.

The Green Corridor Project mapped areas within which to target conservation efforts and proposed a strategic, community based approach to conserving land within areas called the “Green Corridor”. The maps evolved from a year-and-a-half effort to combine scientific data, community input and local government plans. The Project proposed that new and existing conservation options for landowners be focused in these areas. The project areas were not designed with the expectation that all of the mapped open spaces would be protected, but that specific program criteria would further prioritize areas appropriate for each land conservation tool. Also, the Green Corridor Project recommended that local priorities for trails and public parks complement the Green Corridor opportunity areas.

To develop the maps the Project developed four program objectives: protection of agricultural land, preservation of natural habitat diversity, protection of environmentally sensitive areas and preservation of scenic areas. The mapping was based on 17 criteria that are included in the Creating Green Corridors in Chisago and Washington Counties final report. In order to protect wildlife corridors and large blocks of agricultural land, the Project aimed to create corridors of connected open spaces, including existing protected areas. High value open spaces that could not easily be connected to other important open spaces were not included in the opportunity areas.

Highlights of the Green Corridor opportunity areas in Chisago County include forests in the St. Croix River Valley, ecologically valuable lands along the Carlos Avery Wildlife Refuge, the Sunrise River corridor, and large blocks of agricultural lands in the north, central and southeastern parts of the county. The “Green Corridor” Opportunity Areas are shown in the map below.



The Green Corridor Project proposed that local governments and landowners use four incentive-based conservation tools for lands designated as opportunity areas. These tools are: donated conservation easements, purchased development rights, transfer of development rights and land acquisition. Residents with land in the opportunity areas should have priority in conservation programs. To be eligible for local program incentives, lands must meet certain criteria and the landowners must want to participate.

Chisago County Transfer of Development Credits Advisory Committee Report and Transfer of Development Rights Program

As a part of the Green Corridor Study a Transfer of Development Rights (TDR) program was designed. The Green Corridor Opportunity Areas were designated as the “sending area” where conservation would be encouraged. The Project suggested that areas within and immediately surrounding cities would serve as the preferred “receiving area” where increased development densities would be transferred. Maximum conservation value would be achieved by reducing the allowable building density in the sending area and assigning development credits to replace original building density. Developers who purchase TDR credits could build at higher densities in the receiving areas.

In July 1999, The Chisago County Board commissioned the Transfer of Development Credits (TDC) Advisory Committee to “provide to the Chisago County Planning Commission and the Board of Commissioners recommendations specifically dealing with the potential use of Development Credits as a land management tool/technique.” In addition, the committee evaluated and made recommendations on a Purchase of Development Rights (PDR) program.

The 22-member TDC Advisory Committee was primarily a citizen’s task force, representing a wide range of perspectives, interests, residency and public policy positions. It approached the TDC and PDR concepts with a fresh perspective and largely confirmed the earlier work of the Green Corridor Project.

There were ten major conclusions that the TDC Advisory Committee reached consensus on:

Recommendations of the TDC Advisory Committee

1. The TDC Advisory Committee recommended that the County Board implement both a Transfer of Development Credits program and a Purchase of Development Rights program. The committee stated that it believes that TDC and PDR programs can provide growth management alternatives that accommodate new development and preserve agricultural land and significant natural areas within the county. The county should also promote other land management options such as donated conservation easements.
2. A TDC is intended to fairly compensate landowners for the right to develop their property. Landowners who sell development credits through the TDC program should receive up to the difference between the unimproved value and developed value, within the context of current market values of both land and development credits. Participation in the TDC shall be voluntary by both developers and landowners; however, incentives should encourage participation wherever possible.
3. When a transfer of development credits takes place under a TDC program, or development rights are purchased under a PDR program, a conservation

easement is placed on the property. A conservation easement is a written agreement that separates the right to develop the property from the title itself. The property owner retains the right to use the property or to sell it, and future owners have the same rights. The TDC/PDR committees recommended that this conservation easement – at a minimum – permanently prohibit residential development and non-agricultural commercial and industrial development.

4. The committee recommended that lands considered under a Purchase of Development Rights program (which uses public funds to purchase development rights on private property) should protect lands within the Green Corridor, and lands near protected areas or key resources such as lakes, protected wetlands, rare natural areas or forest interiors. The Committee developed specific threshold criteria and a ranking system for these properties (which is included in the appendix of the final report of the TDC advisory committee).
5. The TDC program, while encouraging the transfer of development credits from land within the Green Corridor, will also allow the transfer of development credits from suitable areas not designated by the Green Corridor.
6. In that the comprehensive plan already has a number of stated goals that support the adoption of a TDC/PDR program, the county should evaluate the comprehensive plan and make any necessary revisions in order to accommodate TDC/PDR programs.
7. Members of the former TDC Advisory Committee should continue to work with the Chisago County Planning Commission to evaluate the effects of TDC/PDR programs on the County Comprehensive Plan and to develop ordinances for consideration by the County Board. An ongoing Citizen's Advisory Committee should eventually be established which would advise the Board on the selection of eligible lands in a PDR program, oversee the TDC or PDR programs, and promote a variety of land use options within the county by conducting educational activities for Chisago County citizens.
8. In order to further protect important agricultural and natural resources, it is recommended that the county establish a multi-level zoning policy. Possible levels might include; lower density in Green Corridor; the same or lower density in rural areas outside the Green Corridor.
9. County administration of the TDC/PDR program would require an increase in staffing. A full-time professional should be hired, with qualifications in land use planning. This professional would be responsible to promote options for land use conservation and development, including TDC, PDR, donated conservation easements and other land use planning tools.

10. The County Board should strongly consider establishing a TDC/PDR brokerage. The brokerage could operate as a registry, a buyer and seller of development credits, and as a link between TDC and PDR programs.

There were several additional detailed recommendations in conjunction with the TDC Advisory Committee which are contained in the TDC advisory final report for evaluation by County and Planning Commission. The TDC Advisory Committee also made significant progress on many other tasks, without striving for consensus. Their work is summarized in the “unfinished work” section of the final report and was included in the report to give direction to the County Board for the next steps to be taken in moving TDC/PDR programs forward in Chisago County.

Transfer of Development Credits Program

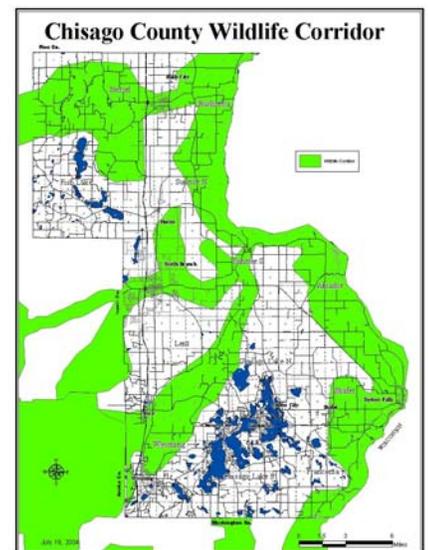
In May of 2001, Chisago County adopted zoning ordinance language establishing a transfer of development credits program in the Agricultural Zoning District. As a pilot for the program it was decided that the ordinance would only be in effect in the Chisago Lakes and Franconia School Districts. The Green Corridor Opportunity Area that falls in the Chisago Lakes and Franconia School Districts was designated as the “sending area” and any land outside of the Green Corridor Opportunity Area was designated as a “receiving area”. The current ordinance allows for land in the sending area to rezone to a Protection and Transfer District (PAT) where development is reduced to a 1 per 20 acre density and the ability to sell development credits at a 1.25 credits per 5 acre. The credits which are sold are then allowed to be used for density increase in the receiving area in the RRI, RRII or Resource Protection Districts. Density increases are allowed to be increased up to 50% in the RRI and RRII Districts and by no more than 100% in the Resource Protection District. The use of credits in the Resource Protection District allows for the development to occur under the current clustering regulations.

Since 2001 several properties have been rezoned to the Protection and Transfer District and some developments have used the transfer of development credits program. To date 156¼ acres have been rezoned to PAT, a total of 31¼ credits have been issued and 11 credits have been retired.

While the transfer of development credits program is being utilized in the Chisago Lakes and Franconia School Districts there is a public desire to expand the program to other areas of the county. There is also a need to make some adjustments to the program when the zoning ordinance is updated following adoption of this comprehensive plan.

Metro Wildlife Corridor Mapping

As discussed in the Natural Resources Chapter, the Metro Wildlife Corridor program recently expanded into Chisago County in 2004. As a part of this program wildlife corridor areas were mapped as shown. Property owners in those areas may then apply for funding for habitat protection and restoration projects. The program uses a strategy for accelerating and



enhancing habitat focus area and better coordinating efforts of conservation groups. This wildlife corridor mapping should also be taken into account in any open space preservation efforts, conservation programs and park planning that the County undertakes.

Open Space and Development Goals and Policies

General Policy Statements

1. Cluster development should be voluntary with strong incentives, not mandatory.
2. Objectives of cluster development should include:
 - a. Preserving unique and environmentally sensitive natural features.
 - b. Protecting wetlands, shorelands, woodlands and agricultural lands.
 - c. An opportunity to promote common sewer and water.
 - d. Providing commonly owned open space areas for passive and/or active recreational use by residents of the development and/or the larger community.
3. The County will seek a variety of ways to encourage the preservation of open space.
4. The County will seek information that would assess and prioritize the quality of open space.
5. The County will define a broad range of different types of open space.
6. Define "high quality" wetlands that could be counted as part of the "open space" in a development.

Goal: Encourage an interconnected network of protected open space to achieve multitude of community goals – recreational trails system, wildlife corridors and habitat, stream corridor protection, or preservation of viable agricultural land. New development must be coordinated with this goal in mind.

Policies:

1. Open Space shall be defined as land used for agriculture, natural resource protection, wildlife habitat corridors and/or recreational purposes, that is undivided and permanently protected from future development.
2. Whenever possible, open space shall connect with existing or potential open space lands on adjoining parcels.
3. The County will encourage the use of strong incentive based programs to achieve land use and open space goals and objectives.
4. The County will promote educational programs to educate current residents and prospective property owners on items such as land stewardship, conservation of natural resources, significance of natural areas and open space.
5. Encourage and accept land gifts and land forfeitures in areas with potential recreation development value.
6. Continue to require a park fee per lot created in conjunction with the subdivision of all properties.

7. Develop land use regulations to ensure the compatibility of land uses adjacent to parks, recreation areas, natural features and special management areas. i.e. public or private buffers, increased setbacks.
8. Expand transfer of development rights countywide.

Goal: Cluster Development will be established to encourage development of rural housing clusters that meet one or more of the following purposes:

- **Provide efficient use of the land while maintaining contiguous blocks of economically viable agricultural land, mature woodlands, and open space, and preserving historical features, scenic views, natural drainage systems and other desirable features of the natural environment.**
- **Create neighborhoods with direct access to open space, distinct identities and sense of community.**
- **To encourage innovation and promote flexibility, economy and creativity in residential development.**
- **To provide dedicated open space areas for passive and/or active recreational use by residents of the development and, where specified, the larger community.**
- **To provide for a diversity of lot sizes, housing choices and building densities to accommodate a variety of age and income groups.**
- **To preserve scenic views and elements of the County's rural character by minimizing views of new development from existing roads.**

Policies:

1. The County shall consider the option of cluster type development in the Rural Village Centers to create a more compact development pattern that echoes the traditional interconnected street pattern and "village" character of these towns while creating and protecting a surrounding greenbelt of open space.
2. A cluster development option should be created in the rural residential area as long as private wells and onsite wastewater treatment areas are reserved so that in the future setbacks between well and septic treatment areas are not compromised.
3. Encourage the preservation of lands for open space that are substandard for development and have limited land use due to slope, soil characteristics, wetlands or other physical limiting conditions.
4. Preserve the rural character and open spaces of Chisago County by encouraging through incentives Open-Space Design developments, an effective TDC program, purchase of development credits, and/or the outright purchase of land by a city, the county, state or other non-profit organizations.

Open Space Development is characterized by common open space and clustered compact lots. Open Space Development is designed to protect county amenities such as farmland, forests, scenic vistas and other natural resources while allowing for the maximum number of residences

under current County zoning and subdivision regulations. Thus, an Open Space Development maintains the same or (through incentives) greater level of density as a conventional subdivision.

5. Use financial incentives such as bonus density increases and the utilization of TDC credits as incentives for Open Space Design developments.
6. Higher density Open-Space Design developments may be allowed in Rural Village Centers, Rural Residential Areas and Ag/Limited Growth zones.

AGRICULTURAL CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Agriculture

Chisago County has been an agricultural area since its permanent settlement by immigrants in the mid and late 1800's. The first farms were developed from land appropriated through provisions in the Homestead Act and other governmental expansion acts. These acts gave each farm family approximately 160 acres of land if they would farm the land for five years. This legislation enabled farm immigrants to establish themselves agriculturally in this area.

From the time the county was first settled until after World War II, farming was of subsistence nature. These farms had a diversity of livestock and crops from which the farm family provided for their essential needs. Production for the market was limited. The major crops during this period were small grains such as wheat, barley, rye and oats. Forages were grown for livestock feed. The land was also suited for potato production and many farms produced potatoes for the commercial market. Livestock included dairy, pigs, beef cattle and chickens, with a variety of these on individual farms.

After World War II, farming practices benefited from a tremendous increase in technology and farm mechanization, providing for more efficient and increased production. There was also a trend to farm specialization and cash crop production such as corn and soybeans. The limiting factors for cash crop production are soil condition, rain fall and temperature.

In the early 1900's agriculture became the dominant industry in the county due to the fact that most of the forests had been cleared and the logging industry declined. Today, agriculture is still the primary land use in the county, but the county is rapidly changing. It is one of the fastest growing non-metropolitan counties in Minnesota, in part, because of its proximity and accessibility to the Minneapolis/Saint Paul metropolitan area and, in part, because of the attraction of its abundant natural amenities.

Agriculture is the predominant land use in the County. Commercial agriculture and related service businesses are a major element in the County economy and employment base, particularly in the unincorporated areas.

The purpose of the agricultural chapter is to encourage long term commercial agriculture and prevent the premature conversion of agricultural land to non-farm uses. In addition to traditional agricultural uses, the Resource Protection District (titled Agricultural District in past comprehensive plans) also includes low density single family residences, agri-business, mineral extraction, home occupations, public uses, recreation and conservation.

Inventory of Prime Farmland

According to the Chisago County Soil Survey prime farmland, as defined by the U.S. Department of Agriculture, is land that is best suited to produce crops. It may be cultivated land, pasture or woodland, but it is not urban and built up land or water areas. The soil qualities, growing season and moisture supply are those needed for a well managed soil to produce a sustained high yield of crops in an economic manner. Prime farmland produces the highest yields with minimal expenditure of energy and economic resources, and farming it results in the least damage to the environment. Other factors include favorable temperatures and acceptable levels of acidity or alkalinity. Prime farmland has few or no rocks and is permeable to air and water. It is not excessively erodible or saturated with water for long periods and is not frequently flooded during the growing season. Slopes range mainly from zero to six percent. Areas that are considered prime farmland are shown in Figure 12 (page 5-9).

About 82,000 acres in the survey area, or 31 percent of the total acreage, meets the soil requirements for prime farmland. Scattered areas of this land are throughout the county. About 60,000 acres of this prime farmland are used for crops. The crops grown on this land are mainly corn, soybeans, and small grain.

A recent trend in land use in some parts of the county has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Agriculture Census Statistics

The U.S. Bureau of Census conducts an agriculture census every five years, for years ending in "2" and "7". The Census Bureau defines a farm as any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. The following information on number of farms, size of farms, type of farms and land in farms is from the 2002 Census of Agriculture County Profile published by the United States Department of Agriculture.

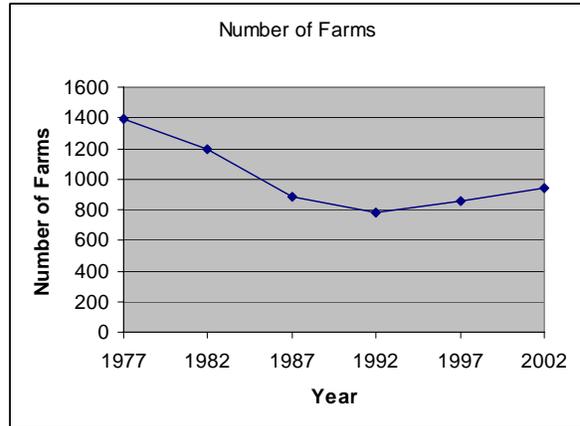
Number of Farms, Average Farm Size & Total Land in Farms

Year	1977	1981	1987	1992	1997	2002
Number of Farms	1,395	1,200	885	778	860	943
Average Farm Size (acres)	134	154	173	178	153	124
Total Land In Farms (acres)	187,100	184,300	152,717	138,594	131,305	116,948

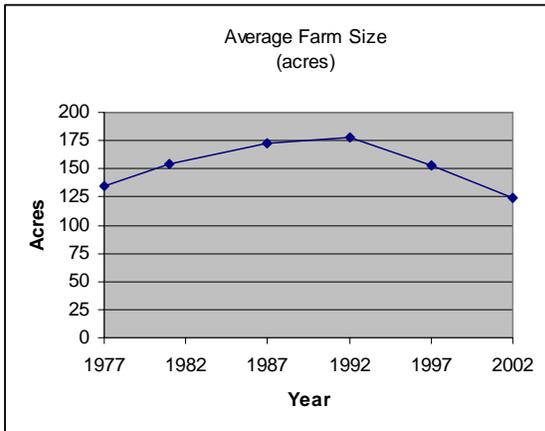
Source: Minnesota Agricultural Statistics (1977, 1981)
United States Department of Agriculture – National Agriculture Statistics Service
(1987, 1992, 1997, 2002)

Number of Farms

In the 25-year span from 1977 to 2002 the number of farms in Chisago County has decreased a total of 452 farms. However, the number of farms actually decreased over the time period from 1977 to 1992 and has actually risen over the past 10 years from 1992 to 2002.



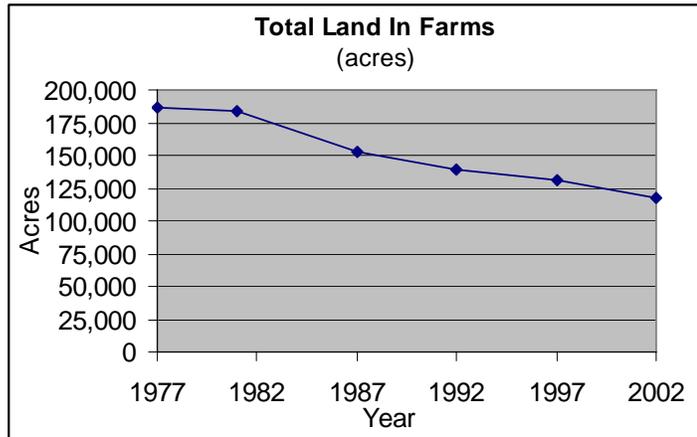
Average Farm Size



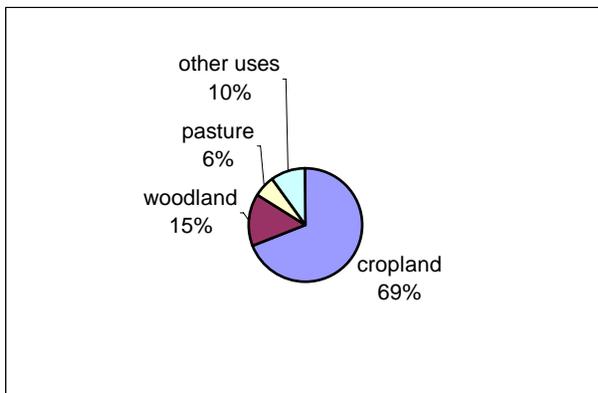
The average farm size increased a total of 44 acres from 1977 to 1992 but has since declined from 178 acres in 1992 to 124 acres in 2002. For the total 25 year time span the average size of farms has dropped only 10 acres from 134 acres to 124 acres.

Total Land in Farms

The total land in farms has steadily decreased over the past 25 years from 1977 to 2002. The total amount of land in farms has decreased by 70,152 acres or roughly 38%.



Land in Farms by Type of Land (2002)



The settlement of farm land has generally been uniform throughout the county. However, farmers learned that the south and north-central areas of the county were more suited for general farming and presently many of the more productive farms are located in these areas.

As the pie chart shows in 2002 the Land in Farms by Type of Land shows cropland at approximately 69%, woodland at 15%, pasture at 6% and other uses at 10%.

Farm Diversity

Farm diversity in Chisago County has included the production of cultured sod and Christmas trees. Some farms in the county are characterized by newly opened lands that have organic soil types. These soils are suitable for commercial sod production. Sod production appeared in the 1960's and continues to utilize between 1,000 and 2,000 acres in the county. Tree farming was usually done on a small-scale basis utilizing land that was not well suited for crop production. Market structure, environmental conditions, cultural practices and over production were some of the limiting factors for effective Christmas tree production in the county. It is not known exactly how many acres of land have been used for growing Christmas trees.

Feedlot Inventory

Minnesota State Rules require anyone with, or intending to construct, a livestock facility containing over 50 or more animal units (10 or more animal units in shoreland) to be permitted by the Minnesota Pollution Control Association. Animal units are defined by the size and species of animal. The table below shows the number of registered feedlots in each township and Figure 13 (page 5-10) is a map of general locations of registered feedlots.

Township/City	# of Registered Feedlots
Amador	7
Chisago Lakes S	3
Chisago Lakes N	17
Fish Lake	7
Franconia	15
Harris	6
Lent	4
Nessel	14
North Branch	5
Shaffer	7
Sunrise S	11
Sunrise N	6
Rushseba	12
Wyoming	1
Total	115

Source: MPCA Registered Feedlot Inventory Database

Agricultural Importance

Agriculture has been an important element in the development of Chisago County. It is significant that agriculture prevailed even when confronted with many technological, economical, governmental and societal changes. Even in 1973 though the County recognized that the role agriculture will have in the future will depend upon developmental potential in the county and its ability to adapt to the changes. Agricultural importance, prosperity, and feasibility are and will continue to be questioned when confronted with persistent land use alternatives.

In this light, the following agriculture contributions to the total environment deserve strong consideration in determining the development patterns of Chisago County in the foreseeable future.

1. Society needs agriculture.
2. Agriculture is an important economic function in the county.
3. Farming can be a profitable enterprise.
4. Agriculture can provide product diversity.
5. Various soils of the county are well suited for agriculture.
6. Farmland contributes to the aesthetic value of the landscape.
7. Farmland will preserve open space.
8. Agriculture influences harmony between various land uses.
9. Agriculture will conserve natural resources.

Heritage and quality of life are also important considerations when determining the role agriculture and the farmer have in the county's future environment and development.

Economic Aspects

Commercial farming occupies a very important role in the local economy of the County. However, due to urban growth, hobby and/or small acreage farms, land speculation and national economic situations, commercial farmland is being converted and permanently taken out of production. This is due to marginal lands being converted to agriculture to replace the traditionally cultivated to land lost to other uses. The conversion of these marginal areas for farmland is less desirable than the preservation of the traditionally cultivated lands due to the loss of woodlands, wetlands, wildlife habitat, open space and the requirement of additional energy, pesticides, herbicides and fertilizer to make these marginal lands productive. These necessary actions increase the cost of production resulting in a lower net profit, thus negatively impacting the local economy.

The economic future of agriculture in Chisago County has been and will be influenced by the following conditions:

1. The increasing urbanization.
2. The steady decline of farm numbers.
3. Decline of farm acres in the county.
4. Increasing land values.
5. Increasing farm expenditures together with small profits realized by farm operators.
6. Ability to adapt to changing farm practices.
7. Ability to physically alter the agriculture land.
8. Amount of farm credit available.

Urbanization is having a strong effect upon agriculture in Chisago County. There was an increase in population of over 10,500 in the period from 1990 to 2000. No doubt this has meant that some of these new people now live on land which was once farmland. The urban expansion also brings about higher land values. These attractive land values have also encouraged many farm operators to sell their land, causing a decline in the number of farms.

Agricultural Goals & Policies

Goal: Preserve and conserve agricultural land and related natural resources in order to maintain farms and farm related economy.

Policies:

1. Provide incentives to transfer development credits from land that is classified as prime farmland.
2. Farms where transfer of development rights occurs should submit a conservation plan that would encourage and promote best management practices.

3. A task force should be formed to look at ways to preserve farmland in a cost effective manner and provide incentives for doing so, including possibly lowering the minimum area threshold for the formation of an AP (Agricultural Preservation) district from 1000 acres to less.

Goal: Encourage the preservation of open space and natural resources.

Policies:

1. Promote cluster development to preserve open space.
2. Expand transfer of development rights countywide.
3. The County shall research further and strive to implement a Purchase of Development Rights program and/or conservation easements program to encourage the preservation of agricultural land.

Goal: Prevent incompatible land use in agricultural areas and encourage urban land uses in or near incorporated areas.

Policy:

1. Hobby and/or small acreage farms should be encouraged and specialized farming provided opportunities.

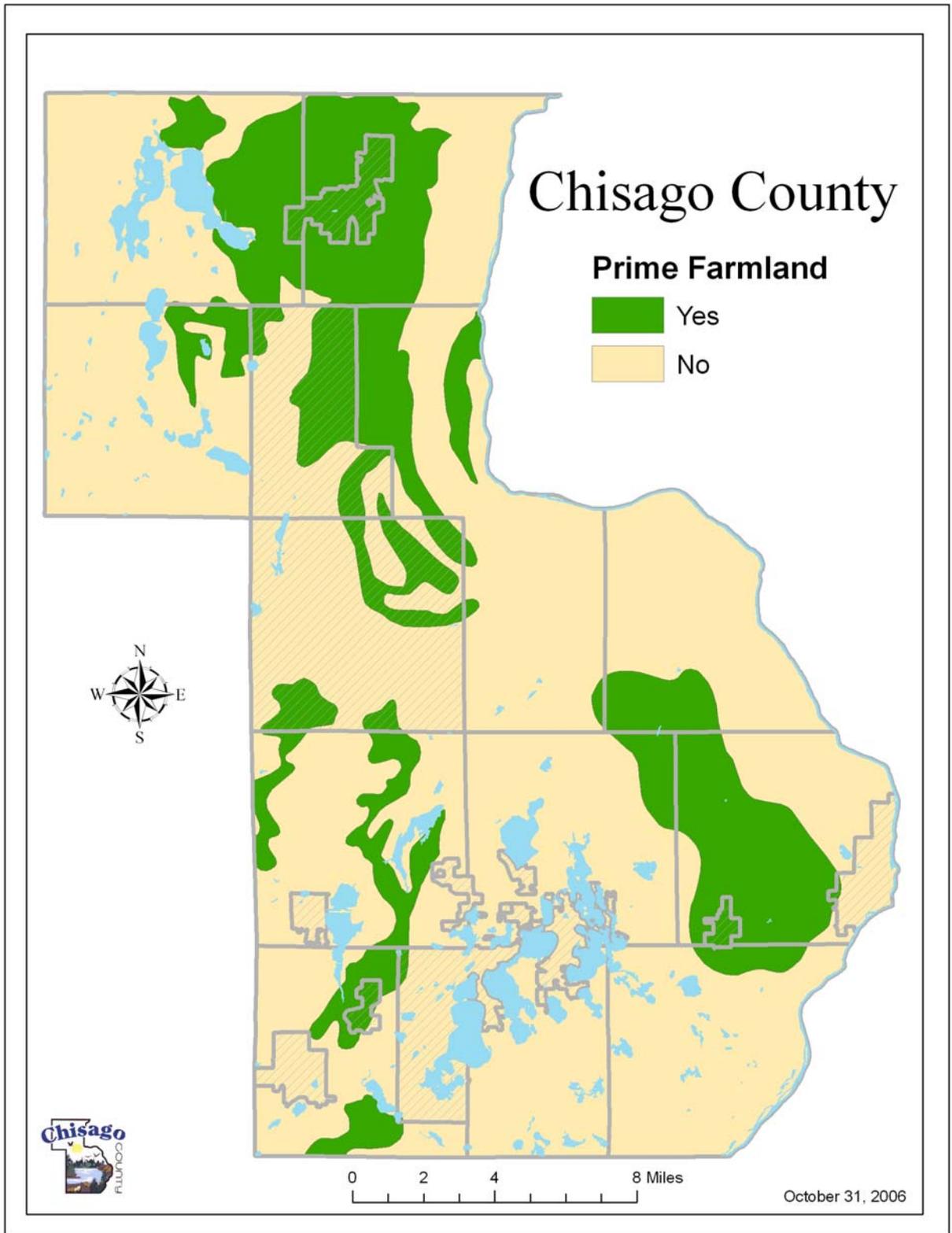


Figure 12

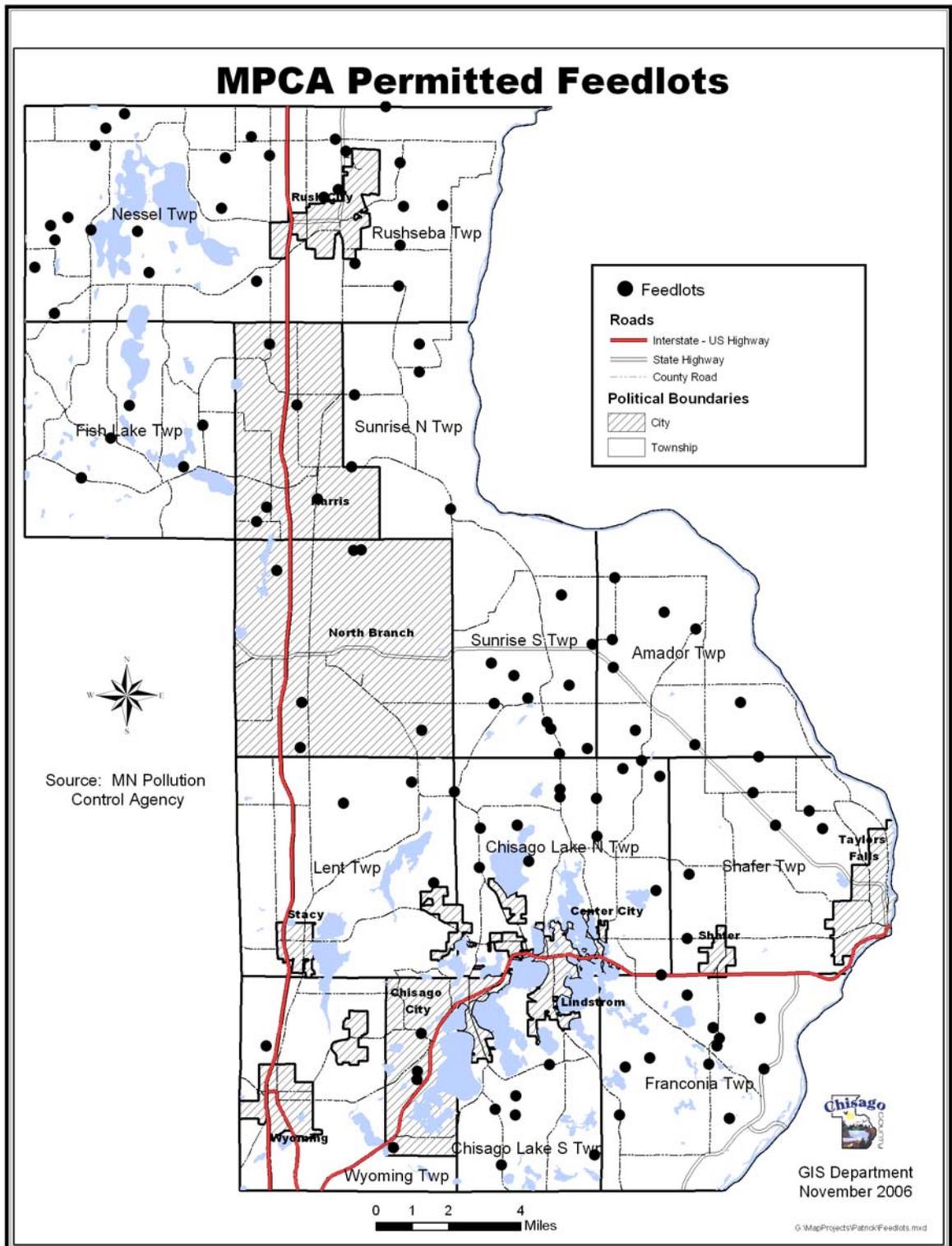


Figure 13

ECONOMIC DEVELOPMENT CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Economic Development

There are several entities that promote economic development in Chisago County or conduct studies on a regional basis relating to economic development and housing. The following provides a brief summary of the major organizations and their roles.

East Central Regional Development Commission

The East Central Regional Development Commission was organized by petition of local units of government in the year 1973. Formation of regional development commissions - RDCs - is authorized under the Regional Development Act of 1969. An updated Regional Development Act was passed in 1997 by the Minnesota Legislature. There are 13 development regions in the State of Minnesota. Twelve of the development regions were created by executive order of the Governor in 1969.

Chisago County is part of the East Central Regional Development Commission along with the counties of Isanti, Kanabec, Mille Lacs and Pine. The mission of this commission is to provide leadership and direction through creative problem solving by initiating projects and programs that lead to creative solutions to regional problems, by providing technical assistance and by identifying and developing available resources. The East Central Regional Development Commission provides a leadership role as an advocate for East Central Minnesota to bring about positive change.

Initiative Foundation (Central Minnesota Initiative Fund)

A network of regional non-profit foundations was established in the mid-1980s across the State of Minnesota. The general mission of these foundations is to strengthen the communities and the people that live there through leadership training, grant making and business development. The Initiative Foundation, formerly the Central Minnesota Initiative Fund, serves 14-county area in central Minnesota including Chisago County. It is governed by a board of directors and has its main office in Little Falls.

In 1995, the Initiative Foundation prepared a regional economic development strategy and overall vision. The vision developed for the region was to:

“Build on its many strengths in order to address concerns related to wages and opportunities, education and job skills, enterprise development, sustainable development and quality of life and physical infrastructure. Specifically, the region hopes to improve wages and job skills; increase job opportunities through business development, expansion, and attraction; and address physical infrastructure concerns that hinder economic development. The vision will be achieved through partnerships and cooperation.”

The Central Minnesota Initiative Fund strategy developed several specific actions aimed at helping the region attain the above vision including the following:

- Develop a program that encourages the development, attraction and expansion of firms that provide living wages.
- Make seed capital and equity for starting and expanding businesses more widely available.

- Target gap-lending to areas of high unemployment and low income.
- Increase competition for workers by encouraging high skill/high wage industries to locate, develop or expand in the region.
- Develop a strategy that maximizes the region's comparative advantage, a program that strengthens industries in which the region has a comparative advantage.

Northern Technology Initiative (NTI)

Chisago County is a member of NTI. The organization is a regional economic development initiative of counties, cities, businesses and others interested in attracting high tech businesses to East Central Minnesota. The goal is to establish integrated economic development efforts with the focus of encouraging growth among high-tech business. The organization is encouraging cities to work together to create services, programs and incentives that encourage growth among existing businesses and to help attract new businesses.

Chisago County Housing and Redevelopment Authority – Economic Development Authority (HRA-EDA)

The Chisago County HRA-EDA was formed in 1988 and offers a wide range of resources to public and private sector clients. These resources include: 1. Community Development: including securing and administering local, state and federal grants and loans, project planning, and program implementation; 2. Economic Development: including providing assistance to local units of government in Chisago County by financing the acquisition of commercial/industrial land, providing tax increment financing and tax abatement assistance and offering incentives to business looking to expand in or relocate to Chisago County; 3. Housing Development and Rehabilitation: including administering rehabilitation programs for multi-family and single family rehabilitation, multi-family and single family housing development and construction, and home purchase assistance; and 4. Construction and Project Management: including coordinating architects, engineers, and contractors to help deliver the best possible results for our clients.

The Chisago County HRA-EDA has a full-time Director that administers the programs for a six member board (one ex-officio member). In 2002 the HRA-EDA began using its levy authority for ongoing operations of the HRA-EDA and for the business development land acquisition program. The HRA-EDA is working with cities and townships to identify areas for business development with the goal being to give the county land reserves for future business development. Some incentives offered by the EDA for development include: tax increment financing, industrial development revenue bonds, business enterprise loan funds, employee and management training programs, revolving loan funds, Minnesota Investment Fund and SBA financing.

City Economic Development Programs

There are several local communities that have economic development or housing and redevelopment programs. North Branch, Wyoming, Chisago City and Lindstrom all have an Economic Development Authority. Taylors Falls has an Economic Development Commission and Rush City has Housing and Redevelopment Authority.

Overall Economic Development Issues & Baseline Information

Employment Conditions & Workforce:

Employment conditions in the Chisago County area are favorable for expanding employers. Chisago County was ranked in the top third of Minnesota counties in 2001 for the number of jobs created due to new and expanding businesses.

Businesses can count on a rapidly growing workforce with a Chisago County location. The population of Chisago County is expected to increase 26% between 2000 and 2010, and 69% by 2030. In addition, Chisago County is easily accessible to the Twin Cities and to the highly skilled and educated workforce in the Twin Cities Area.

Chisago County Area Labor Market	Population (2001)	Labor Force (2002)	Unemployed Workers (2002)
Chisago County, MN	41,101	23,033	1,334
Washington County, MN	201,130	123,211	4,409
Anoka County, MN	298,084	189,859	8,242
Isanti County, MN	31,287	17,505	1,007
Ramsey County, MN	511,035	300,148	12,552
Hennepin County, MN	1,116,200	701,470	29,612
Pine County, MN	26,530	12,350	972
Total	2,225,367	1,367,576	58,128

Source: US Dept of Commerce, Bureau of the Census, US Dept of Labor, & Bureau of Labor Statistics

65-80% of Chisago County's working residents commute outside of the area to work everyday. Due to great transportation access, residents of Chisago County enjoy both the atmosphere of a smaller community and the resources of a metropolitan area.

Commute to:	Percent	Commute From:	Percent
Chisago County, MN	34%	Chisago County, MN	60%
Ramsey County, MN	21	Ramsey County, MN	7
Hennepin County, MN	13	Hennepin County, MN	6
Washington County, MN	12	Washington County, MN	6
Anoka County, MN	8	Anoka County, MN	6
Isanti County, MN	4	Isanti County, MN	5
Dakota County, MN	2	Dakota County, MN	3
Polk County, MN	2	Polk County, MN	2
Pine County, MN	1	Pine County, MN	1

Commercial/Industrial Tax Base

Maintaining a healthy tax base is an important function of government. The 2000 data from the League of Minnesota Cities shows the existing tax base composition as shown in the table below.

Existing Tax Base Composition, Percent Market Value Commercial/Industrial

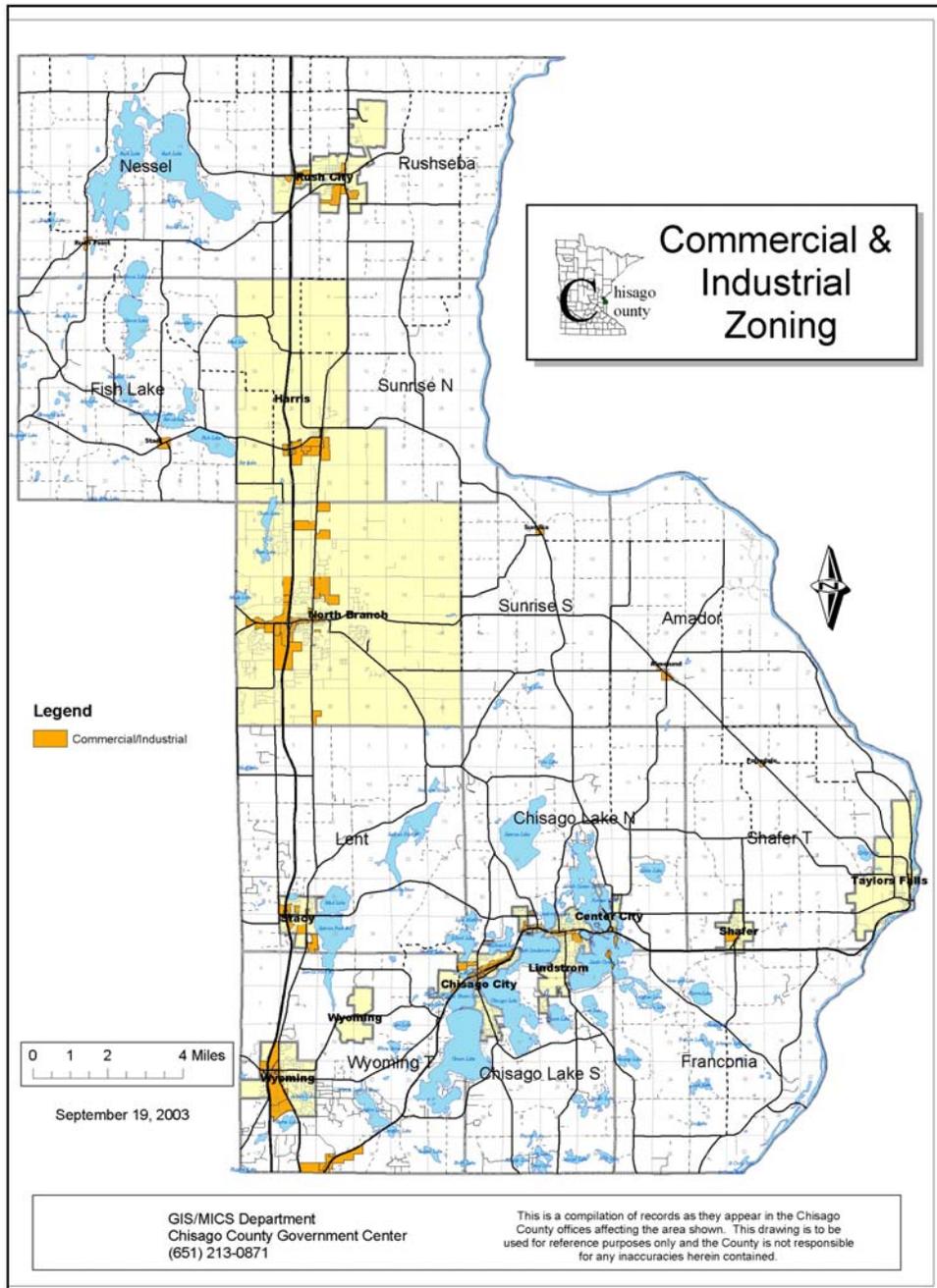
Harris – 5.05%	
Center City – 6.61%	
Taylor Falls – 8.00%	
Lindstrom – 9.38%	
Chisago City – 9.92%	
North Branch – 11.8%	Chisago County – 5.33%
Wyoming – 14.26%	Statewide Average – 15.31%
Stacy – 17.42%	Metro Counties Average – 19.81
Statewide Average – 19.85%	Non-metro Counties Average – 8.94%
Shafer – 21.20%	(Source: MN Dept. of Revenue, 2002)
Rush City – 22.26%	
(2000 Data, League of Minnesota Cities)	

With the commercial/industrial tax base of Chisago County being only 5.33%, there is concern that with the addition of the rapidly expanding residential development, steps must be taken to maintain a healthy balance to ensure an acceptable residential tax rate. Chisago County needs to analyze and develop an optimum goal for maintaining a healthy balance in tax base. This study is needed not only for the County but also for the other taxing districts including townships, cities, and school districts. In any case it is evident an increase in the commercial/industrial development is necessary in Chisago County. Chisago County would like to see the majority of new commercial/industrial development occur within municipalities where public water and sewer services are available. Other options should also be looked at including potential commercial/industrial development along I-35 at activity and/or transit centers, and establishment of mixed use rural village centers at historical unincorporated villages.

The number of businesses in Chisago County is rapidly growing. Businesses in Chisago County benefit from the advantages insofar as suppliers, distributors and services in the Twin Cities are only minutes away. In addition, Chisago County itself has businesses that can provide the services a company might need. There are 21 computer systems design and related services firms, 18 scientific and technical consulting services firms, as well as 11 engineering and R&D services firms in Chisago County. In addition two major employers have recently located in Chisago County: Polaris Industries and Andersen Windows.

Current Commercial and Industrial Sites and Future Needs

The map below shows the land that is currently zoned commercial/industrial throughout the County. The total amount of land currently zoned commercial or industrial is approximately 3579 acres. This includes both land in municipalities and land in unincorporated areas. [Note: This map is from Sept 2003, total acreage is excluding recent Polaris – Wyoming annexation and rezoning, Rush City’s newest zoning map, and possible other changes in municipalities. Update still needed.]



There are very few sites currently available in Chisago County that are suitable for commercial/industrial development that have the necessary infrastructure in place. Currently there are approximately 172 acres of land available for commercial and industrial sites. These include the following sites:

Chisago City

- Liberty Lane Industrial Park, All utilities
- 11 Acres Available

North Branch

- 16 Acres Available

Rush City

- City owned Industrial park, All utilities, Incentives Available.
- 74.45 Acres Available

City of Wyoming

- 70 Acres Available

The Chisago County HRA-EDA has its own separate Board that approves the goals, policies and work plan of the organization. However, the goals and policies set by this agency should be incorporated into the County's Comprehensive Plan to ensure that the two are working together.

Chisago County HRA-EDA Economic Development Goals and Policies

Goal: Promote and maintain a high quality of life in Chisago County by encouraging business development and private investment using as few county and city dollars as possible.

Objective: Expand Local Commercial/Industrial Tax Base

Policies:

1. Continue the County's business retention and expansion program.
2. Assist start-up and expanding businesses obtain financing to keep them in Chisago County.
3. Market the County/Cities as a great place to live and do business – support and encourage new business development opportunities.

Objective: Create "buildable" sites with infrastructure to attract new commercial/industrial businesses.

Policies:

1. Expand the County's Commercial/Industrial Park Development Program.
2. Work with communities to provide Tax Increment Finance assistance to finance infrastructure improvements and business incentives.
3. Work with cities in the county to identify and protect areas that are suitable for commercial/industrial development.

Objective: Create new jobs; retain existing jobs and increase wages for residents in the county.

Policies:

1. Encourage and support new high-tech, high-wage paying business development opportunities in the county.
2. Work with the Department of Trade and Economic Development and Minnesota Technology, Inc. to identify potential new business relocation/expansion opportunities.
3. Create Countywide Technology Revolving Loan Fund (potential funding sources include: local banks, through the use of Community Investment Credits, Rural Business Enterprise Grant Program, Intermediary Re-Lending Program, Minnesota Investment Fund.).
4. Work with existing businesses on expansion opportunities.
5. Develop a “technology campus” that focuses on high tech businesses or start-up companies.

**Potential Additional County Economic Development
Goals & Policies Relating to Land Use**

Goal: Provide for a range of economic diversity and development opportunities in the County.

Policies:

1. Promote natural amenities in the County as assets to economic development and business opportunity.
2. Promote tourism as an expanding opportunity for employment and tax base.
3. Encourage the development of infrastructure to promote telecommuting and E-business in Chisago County.
4. Commercial and industrial growth shall be located where urban services are available.
5. Other options for potential commercial/industrial development shall be explored along I-35 at activity and/or transit centers.
6. A rural village center zoning district shall be established for the historical unincorporated villages to allow for mixed use development to serve the local public.
7. Home occupations shall be continued to be allowed in all districts provided that performance standards are met.
8. Agri-business opportunities should continue to be allowed in the Resource Protection District.

INFRASTRUCTURE CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Infrastructure

Residents of Chisago County receive public services and have access to public facilities from the County, townships, municipalities and school districts. The availability and location of these services usually has a major impact on the development patterns of a county. The population distribution is usually greater in close proximity to services and facilities as residents desire the convenience of easy access to them. Local governments providing services and facilities also benefit from a development pattern which has the population served, close to services and facilities. Major public services and facilities include transportation, public water supplies, wastewater treatment systems, schools, major health services, fire protection, and other governmental services.

The county is responsible for providing many other services throughout the County, such as law enforcement, public health, human services, building regulations and solid waste. While solid waste services are provided by the private sector, Chisago County is responsible for the management of solid waste. Safe and reliable water and sanitary sewer systems are an essential infrastructure component to all communities. Stormwater management is also becoming a growing topic for communities to address. In addition, there are private systems and services not directly provided by public entities that must be taken into account when analyzing adequacy of existing infrastructure and future needs. This chapter will attempt to inventory some of the existing infrastructure currently in place; however, a more in depth study would be needed to draw any conclusion as to recommendations for future infrastructure needs.

Transportation

Transportation is one of the main infrastructure items that is a critical element to every jurisdiction. For this very reason, in 2004, the county went through a year long process to adopt a County-wide Comprehensive Transportation Plan. This Transportation Plan adopted in February of 2005 shall be considered a part of this plan in its entirety.

Public and Private Wastewater Systems

Due to the rapid growth of the County, wastewater treatment is an important issue for the County, cities and townships to keep under review. As part of the 1994 County Comprehensive Plan process issues relating to water quality and waste management were raised. The county determined that it was important to identify and resolve issues relating to wastewater treatment, either municipal or individual. Therefore in 1999, the county conducted a study called The Chisago County Wastewater Project - Developing Sustainable Wastewater Treatment Options for Growing Counties, to establish a planning process with statewide application to identify wastewater treatment alternatives to open water discharges. The project took place from July 1999 to June 2001. A thirty member task force was established to address and develop a set of recommendations for the County on issues relating to wastewater treatment, either municipal or individual.

A complete inventory of all ten wastewater treatment facilities in the County was completed. A detailed accounting was completed of all septage brought into and taken out of the County, pumped within the County, and land applied within the County. The soils survey for the County was analyzed and a listing of which soils are appropriate for

land application was developed. The number of individual sewage treatment systems in the County was identified and the volume of septage pumped per year was calculated, based on records turned in to the County by pumpers. An extensive windshield inventory was also conducted that identified general locations in the shoreland areas of the County with non-complaint residential septic systems.

Public Wastewater Treatment Facilities

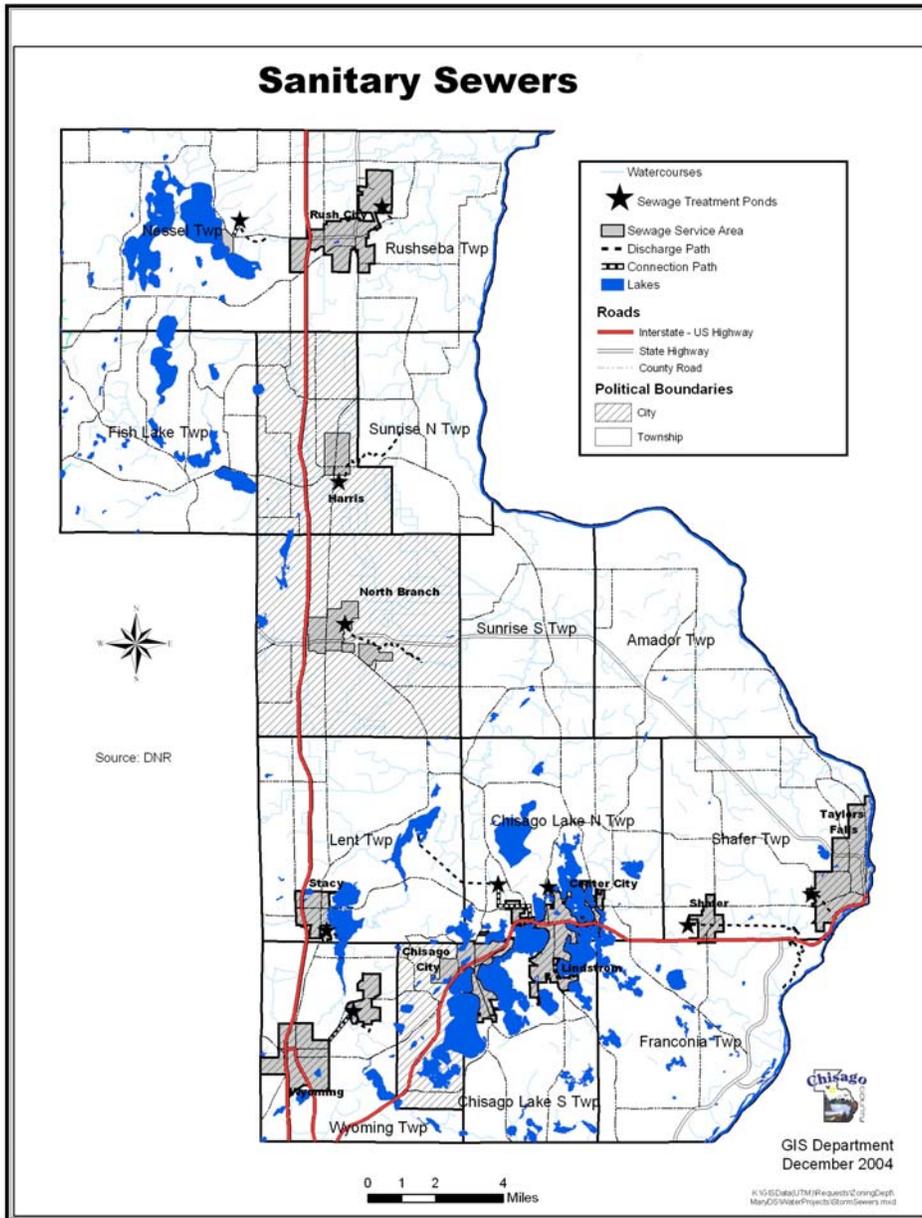
There are currently eight public wastewater treatment facilities located in Chisago County. These are all Class D facilities except for the Chisago Lakes Joint Sewage Treatment Commission (CLJSTC) which is a Class C, and is explained below. The wastewater treatment facilities are shown below.

Chisago County Wastewater Treatment Facilities

Facility	Permit #	Unit Process	Discharge Pt/Route	Discharge Type
Blue Waters Park	MN0050091	Stab Pond-Slow Sand Filt	Land	intermittent
Chisago Co - Shorewood	MN0051390	Stab Pond	CD8 to Rush Creek to St Croix	intermittent
Chisago Lakes JSTC	MN0055808	Aerated Lagoons – Sand Filt	Creek to Sunrise R to St. Croix	continuous
Harris	MN0050130	Stab Ponds	Goose Creek to St Croix	intermittent
North Branch	MN0024350	Mechanical System	Sunrise R to St Croix	continuous
Rush City	MN0021342	Stab Ponds	Rush Creek to St Croix	intermittent
Shafer	MN0030848	Stab Ponds	Creek to Lawrence Cr to St Croix	intermittent
Taylors Falls	MN0053309	Stab Ponds	St Croix	Intermittent

Seven of the eight facilities are municipal systems, one is a sanitary sewer district on Rush Lake and one is a mobile home park/campground facility in North Chisago Lake Township. The Chisago Lakes Joint Sewage Treatment Commission was established in 1985 and is made up of the Cities of Chisago City, Lindstrom, Center City and Chisago County. The system operated by CLJSTC recently constructed an upgraded facility as a mechanical plant. The cities of Stacy and Wyoming have discontinued use of their individual plants and have connected to the new CLJSTC plant. The North Branch system was recently upgraded and designed to accommodate future projected growth of the city. Harris is in the process of upgrading its wastewater plant. As noted in the table above all systems have discharge routes that eventually lead to the St. Croix River with the exception of Blue Waters.

(Note: This map will be updated to reflect the connections for Stacy and Wyoming.)



Individual Sewage Treatment Systems (ISTS)

As a part of the Wastewater Task Force the number of septic systems was calculated from existing county records and information supplied by municipalities. The table below shows the number of systems in each jurisdiction as of the year 2000.

Townships	# of ISTS
Amador	283
Chisago Lakes	1,783
Fish Lake	673
Franconia	485
Lent	866
Nessel	818
Rushseba	320
Shafer	336
Sunrise	532
Wyoming	1,713
Total	7,809

Municipality	# of ISTS
Center City	2
Chisago City	15
Harris	386
Lindstrom	3
North Branch	1,580
Rush City	28
Shafer	4
Stacy	73
Taylor's Falls	93
Wyoming	6
	2,190

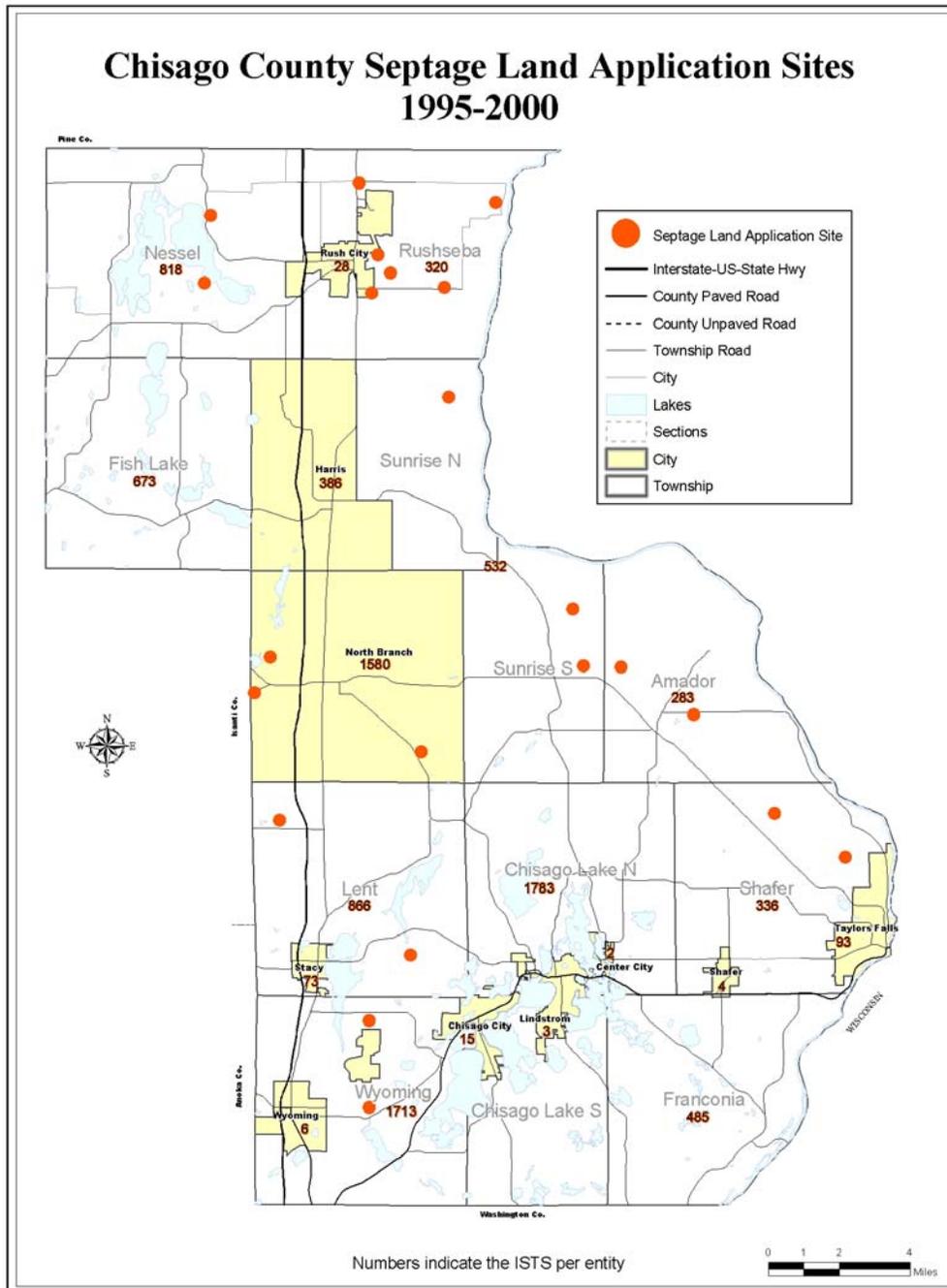
This information indicates that as of year 2000 there were approximately 10,000 septic systems in the county. Issues identified relating to ISTS included maintenance of existing ISTS, enforcement of rules and regulations relating to ISTS, educating homeowners on their responsibilities to maintain ISTS, and land application of septage that is pumped from ISTS. One of the task force's major recommendations in the area of individual sewage treatment systems (ISTS), was the adoption of a Preventative Maintenance Ordinance for all homeowners. The County is currently in the process of exploring this option.

In 2004, Chisago County received a \$240,000 grant from the Minnesota Pollution Control Agency to initiate a four year septic pilot program. The purpose of the program is to find and fix septic systems that are determined to be an imminent threat to public health – those systems that are discharging on to the ground or surface waters or backing up into a dwelling or other establishment. In 2006, the City of North Branch entered into a joint owners agreement with Chisago County to participate in the pilot program.

Land Application of Septage

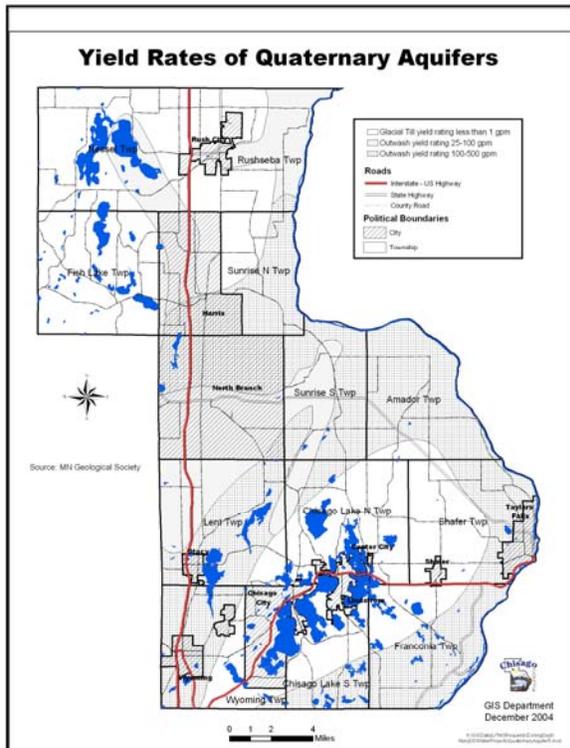
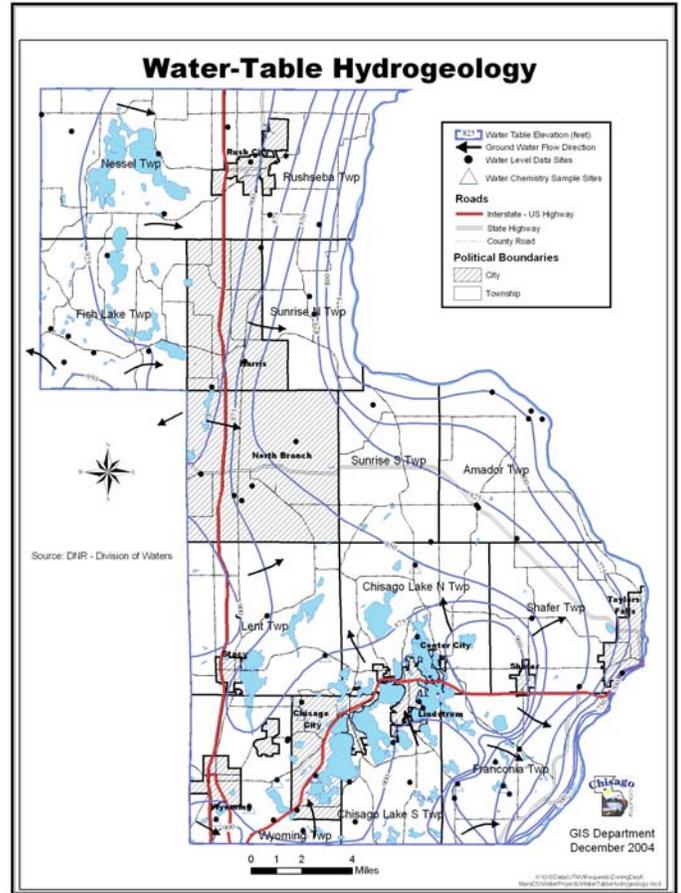
As a part of the task force's studies the issue of land application of septage was looked at by reviewing data relating to the amount of septage pumped in Chisago County and projections for future needs as well as identification of land application sites. Land applications are currently determined by the pumper through relationships with landowners. It was identified that as Chisago County continues to grow, finding sites for septage disposal is becoming increasingly difficult. As a part of the Land Application Ordinance recommendation the Task Force also recommended that the County charge a fee per new individual sewage treatment systems to be used to develop an innovative set aside program for land application of septage, possibly through the Purchase of Development Rights or Transfer of Development Credits concept.

A second Task Force recommendation was for the County Board to adopt a Land Application Ordinance which follows federal Environmental Protection Agency (EPA) and Minnesota Pollution Control Agency (MPCA) guidelines as well as developing a set of regulations specific to Chisago County.

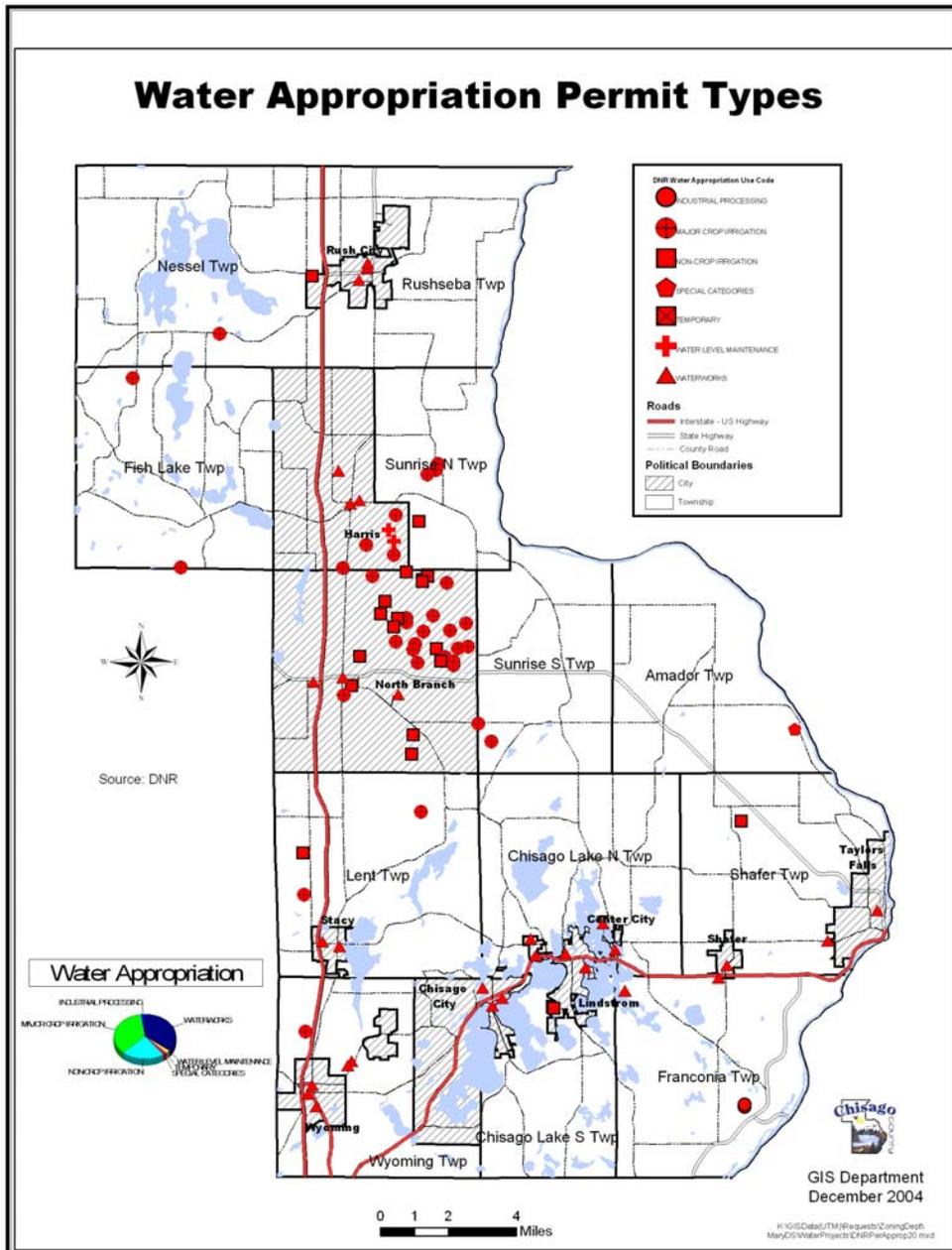


Public Water Systems and Private Wells

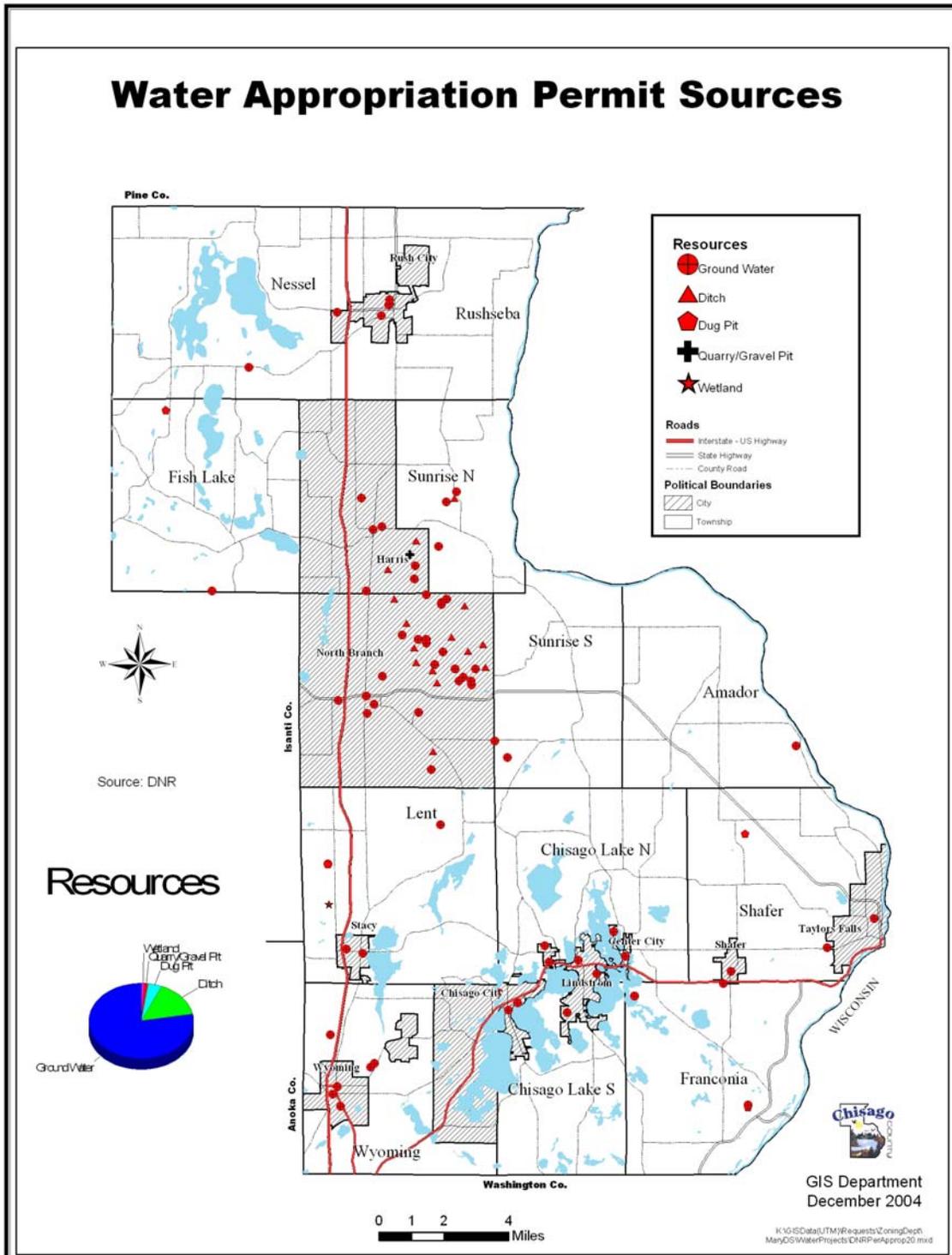
Due to the abundance of aquifers in Chisago County there is an adequate quantity of potable water available and the aquifers are discussed in more detail in the Natural Resources Chapter. In addition, there is a wide array of information on groundwater in the County's Water Plan. Maps are available which show water table elevations and groundwater flow. Also, shown below are the rates of the Quaternary Aquifers.



Groundwater appropriation permits are issued by the Minnesota Department of Natural Resources. The maps shown below and on the following page show the general locations of the DNR appropriation permits issued up to June 2004 by groundwater use and by water source.



Major crop irrigation and waterworks are the largest number of permits issued followed by non-crop irrigation.



By far the largest resource being used for the water appropriations is groundwater followed by ditches at a much lower percentage.

Nine communities in Chisago County have their own water supply systems. Seven of these nine communities have some type of water treatment. Wellhead protection plans will be required for all cities and community water supply systems in the county. The City of Harris has completed a well head protection plan and the cities of Taylors Falls Center City and Rush City are in the process of developing one.

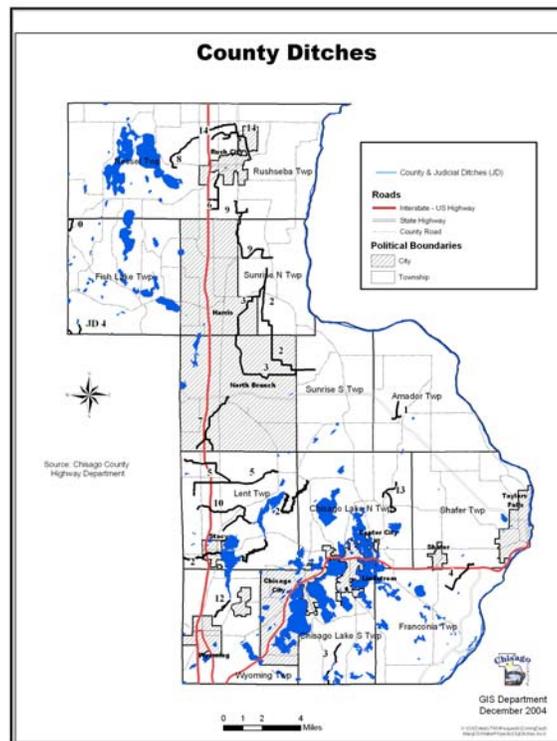
A County Well Index (CWI) is available for the county. This index is a database of information collected from all well logs which are submitted to the Minnesota Department of Health. Minnesota Department of Health administers the Well Code program for wells in Chisago County. In general groundwater quantity has not been issue for private wells in the county.

Stormwater Management

Stormwater management is becoming a greater and greater concern for areas of high growth such as Chisago County. With new development comes stormwater runoff control structures and drainage that need to be managed.

Public Ditches

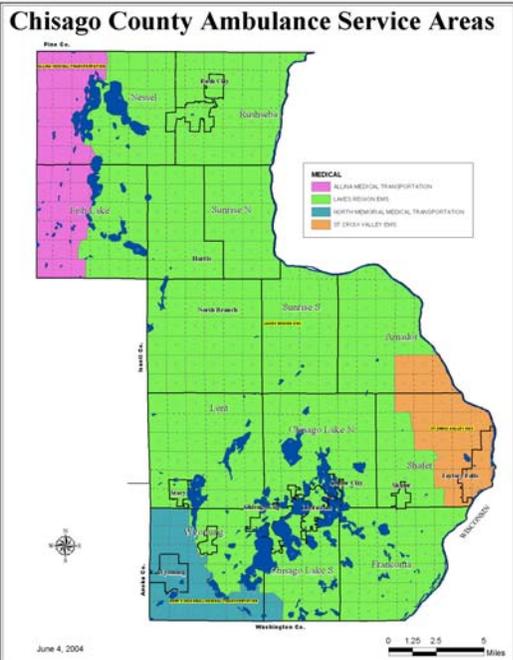
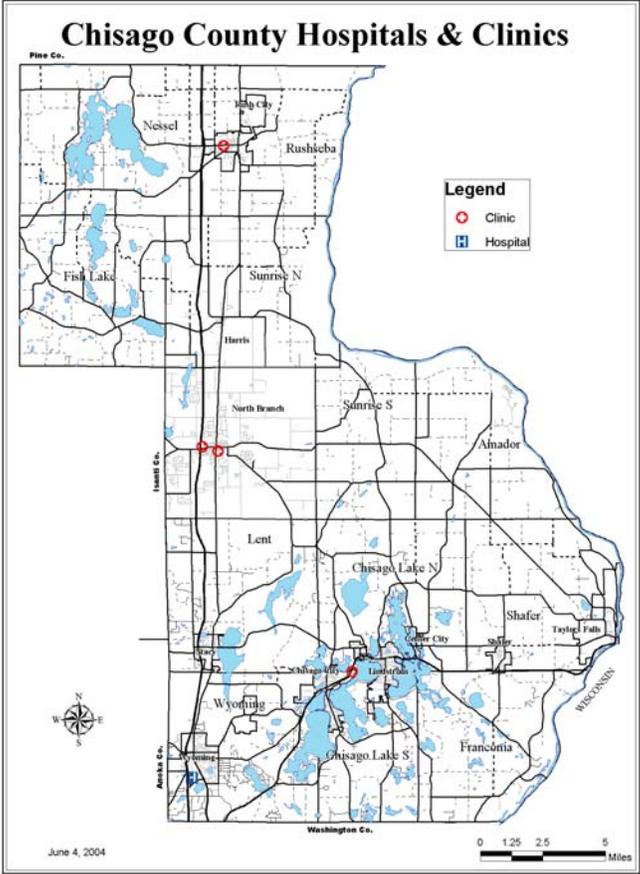
Fourteen county ditches are shown on the County Ditch System as mapped below. One was abandoned in 1954 and another one was never built (this one is not mapped). Most of the active county ditches are in the northwestern part of the county where there tends to be more agricultural production. There are also four judicial ditches in the county. There are nearly 80 miles of county and judicial ditches in the county.



Health Care Services

Health care service is provided to the county by a variety of agencies and health service facilities. There are five clinics located in the county and one hospital. Clinics are located in Chisago City, North Branch (2), Rush City and a clinic/hospital is located in the City of Wyoming. Other health care is provided by the County Public Health Nursing Center from an office in Center City. A County Health and Human Services building is scheduled to open in North Branch in 2007.

Facilities located in areas adjacent to the county provide additional health services. Health care facilities provided to the county can be regarded as adequate for present needs. Other health care facilities in adjacent counties are readily accessible to Chisago County residents. These other facilities are located in Braham, Cambridge, Pine City, Forest Lake, Osceola, Wisconsin, St. Croix Falls, Wisconsin, and the Metropolitan Area. Any inadequacies in health care facilities within the county are covered to some extent by the adjacent health care units. Health care facilities in Chisago County compare favorably with those for the entire state.



Ambulance service is available within 20 miles of any location in the county. The Lakes Region EMS covers the majority of the county. With the far northwestern portion of the county being serviced by Allina Medical, the Taylors Falls Region being serviced by St. Croix Valley EMS and the North Memorial Medical Transportation servicing the far southeastern corner of the county.

There are three nursing homes located within the county; one in Chisago City, one in Rush City and the other in North Branch.

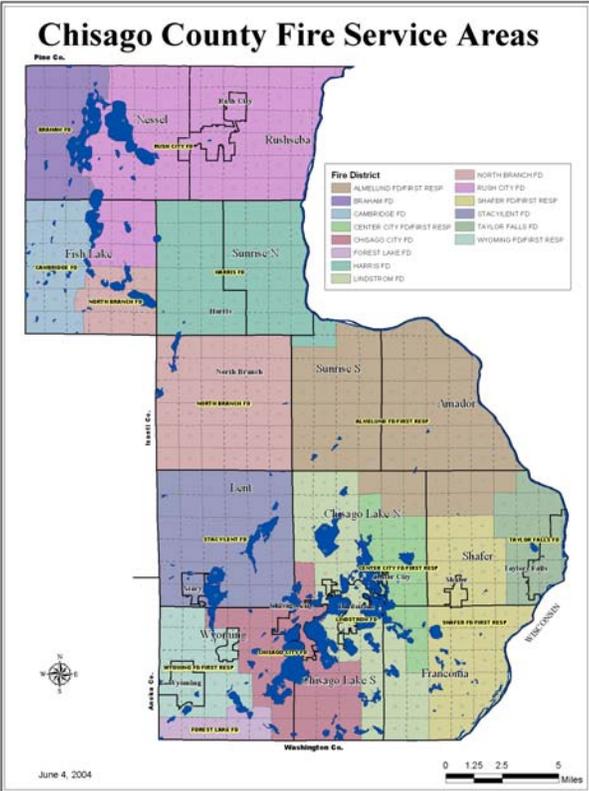
Law Enforcement

The Chisago County Sheriff’s Office is responsible for the unincorporated areas of the county. In addition, several municipalities within the County contract with the Sheriff’s Office for law enforcement services in lieu of having their own police department. These include: Harris, Stacy, Center City and Taylors Falls. The Cities of Rush City, Wyoming and North Branch each have its own police department. The Cities of Lindstrom and Chisago City have combined law enforcement agencies to one department to service both cities.

Currently Chisago County has out grown its jail capacity at its current jail and is currently undertaking a jail/justice center needs assessment for determining future space and location needs.

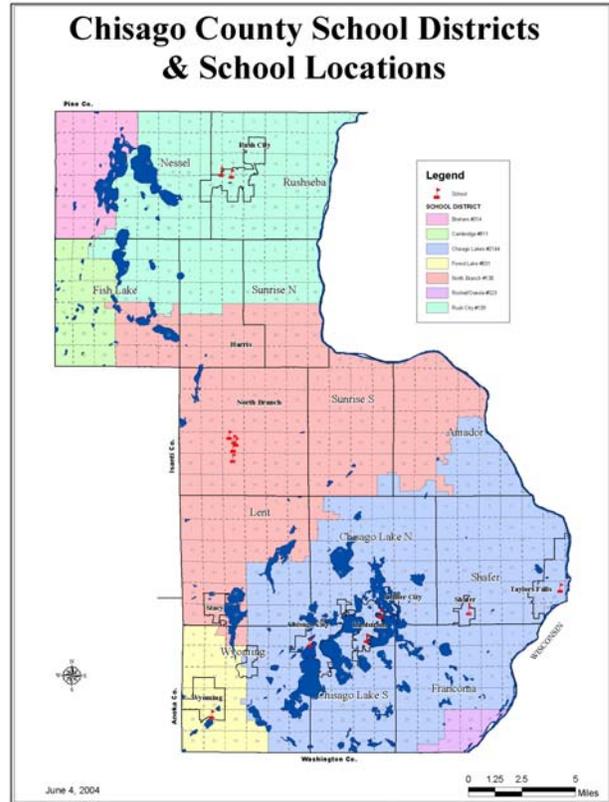
Fire

The fire departments in Chisago County are all volunteer. The fire districts are laid out for very efficient coverage of the county. Currently there are fourteen fire departments that service the entire count; three of which are outside the county (Cambridge, Braham and Forest Lake). The Fire District Service Areas are shown on the map below.



Schools

At one time Chisago County had 62 school districts within the county. Today there are only 7. Three of those districts are completely within the County's boundary (Chisago Lakes, North Branch and Rush City); three are school districts located in communities outside of the County (Braham, Cambridge, and Forest Lake); and there is one common district #323 in the southeast of Franconia Township that sends their students across the St. Croix River to Osceola Wisconsin Public Schools.



Public Libraries

Five public libraries located in the County currently serve the county in Chisago City, Taylors Falls, Wyoming, North Branch, and Rush City. Bookmobile service is furnished to the county by the East Central Regional Library at Cambridge. The Forest Lake Library also serves a portion of the county residents.

Solid and Hazardous Waste

The Chisago County Environmental Services Solid Waste Department is responsible for licensing, bonding, and inspecting all solid waste operations in the County. Annual license fees for garbage haulers start at \$250 and Recycling Facilities Licenses are \$150. The department coordinates the recycling of tires, appliances, electronics, and mattresses at several sites around the County in cooperation with the East Central Solid Waste Commission (of which Chisago County is a member) and pay subsidies to the recyclers in order to keep the costs to the residents at a reasonable rate. In addition, \$57,000 a year is distributed to garbage haulers/recyclers from SCORE funding from the State in order to subsidize the costs for recycling materials with low market prices.

The County also operates a Household Hazardous Waste Facility (HHWF) in North Branch for residents of Chisago, Washington, and Isanti Counties and for Minimal Generator businesses (less than 100 lbs/year). The Reuse Shelves at the HHWF provide a means for residents to acquire "used, but useful" products at no charge and for the County to avoid disposal costs for the products reused. In 2005, Chisago County avoided about \$8000 in disposal costs because of the Reuse Shelves.

Finally the County's Materials Exchange offers residents and businesses a means to electronically list household goods and other items:

- as "available", when they have something they want to give away -or-
- as "wanted", when they are looking for items

A Materials Exchange coordinator is available to assist on a limited basis.

Energy

Chisago County is experiencing steady rates of population and economic growth. This trend will result in increased demand for housing stock, increased need for infrastructure such as sewers, water, highways and government services, and more industrial and commercial development. Each new demand for services and infrastructure will result in new demands for energy and there will be increased pressure to expand and improve the energy system infrastructure. In 2000, Chisago County conducted a project known as the County Energy Management Plan as a response to the need for a public energy planning process that lays the foundation for a comprehensive energy management strategy for the County. The goal was the adoption of local energy policies that use necessary regulatory tools to best provide for reliable essential services. A copy of their findings can be found in their final report that is located in the County Administration Department.

Utilities

Electric power for the county is provided by Xcel Energy, East Central Electric Association, and Connexus. Xcel services in the southern and eastern sections of the county, while East Central Electric Association and Connexus operate in the western sections of the county.

Northern Natural Gas Company and Minnesota Energy service the incorporated areas and some of the rural areas located near the pipeline. Pumping sites are located along the pipeline in strategic locations. A petroleum products pipeline operated by Magellan Pipeline Company also runs through the county parallel to Highway I-35.

Communications

Frontier Telephone Company services the southern and most of the eastern communities. Qwest, with an office in Cambridge (Isanti County) services the northern portion of Chisago County from North Branch to Rush City. Radio and television

services to the county are provided from outside the county. Most of this service is provided by the Twin Cities stations. Booster towers are located throughout the county.

There are numerous wireless communications towers owned and occupied by various service providers throughout the County. New towers are occasionally proposed to be built within the County, and it appears that as the County's population grows more towers will be proposed in the future. The County is currently exploring the possibility of proactively designating specific sites for future towers in locations where they allow effective communication but also cause the least amount of aesthetic concern.

There are two independent newspapers operating in the county: the Chisago County Press, located in Lindstrom, which was established in 1898, and the ECM Post Review, located in North Branch, which was formed from a merger of the Rush City Post and the North Branch Review. The Cambridge Star and Forest Lake Times also serve portions of the county.

Infrastructure Goals & Policies

Goal: Promote policies for financing public facilities that are equitable for all citizens of the County and that reinforce the County's land use and development policies.

Policies:

1. Require developers to cost share on the necessary public improvements resulting from their proposed development.
2. Discourage non-contiguous annexations, but planned, staged growth that builds upon existing infrastructure.
3. Encourage communication and participation in regional planning efforts.
4. Identify public investment needs by accounting for the full environmental, social and economic cost of new development, including but not limited to infrastructure costs such as transportation, sewers and wastewater treatment, water, schools, recreation and open space.
5. Ensure the most effective and efficient use of public resources by the following:
 - A plan shall be in place to determine future demand for resources and the County's response to those needs.
 - The cost of cumulative social and environmental cost shall be taken into consideration when considering new development.
 - Quantify the extent of future demand for new and improved infrastructure.
 - Quantify the ability of Chisago County to absorb and fund these demands.
 - Determine the finite level of demand to which Chisago County can respond.
 - Identify the cost of infrastructure.
 - Identify funding mechanisms necessary to cover the costs of the infrastructure.
6. Support research and educational opportunities for the public concerning growth factors as it pertains to planning and resource management.
7. Actively explore opportunities for all jurisdictions, agencies and public organizations in the area to share services and resources to reduce or eliminate duplication and improve efficiency while still providing appropriate levels of service.
8. Continue to support existing joint governmental ventures in the delivery of services.
9. Continue to maintain community facilities and identify areas of improvement in a capital improvement plan.
10. Continue to improve and update when possible the County's public service capabilities through the use of training, upgraded facilities and equipment, and improved management practices.

11. A Sub-Area Study should be conducted in the high growth area in the southern portion of the County consisting of the following jurisdictions: Cities of: Wyoming, Stacy, Chisago City, Lindstrom, Center City and Townships of: Wyoming Township, Lent Township & Chisago Lakes Township. The county shall lead the sub-area study with input from all jurisdictions to clearly define the area of study. Financing of study also to be determined.

Goal: *Provide public facilities in a cost effective manner that maximizes public health, safety and welfare.*

Policies:

1. Encourage all cities to develop plans for guiding the expansion and maintenance of public water and sewer facilities. The community utility plans should reinforce the County's land use and development policies and be consistent with the community growth area plans.
2. Avoid locating public facilities and utilities in areas designated as special environmental overlays or long term rural areas.
3. Discourage the extension of public utilities over large undeveloped parcels and prime agricultural areas to serve new scattered rural residential and commercial development.
4. The County will support the researching of the feasibility of providing or extending public utilities to existing rural residential areas if mutually beneficial.
5. Encourage cities to develop policies and programs for financing public utilities that do not place an undue tax burden on large undeveloped parcels of land.

Goal: *Ensure the citizens of Chisago County access to necessary services to maintain a healthy life style.*

Policies:

1. Work with Public Health and the cities to develop strategies for evaluating current and future needs of the community and access to health services.
2. Monitor population trends and map the location of various services.
3. Work with the cities to ensure that trends in population are recognized and participate in developing strategies for coping with these trends.

INTERGOVERNMENTAL COORDINATION & COMMUNICATION CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Intergovernmental Coordination & Communication

In order to provide the most effective and efficient infrastructure, ensure compatible land uses with adjacent jurisdictions, and enhance natural and cultural resources, it is necessary to coordinate levels of service between the county, various townships and cities. Partnerships should be fostered between the County with its townships and cities, and with state and federal agencies. Maintaining and improving intergovernmental coordination is essential for the county. This applies to other governmental entities as well as those within the overall government structure.

Many of the issues that have been raised throughout the Comprehensive Plan update process have included some aspect of the need for better communication and coordination between governmental jurisdictions, county departments as well as with county residents. This section will identify goals and policies to aid in assisting the process of creating better intergovernmental coordination and communication.

Federal Government

The federal government does have impact on Chisago County. The most important function of the Federal government involves the provision and funding of a number of services. These federally supported services include the Soil and Water Conservation District, Farm Services Agency, Army Corps of Engineers and the National Park Service. In addition, the Federal government supports many public programs that provide assistance to the county both directly and indirectly. Some of these programs are: Revenue-Sharing; REAP and AFDC.

State Government

The state government is the main governing body of the county and its local units. The state issues all privileges and authority to counties and municipalities. The state legislature is the body which passed county enabling legislation. This legislation provides guidelines for county and municipal ordinances. Two important pieces of this legislation affecting Chisago County are the State Enabling Legislation for county planning and zoning, and the Shoreland Management Act, which were enacted in 1959 and 1969, respectively. The State owns a significant amount of land in the County mainly in the Carlos Avery Wildlife Management Area, Janet Johnson Wildlife Management Area, Wild River State Park and Interstate Park; along with some smaller parcels.

County Government

The county government is administered by five commissioners from their respective districts. The county government acts as an administrative arm of the state. It enacts ordinances that fit within the state guidelines. Chisago County administers many different programs some mandated by the federal and state governments and others that are granted through enabling legislation.

City & Township Government

Within Chisago County, there are ten incorporated cities and ten townships. Each of the incorporated cities has their own planning and zoning regulations. In the southern portion of the county many of the infrastructure issues are the same and some infrastructure items are being consolidated or being conducted on a joint effort; such as, a joint wastewater treatment facility, police services and library services. (See Infrastructure Chapter for more details.) Of the ten townships only one township currently has its own comprehensive plan and zoning regulations, the township of Wyoming. This township has developed a zoning ordinance that is consistent with the County zoning regulations currently in place. A brief summary of the ten incorporated municipalities and ten townships of Chisago County are listed below.

Incorporated Municipalities of Chisago County:

Center City

Center City has been the county seat since 1875. Its name refers to its central location between Chisago City and Taylors Falls. It is the state's oldest continuously inhabited Swedish settlement. The first post office was named Centre City in 1858, then Chisago Lake in 1863, then back to Centre City in 1877 until 1893 when the current name/spelling was adopted. The village was not officially incorporated until 1903. The Chisago County Government center and jail continue to be located in Center City. In 2000 the population of Center City was 582 residents. Center City has a mayor elect and four council members. A planning commission advises the council on planning and zoning related matters. Center City is currently revising its comprehensive plan.

Chisago City

Chisago City was first platted for village lot development in 1855 and was incorporated in 1906. It served as the county seat from 1865 to 1875. Chisago City is located on Minnesota Highway 8, just ten miles east of Interstate Highway 35 and only 35 miles northeast of Minneapolis-St. Paul. The city is approximately two square miles, had a population of 2,622 in the 2000 census, and is located in what is known as the Chisago Lakes Area of Chisago County. It is a city that is rapidly expanding its residential and commercial properties. Lakes and scenic park areas surround the entire city. Recently in 2005 after a contested case annexation approximately 5,000 acres from Wyoming Township was annexed into the city of Chisago City. After the annexation occurred the population of Chisago City is now an estimated 4,749 people.

Chisago City's comprehensive plan was adopted in 2002 and has been updated due to the addition of the nearly 5,000 acres added to the city's jurisdiction. Chisago City has a mayor-council form of government. The city council consists of a mayor and four council members, who are elected at large. The mayor and the council members serve four-year terms. A city administrator is responsible for the administration of policies and carrying out of city council directives. A planning commission advises the City Council on planning and zoning issues and a park board makes recommendations to

the Council on park related items. An Economic Development Authority (EDA) was created to establish a strong economic environment for the City to support existing businesses and encourage the establishment of new businesses. The EDA recommends policies supportive of economic growth to the council.

Harris

Harris is a relatively small quiet rural community. It has a large land base of 12,800 acres and a relatively small population. Much of the City is in agricultural or open space uses and is largely undeveloped at this time. The City of Harris is located in northern Chisago County and has Interstate 35 running through it.

Harris is one of the oldest established communities in Chisago County. The Harris area first settled during the latter half of the 1850's when homesteaders of mainly Swedish origin migrated into northern Chisago County. In 1873, the first plat for the town site of Harris was filed with the County. A small settlement sprang up along the railroad line and took its name in honor of Philip S. Harris, a prominent officer of the early St. Paul and Duluth Railroad. On July 22, 1884 the Town of Harris was incorporated. It initially included 24 square miles of territory. Three years later, Harris was officially incorporated as a village with 20 square miles. Four sections were returned to the jurisdiction of Sunrise Township.

Harris has a mayor and four council members and a City Clerk. In the 2000 census Harris had a population of 1,121 residents.

Lindstrom

Incorporated in 1894, the City of Lindstrom serves as the center of the Chisago Lakes area with its many recreational opportunities. Within close proximity to the Twin Cities Metro, Lindstrom has retained its small town character, with a special emphasis on Swedish heritage. The City is working to increase quality commercial development, while at the same time preserving the small town atmosphere. The 2000 census estimated the population of Lindstrom at 3,015 people.

Although not incorporated until 1894, the initial settlement of the area around Lindstrom took place during the early and mid 1850's. At that time, the similarity of the area's topography to that of the Swedish countryside brought Scandinavian homesteaders up the St. Croix River from Stillwater. They moved inland from Taylors Falls and Franconia to the greater Chisago Lakes area. The construction of a branch rail line by the St. Paul and Duluth Railroad through the Chisago Lakes communities in the 1880s helped speed area development. Within a few short years the Chisago Lakes Area grew with new resorts, seasonal cabins, and the necessary supporting businesses.

Many of the area's residents are descendents of those original Scandinavian settlers and they continue to take pride in their Swedish heritage. A statue of the trilogy's main characters, Karl Oskar and his wife Kristina, stands in the center of Lindstrom as a

tribute to those early men and women who set an example for the conscientious, hard working descendents who still populate the area.

Lindstrom has a mayor with four council members and a full time administrator. The 2002 census population was 3,395. In 2000 the City of Lindstrom and the township of Chisago Lakes participated in a joint planning process from which the city adopted a comprehensive plan in 2001. Due to the rapid increase in population and increasing demand for development the city has updated its comprehensive plan.

North Branch

North Branch is named for the north branch of the Sunrise River. The village was platted in 1870 when the railroad through the area was finished and incorporated in 1881. Also known as the "hub of the potato belt", 527 rail cars of potatoes were shipped from the local station in the fall of 1911. In 1901, Branch Township was split off from the village; it was reunited with the village in 1994. The current City of North Branch was formed in 1994 from the consolidated cities of Branch and North Branch. The total area after consolidation was 36 square miles.

The City of North Branch has a mayor-council form of government and a city administrator, as well as full-time planning and engineering staff. The city also has a planning commission, park board and an economic development authority. A comprehensive plan was adopted in 1995 after the cities merged and this plan was updated in 2003. The City of North Branch has recently emerged as one of the fastest growing communities in Minnesota percentage wise. In 2000 North Branch had a population of 8,023. The population is expected to almost double to 16,000 people by 2020.

Rush City

Rush City, located in northern Chisago County, is approximately 4 miles west of the Wisconsin border and is about 55 miles north of the Minneapolis/St. Paul Metropolitan Area with Interstate 35 running through the city. Rush City occupies an area of approximately 1,800 acres.

The original settlement of Rush City was known as Rushseba, and was located on the Government Road a few miles east of the present-day City. The original settlement included a flour mill, stagecoach stop and a sawmill. Logging was a main industry in the area and later agriculture. Potato crops were one of the main industries in Rush City. The first school opened in 1856 and the first post office in 1859. In 1869, the railroad was built and the town moved to the present-day location. The City became a municipal corporation in 1873 and a statutory city in 1974.

The population of Rush City in 2000 was 2,102 residents. Rush City has a mayor-council form of government and a full-time city administrator. The city does have a housing and redevelopment authority of its own. Rush City adopted its first comprehensive plan in 1967 which was then updated in 1980 and 1997. The city is currently in the process of once again updating their comprehensive plan.

Shafer

Shafer is a city in transition from rural to urban in nature and is rapidly growing. The city is situated along both sides of US Trunk Highway 8 approximately six miles west of the Wisconsin border. The city of Shafer was first settled by Swedes in 1853 and called Taylors Falls. It was renamed in 1873 for Jacob Shafer who as early as 1847 cut hay in the local meadows. The village was settled and its first post office established in 1881 when the railroad arrived. As many as six trains a day passed through the village in its prime. The city was incorporated in 1922 and originally developed because of the influence of the now abandoned railroad branch line that extended east-west through the community.

The 2000 census indicated that the city of Shafer had a population of 343 residents. The City occupies approximately 428 acres of which 63.5% is developed with urban uses. Due to the amount of wetlands within the city limits, 107 acres remain within the corporate limits to accommodate most types of future land uses. The City of Shafer has a mayor-council form of government and a planning commission which makes recommendations to the council on planning and zoning related issues. Shafer adopted a comprehensive plan in 1999 which was revised in 2002.

Stacy

The city of Stacy is located along the Interstate 35 corridor on the western edge of Chisago County. Stacy was originally called Middle Branch for its location near the middle of the bank of the Sunrise River; it was renamed in honor of Dr. Stacy B Collins, an early resident, when the railroad came through. The post office was established in 1873. The village was not incorporated until 1923.

Stacy has a mayor-council form of government. In 2000 the population of Stacy was 1,322 residents. The city of Stacy comprehensive plan was revised in July of 1997.

Taylors Falls

Taylors Falls is located on the eastern edge of Chisago County nestled in the banks of the St. Croix River. Taylors Falls played a key role in the early settlement of the county as a logging town and a steamboat landing. The city served as the county seat from 1851 to 1865. The largest log jam ever recorded in Minnesota occurred here in June 1886 on the St. Croix River and stretched for two miles. Today tourism is the major industry of the city as many of the historical resources still exist in the city as well as the location of adjacent Interstate Park.

Taylors Falls has a mayor-council form of government, a planning commission, park commission, heritage preservation commission and an economic development commission. The population of Taylors Falls in 2000 was 951 residents. The city has completed its updated comprehensive plan.

Wyoming

The city of Wyoming is located in southwestern Chisago County along the Interstate 35 corridor approximately 30 miles north of the Twin Cities. The Carlos Avery Wildlife area is located directly to the west and northwest of Wyoming. Wyoming derived its name from Wyoming Valley in Pennsylvania. A colony of German and Dutch families from that region originally settled here in 1855. One of the early settlers, Lucius Trombler built a three story hotel that was the first stop north of St. Paul on both the stage coach and railroad lines. The village was platted in 1869, after the completion of the St. Paul and Duluth Railroad. Ten years later a branch line was built from Wyoming to Taylors Falls and operated until 1948.

The city of Wyoming has a mayor-council form of government, a full time city administrator, a planning commission, parks and recreation board, and economic development authority. In the 2000 the census count for the city was 3,048 residents. The city of Wyoming’s comprehensive plan was adopted 2000.

Townships of Chisago County

There are ten townships in Chisago County:

Amador	Lent	Sunrise
Chisago Lakes	Nessel	Wyoming
Fish Lake	Rushseba	
Franconia	Shafer	

Townships came into existence in the county during the 19th century to provide infrastructure – roads, fire and police protection- for people living outside cities.

Amador Township

The St. Croix River forms the township boundary on the north and east. Amador Township was organized October 11, 1859. The township of Amador contains a small unincorporated village of Almelund, founded by John Almquist, and located along Minnesota State Highway 95. Northern States Power Company once owned many acres of land in Amador Township that is now a part of the Wild River State Park. Amador Township does have its own fire hall. Almelund Threshing Show is an annual festival that recreates scenes from early farm harvest days. Today Amador Township is primarily home to farms and country homes. Wild Mountain Recreation Area is also located in Amador Township.

Chisago Lakes Township

The Chisago Lakes Township was organized in 1858. Known for its lakes, the township surrounds the Chisago Lakes communities of Center City, Chisago City, and Lindstrom. Most of the history of the township is found in the history of these three cities.

Fish Lake Township

Fish Lake Township is named for its lake and the outflowing creek. The township was organized three years after the end of the Civil War in 1868, the same year Fish Lake separated from Sunrise Township. The township of Fish Lake contains a small unincorporated village of Stark, named after Lars Johan Stark, the postmaster that served from 1867 to 1875.

Franconia Township

Franconia Village was organized and platted in 1858 but not incorporated until 1887. The village was dissolved by the Legislature in 1897. Franconia Township was settled and named by Ansel Smith in 1852. Today Franconia Township contains the world-famous Hazelden alcohol and drug treatment center in the extreme northwest edge of the township. Franconia today is home to mostly commuters and small farmers.

Lent Township

The Township of Lent was originally a part of Wyoming Township until it was separated by action of Chisago County in 1870. However, representatives of the new town continued to meet with Wyoming until an organizational meeting in March 1882. An important portion of the Carlos Avery Wildlife Management Area is located within Lent Township. The township is home to small businesses and people who commute to employment in the Twin Cities.

Nessel Township

Nessel Township was named after its earliest pioneer Robert Nessel. The township was separated from Rushseba and organized in 1871. The township contains Rush Lake and the small unincorporated area on Rush Point.

Rushseba Township

Rushseba is named for the Rush River and Rush Lake and after the Ojibwa name "seba" or "sippi" meaning river. The Township was organized in 1858. The St. Croix River forms the eastern boundary of the township.

Shafer Township

Organized first as Taylors Falls the name was changed to Shafer in 1873. The biggest spur to growth in the township's history was the arrival of the railroad in 1881.

Sunrise Township

The Township of Sunrise contains the Sunrise River and the unincorporated village of Sunrise. The township was organized on October 26, 1858 and was much larger than it is now due to the fact that the original contained what is now the City of Harris, old Branch Township, and the present township of Fish Lake. Wild River State Park follows the St. Croix River across Sunrise Township. The township remains home to residences and small farms.

Wyoming Township

Organized in 1858, the township originally included present Township of Lent, and part of Chisago Lakes Township. Wyoming was settled beginning in 1855 by several families who came primarily from Pennsylvania. The township contains a significant portion of Carlos Avery Wildlife Management Area.

Comfort Lake – Forest Lake Watershed District

The Comfort Lake-Forest Lake Watershed District (CLFLWD) is the County's only watershed district and plays an important role in the management of natural resources and water resources for a portion of the County. Coordination with the CLFLWD is critical for the continued environmental health of the County.

Intergovernmental Coordination Goals & Policies

Goal: Coordinate efforts between the County, municipalities, townships, State and Federal agencies to assure wise land use, effective and efficient infrastructure, appropriate economic development and the protection of natural resources.

Policies:

1. Chisago County will work with townships and municipalities to encourage them to work together to construct urban growth areas and orderly annexation agreements.
2. Chisago County will research the opportunity to expand the Transfer of Development Rights program to make it a multi-jurisdictional program.
3. Chisago County will coordinate joint meetings with city and township officials on land use and other planning issues.
4. Chisago County will continue the open planning process by soliciting input from townships, cities, special districts, surrounding counties and state agencies.

Goal: Chisago County will coordinate planning efforts between their own departments to ensure efficiency of resources and delivery of government services.

Policies:

1. The County will use the Comprehensive Plan to link together the various plans of each County department into an overall coordinated system.
2. The County will encourage each department to coordinate resources and services to provide the most efficient, planned and cost-effective delivery of government services.

Goal: Chisago County is committed to continuing a public participation process in planning activities by communicating with its residents and by creating the necessary climate to secure increased input from county residents.

Policies:

1. Chisago County will strive for increased resident notification and input on policy issues.
2. Chisago County will develop an outreach strategy to inform citizens of land use educational opportunities.
3. Chisago County will conduct periodic public information meetings to update county citizens on county projects and developments.
4. Chisago County will use various forms of media to educate the public regarding land use issues and all planning efforts, such as newspapers, newsletters, direct mailings, and the County Website.

LAND USE/GROWTH MANAGEMENT CHAPTER

February 2007



Chisago County Comprehensive Plan 2007

Land Use

The existing land use and land use trends are important factors in developing policies and preparing a future land use plan for the County. Land use is a major factor as it determines the physical and economic characteristics of the County as well as determines the level of public services which need to be provided.

A majority of land in Chisago County remains largely undeveloped, primarily in agricultural use, woodlands or wetlands. However, development is occurring at a rapid rate. The majority of development has occurred in the southwest area of the County and along I-35 on the western side of the County and the Northern Lakes Area.

The lakes area around Wyoming, Lindstrom, Chisago City and Center City has attracted significant residential development over the past 20-30 years and continues to be an area of growth, given proximity to employment centers in the eastern Twin Cities Metropolitan Area. Development also continues to occur along I-35, north to the County border.

Commercial development is found primarily within incorporated cities in the County. Unincorporated centers, such as Almelund, Rush Point, Sunrise and Stark also have a limited amount of commercial uses. Increased interest in commercial sites has occurred over the past several years along Highway 8, primarily in Wyoming Township.

In total there are 285,286 acres in Chisago County. Chisago County includes 18,864 acres of protected lakes, waters and wetlands (7% of the total county area). There are 91 lakes in Chisago County.

State-owned land accounts for a significant portion of land in the County. Carlos Avery Wildlife Management Area consists of about 8,000 acres, Wild River State Park 7,000 acres, Interstate State Park 295 acres and Chengwatana State Forest 250 acres.

Factors Influencing Land Use

The land use situation in the county has not been static but has been constantly changing, both quantitatively and qualitatively. Over time, a multitude of factors have shaped and changed land characteristics, affecting and altering policies and decisions. The present situation has been influenced by characteristics of population, culture, geographical location, natural resource base and many other factors. A brief review of some of the major influences is presented here to summarize their relationship to land use.

1. Geographical Location

The county is located in the glaciated east-central area of Minnesota, bounded on the east by the St. Croix River. The river was a major transportation route at the time of original settlement because it was navigable by steamboat as far

upstream as Taylors Falls. The county lies roughly one hour drive from the center of the Twin Cities on a route to Duluth.

2. Cultural Influences

The original settlers of Chisago County came from predominately an agricultural background. Subsistence agriculture on homesteads set the pattern for farm size, which has altered little in later years despite influences such as increased land prices, types of crops grown, and combining of smaller farms into larger landholdings or breaking up of large farms through inheritance or sale.

3. Population Characteristics

The population of the county was relatively stable until the last decade when it showed a rather marked increase and a continuing increase is expected. With more people coming into the county there has been a corresponding increase of demand on agricultural and open lands for urban and residential uses.

4. Natural Resource Base

The soil quality of Chisago County ranges from very good to unsuitable for agriculture and/or development. Originally, much of the land was covered by forest or oak savannah. Numerous areas of poorly drained or steeply sloping land could not be used for agriculture or residential development. The county has little in the nature of mineral wealth, but is adequately supplied with water resources, which have attracted both early settlers and recent in-migrants.

5. Residential Development Patterns

The major development corridors in the county are located around the northern lakes (Rush Lake, Goose Lake, Fish Lake, and Horseshoe Lake), adjacent to Interstate 35, in the southern lakes area and along Highway 8. In addition, new home construction is distributed throughout the county.

Some factors affecting land use in the county in the past that are still affecting land use in the county today include:

1. Population Increase

Perhaps the single most important factor affecting land use in Chisago County today and in the near future is the rapidly growing population. In-migration of new families has created a demand for more residential areas and support services, leading to conversion of agricultural and open space lands to urban uses.

2. Transportation System

Interstate 35, in conjunction with the remaining highway network within the county, has increased the accessibility of the county to the Twin City Metropolitan Area. People now find it quite feasible to commute to a job in the city and still reside in a relatively uncrowded environment.

4. Zoning Laws

Past and present zoning laws have had the goal of protecting agricultural lands from urbanization. Scattered small acreages have been developed for residential use.

5. Recreational Demand

Chisago County has the potential for providing recreational uses of the land; uses which have increased in importance in recent years. The Wild River State Park and Interstate Park have become important influences on the area as a major recreational area.

Land Use/Growth Management Goals & Policies

Overall Growth Management & Land Use Statements

Goal: Establish a comprehensive growth management strategy for Chisago County that promotes orderly and efficient growth of residential, commercial and industrial development while preserving the county's rural character.

Policies:

1. Chisago County will cooperate with townships and municipalities to develop urban growth areas and orderly annexation agreements.
2. Recognize and respond proactively to internal and external growth pressures.
3. In the land use plan, select locations for types of uses based on transportation needs and availability and the best economic development potential, making these inter-supportive of each other.
4. Encourage an integrated approach to land use, transportation and natural resources, including development review for: a sufficient level of supportive services (i.e. schools, jails, emergency services, etc) and infrastructure, compatibility of land use and natural features, and economic viability of the land use.
5. Work towards minimizing conflicts between different and/or incompatible uses by establishing standards, such as, physical barriers, landscape screening and/or setbacks to provide buffers between districts/uses.
6. Define growth management in terms of "public service areas" where growth will be expected, allowed or limited due to the availability of services.
7. Recognize the importance of gateways to the community, land uses along the corridor should be closely considered as they will reflect upon the community's image. (Hwy 8, Hwy 95, I-35 Interchanges).
8. Identify and preserve viewshed corridors along heavily traveled routes. Some options may include additional setbacks, and/or plantings.
9. Create a plan to restore or convert improperly used land by using incentives that will compensate for conversions. An example would be converting marginal land along a creek into a grass buffer strip to reduce run off into the surface water or using some alternative non-point source pollution reduction strategies such as rain gardens or vegetated swales.

Goal: Recognize the challenges and compatibility of present and future land use and strive for the most harmonious balance.

Policies:

1. Coordinate plans and work with all local governments and agencies responsible for the regulation of land use.
2. Promote opportunities to communicate with the citizens of Chisago County concerning land development and resource management.
3. Develop an outreach strategy to inform citizens of land use educational opportunities.
4. Encourage compatible land uses along bordering jurisdictions.

Residential Development Statements

Goal: Plan for the orderly and efficient growth of residential development in the County.

Policies:

1. Encourage non-farm residential development to be clustered on small lots in and around unincorporated rural village centers, areas that are considered marginal for agricultural use, and in locations with adequate road service.
2. Encourage density transfers and clustering techniques for non-farm rural residential development to preserve agriculture and environmentally sensitive areas.
3. Encourage higher residential densities and multiple family housing alternatives to be located in areas serviced by public sewer and water.
4. Provide a variety of rural housing opportunities, consistent with the natural amenities in the County and the protection of environmental systems.
5. Provide for the orderly development of safe and efficient housing opportunities in the County.
6. Preserve and/or enhance the character of established rural residential neighborhoods (homes on parcels 2 acres or larger with septic systems and wells) that are not planned for public wastewater service. Use incentives for private property owners to preserve trees and maintain lower-density development to maintain rural character.
7. Encourage cluster developments to create appealing, low environmental impact rural neighborhoods.
8. Only allow the location of multi-family residential development in areas where public sewer and water facilities are available or in Rural Village Centers that provide a proven on-site sewer and water technology system.
9. Support compatible agricultural and rural residential development in the County.
10. Develop and adopt provisions in development ordinances that encourage innovative site and housing unit designs including Open Space Designs.
11. Rural residents and developments can reasonably expect agricultural, forestry and mining activities within the vicinity of their homes. The County

should direct residents to resources explaining what newcomers might expect in the rural areas of Chisago County.

13. Explore options for a less cumbersome and less expensive method for landowners to subdivide their property into buildable parcels for the use of family members.

Commercial/Industrial Development Statements

Goal: *Plan for the orderly, efficient growth of commercial and industrial development in the County.*

Policies:

1. Encourage new commercial and industrial development that requires public sewer and water to locate within the county's cities in accordance with their Comprehensive Plans.
2. Encourage limited commercial developments which do not need public sewer and water to locate in areas with adequate road service within rural village centers.
3. Allow for home occupations and limited rural businesses on homesteads in agricultural areas as well as small, community based retail in the county's unincorporated rural village centers.
4. Clearly define and regulate or limit the type of commercial and industrial type uses that can be operated under the definition of a farm/agricultural use.
5. Indicate in the land use plan and zoning ordinance areas designated for commercial and industrial development, such as locations adjacent to I-35 and other areas near primary transportation routes that provide the best use of the land.
6. Consider the I-35 corridor as a location for commercial/industrial land uses.
7. Strive to provide land for commercial development to meet a standard of 5% to 6% of the total developed land in the county. Future locations for commercial development will primarily be based on the transportation system.
8. Establish performance standards for commercial and industrial development that promotes quality new development site design.
9. Allow for commercial and industrial districts where services are available and where land use conflicts between commercial/industrial and residential uses will not impede commercial and industrial growth.
10. Commercial recreation opportunities should be allowed in the Resource Protection district as long as performance standards are established and met.

Growth Management Strategy

Rural Village Center

- Rural centers (unincorporated areas) that have been historically formed shall be encouraged to add new housing units and possibly businesses, if such growth is consistent with their historic character and it is located as a contiguous extension of the existing village center.
- New homes will be supported provided on-site sewer and water standards are met. Under a conditional use process smaller lot sizes may be allowed if clustered/community septic and wells are used. Desirable design criteria shall be determined based upon a review of the community's pattern of houses, lots, streets, major building views, open spaces, trees and hills.
- These centers are intended to be areas of multiple uses to serve the local public which have a historic basis for their existence. These areas are defined as Almelund, Stark, Rush Point, Sunrise, and Palmdale.
- The village centers are planned to evolve as a small, self contained town and an alternative to urban sprawl.

Rural Transit Center

- Provide appropriate and centralized support facilities, and retail and service businesses adjacent to the Interstate 35 / County Road 17 highway interchange. (See Figure 13 for RTC boundaries.)
- Permitted uses include uses such as single family dwellings, public parking and transit facilities, local government administration and service buildings, agriculture uses, farm drainage systems, flood control and watershed structures and erosion control devices, temporary or seasonal roadside stands for sale of agricultural products, greenhouses or nurseries, forestry and sod farming, wildlife areas, forest preserves, public parks and other open space uses, and daycare.

Rural Residential Areas

- To accommodate and acknowledge existing conditions and those areas that are located well beyond any growth or expansion area of a municipality.
- Land that is suitable for residential but not commercial/industrial uses.
- The long-term predominant use of these areas is intended to be large-lot, low density residential development. However, long or short term temporary uses may include crop production, animal husbandry not involving new feedlots, forest management, other agricultural uses and sand and gravel operations.

Commercial/Limited Industrial Area

- Areas where there are legally existing commercial and/or industrial uses already in place.
- Minimum lot size dependent on use and area needed for water and on-site sewage treatment system.
- New development or redevelopment in this area must provide buffer from residentially zoned land and existing residential development.

Agriculture/Limited Development Areas

- Areas outside of highly developed areas that will remain more rural in nature.
- Includes areas intended for exclusive resource related use: areas intended primarily for agriculture and other resource uses, with limited rural residential development; recreational commercial and other resource related business uses; natural resource areas protected by easement or acquisition or limited due to site constraints; and areas which will accommodate a very limited amount of subdivision activity.
- Both traditional agriculture and larger hobby farms will be encouraged. Some residential development in this area will be allowed but it will be limited to a base density of 1 per 5 acres. Clustering will be encouraged, preserving most of the land area in larger parcels (20+acres) for agriculture, hobby farms, or open space.
- Base density will not necessarily mean the minimum lot size. Building eligibilities deriving from base density may be transferred from contiguous parcels under common ownership. Density transferred may not be used more than once for any piece of land.
- Any clustered subdivisions will require a conditional use permit. The conditional use process will consider whether or not the development is sited and designed in a manner to have minimal impact to adjacent agricultural uses, forestland, or other natural resources. Conditions should be attached to minimize impact to surrounding land uses, natural resources, historical resources and the environment. Such conditions may consist of landscaping criteria, buffering, and minimizing visual intrusion.
- Anyone building in this District should accept the rural environment as it is found.
- Allow other uses – essential services/public services, large scale land uses requiring a location in a unique rural land area, and small scale home occupations.

- Open Space Design developments will be allowed and encouraged in Agriculture/Limited Development Areas. Open Space Design will benefit from bonus density increases and may utilize TDC's to increase density within the development.

Figure 13 depicts the Growth Management Plan for Chisago County.

Growth Management Strategy

District	Description	Base Density	Minimum Lot Size	Clustering	Transfer of Development Credits
Rural Village Center	Historic unincorporated area and/or transit centers. Mixed use corresponding to historic nature of community. Growth is encouraged in these areas.	2 acres with incentives or density increases for clustering	To be determined by historic nature of community and wastewater needs being met	Allowed and greatly encouraged with incentives	Allowed and greatly encouraged with incentives
Commercial/Limited Industrial	Includes some existing commercial areas and some areas that may be reserved for future commercial uses.	Dependent on use and area needed for water and wastewater needs	Dependent on use and area needed for water and wastewater needs	N/A	Allowed
Rural Residential	Accommodates existing residential areas as well as other areas in townships that is planned for large lot, low density residential development.	2 acres	2 Acres or less if clustering used to increase density	Allowed and greatly encouraged with incentives	Allowed and greatly encouraged with incentives
Agriculture/Limited Development	Areas outside rural residential areas and other more highly developed areas that will remain more rural in nature. Areas intended to be primarily agriculture and other resource use with limited residential development.	1 per 5 acres	5 acres unless cluster option used	Allowed but no direct density increase, other incentives provided for clustering	Allowed and greatly encouraged with incentives
Rural Transit Center	Provide appropriate and centralized support facilities, and retail and service businesses adjacent to the Interstate 35 / County Road 17 highway interchange.	Dependent on use and area needed for water and wastewater needs	Dependent on use and area needed for water and wastewater needs	Allowed and greatly encouraged with incentives	Allowed and greatly encouraged with incentives

Growth Management Plan Chisago County

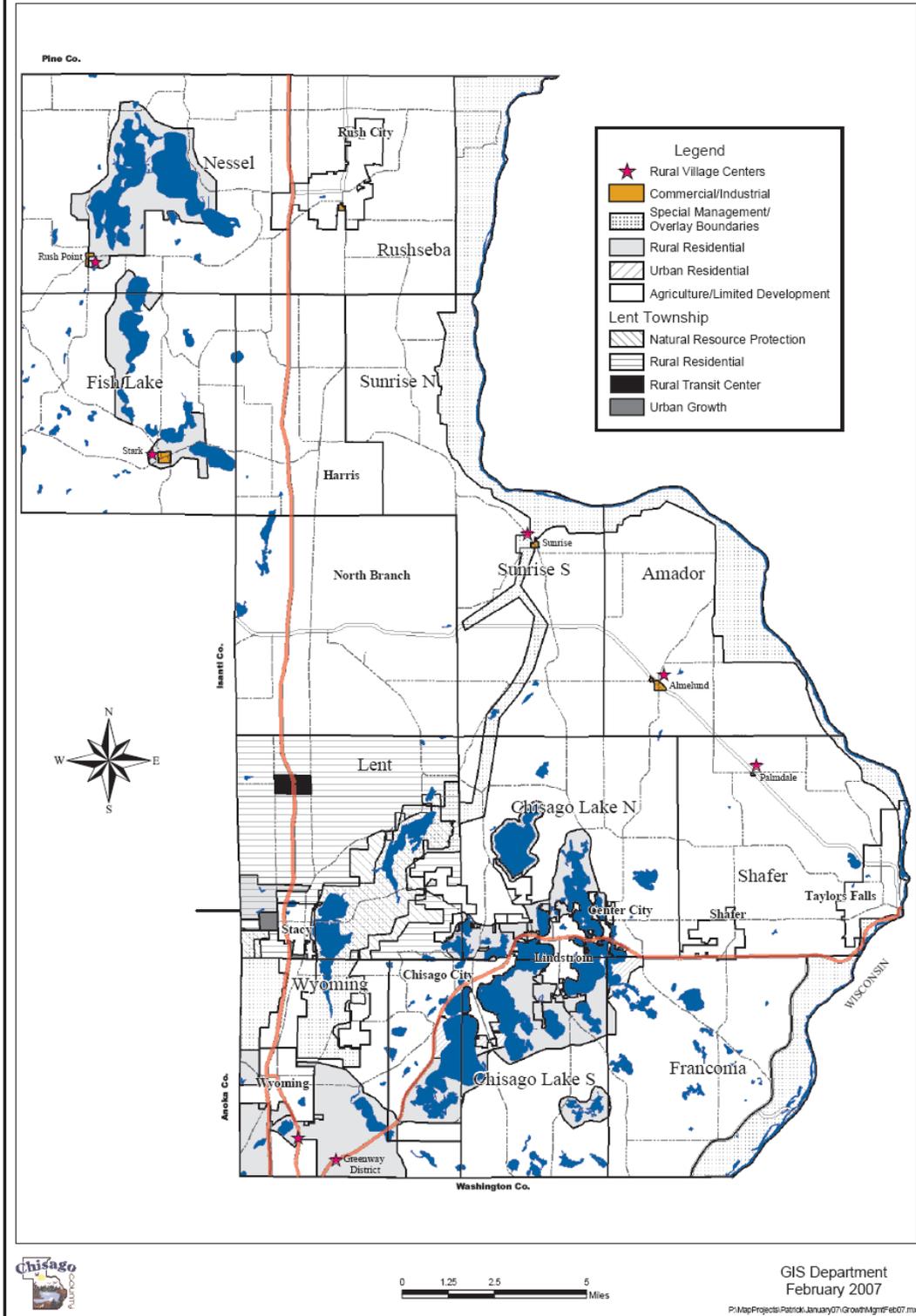


Figure 13

IMPLEMENTATION CHAPTER

February, 2007



Chisago County Comprehensive Plan 2007

Implementation Tools

The following provides a general overview of some of the specific tools available to county governments when they implement comprehensive plans:

Primary Tools

Capital Improvement Program (CIP)

Capital improvement programming is a financial planning process used by local governments to prioritize their investments in public infrastructure. The infrastructure includes items such as highways and streets, water and sewer facilities, parks, trails, and public buildings. Typically capital improvement programs are developed every one or two years and list out potential projects and costs over a five-year period. Recommended projects developed in a comprehensive plan should be incorporated into the County's CIP. Thus, the CIP process represents a primary means of implementing the comprehensive plan.

Official Mapping

The Minnesota State Statutes authorizes local governments the ability to adopt official maps after the adoption of transportation and public facilities plan. An official map is a map that shows areas in the community where land for future streets or road widening, parks and other public facilities is needed.

The primary purposes of official mapping is to 1) communicate with property owners, developers, and citizens where these lands are located and 2) prevent or forestall the construction of buildings or other private improvements on the designated lands. It is designed to save the public expense of paying for buildings and improvements in such designated corridors.

To adopt an official map, the County must work through the process established in the state law. This includes a review of the map by the Planning Commission and a public hearing held by the County Board. Property owners and citizens alike should be a part of the official mapping process.

Subdivision and Zoning Controls

While zoning has received the most emphasis in the past as a means to implement comprehensive plans, subdivision regulations have become recognized just as important of a tool. Subdivision regulations are intended to guide the division of land and ensure that adequate public facilities are constructed or provided with the development. Subdivision regulations prescribe standards for site design, lot and block design, street and utility improvements, rights-of-way and easements, etc. In summary, subdivision regulations ensure that the costs of public improvements as created by a

proposed development are borne by the developer and subsequent landowners rather than by the established community.

Zoning ordinances are designed to control land uses. They consist of a zoning map and supporting ordinance text. The zoning map divides the community into zoning districts and the text describes regulations for the use of land within those districts. Zoning regulations typically include a list of the uses that are permitted, lot sizes, setbacks, density standards, etc. They can also include design controls on the maintenance and upkeep of property.

Implementation Steps

Upon adoption of the 2007 revision of the Comprehensive Plan, County Staff will set about to update the County's regulations. Documents to be revised include the following:

- Zoning Ordinance
- Subdivision Ordinance
- Shoreland Management Ordinance
- Sewage and Wastewater Treatment Ordinance
- Solid Waste Management Ordinance

Before the Subdivision Ordinance, Shoreland Management Ordinance, Sewage and Wastewater Treatment Ordinance and Solid Waste Management Ordinances are rewritten, public input will be obtained.

In addition, Staff will be drafting new ordinances for consideration by the Planning Commission and County Board, including the following:

- Shade Tree Pest Ordinance
- Adult Uses/Specialty Retail Ordinance
- Wind Power Generation Ordinance
- Communication Tower Ordinance
- TDR/TDC Ordinance



OFFICE OF COUNTY RECORDER
Chisago County, Minnesota



I hereby certify that this document was filed in this office
on 4/11/2007 at 10:30:00 AM and was duly
recorded as document number **A-483667**

THORA G FISCO -County Recorder, by _____ Deputy.

Well Certificate: ___ Received ___ Not Required ___^p

Fees:

Total \$.00

Received from/return to:
CHISAGO COUNTY ADMINISTRATOR
ATTN: DEANNA