

CITY OF GLENWOOD CITY 2005 - 2025 COMPREHENSIVE PLAN



Prepared by:
GLENWOOD CITY PLAN COMMISSION

Adopted by:
GLENWOOD CITY CITY COUNCIL
May 2005

Planning Assistance Provided by:



Ordinance No. 2005-01

An Ordinance to Adopt the Comprehensive Plan of the City of Glenwood City, St. Croix County, Wisconsin.

The City Council of the City of Glenwood City, St. Croix County, Wisconsin, do ordain as follows:

Section 1. Pursuant to Sec. 62.23(2) and (3), Wis. Stats., the City of Glenwood City is authorized to prepare and adopt a comprehensive plan as defined in Sec. 66.1001(1)(a) and Sec. 66.1001(2), Wis. Stats.

Section 2. The City Council of the City of Glenwood City, Wisconsin has adopted written procedures designed to foster public participation in every stage of the preparation of a comprehensive plan as required by Sec. 66.1001(4)(a), Wis. Stats.

Section 3. The Plan Commission of the City of Glenwood City, by a majority vote recorded in its official minutes dated April 25, 2005, has recommended to the City Council the adoption of the document entitled ACity of Glenwood City 2005 - 2025 Comprehensive Plan@ containing all of the elements specified in Sec. 66.1001(2), Wis. Stats.

Section 4. The City has held at least one public hearing on this ordinance in compliance with the requirements of Sec. 66.1001(4)(d), Wis. Stats.

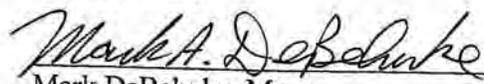
Section 5. The City Council of the City of Glenwood City, Wisconsin, does, by enactment of this ordinance, formally adopt the document entitled, ACity of Glenwood City 2005 - 2025 Comprehensive Plan@, pursuant to Sec. 66.1001(4)(c), Wis. Stats.

Section 6. This ordinance shall take effect upon passage by a majority vote of the members-elect of the City Council and publication as required by law.

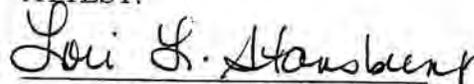
Adopted by the City Council of the City of Glenwood City this 2nd day of May, 2005.

AYES _____ NO _____ ABSTAIN _____ ABSENT _____

APPROVED:


Mark DeBehnke, Mayor

ATTEST:


Lori L. Stansbury, City Deputy-Clerk

Adopted: May 2, 2005

Published: June 14, 2005

RESOLUTION 2005-03

CITY OF GLENWOOD CITY, ST. CROIX COUNTY, WISCONSIN

RESOLUTION ESTABLISHING PUBLIC
PARTICIPATION PROCEDURES FOR COMPREHENSIVE PLAN

WHEREAS, the City of Glenwood City has decided to prepare a comprehensive plan under the authority of and procedures established by Sec. 66.1001 Wis. Stats; and

WHEREAS, Sec. 66.1001, Wis. Stats, requires that the governing body of the local governmental unit adopt written procedures designed to foster public participation at every stage of comprehensive plan preparation, and that such written procedures shall provide for wide distribution of draft plan materials, an opportunity for the public to submit written and oral comments on the plan materials, and a process for the governing body to respond to such comments.

WHEREAS, the City of Glenwood City believes that regular, meaningful public involvement in the comprehensive plan process is important to assure that the resulting plan meets the wished and expectations of the public; and

WHEREAS, the Agreement for Professional Services@ between the City and Cedar Corporation, a consulting firm, includes written procedures to foster public participation, ensure wide distribution of draft plan materials, provide opportunities for written comments on such materials, and provide mechanisms to respond to such comments.

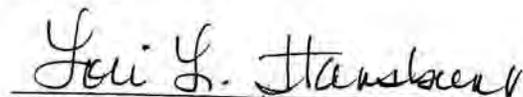
NOW, THEREFORE, BE IT RESOLVED that the Common Council of the City of Glenwood City hereby adopts the written procedures included in the Public Participation Approach@ with Cedar Corporation as its public participation procedures meeting the requirements of Sec. 66.1001, Wis. Stats. A copy of said procedure is attached as Exhibit A.

Adopted this 14th day of June, 2005.

CITY OF GLENWOOD CITY


Mark DeBehnke, Mayor

ATTEST:


Lori L. Stansbury, City Deputy-Clerk

CITY OF GLENWOOD CITY 2005-2025 COMPREHENSIVE PLAN

Prepared by:
City of Glenwood City Plan Commission

Adopted by:
**City of Glenwood City
City Council
2005**

Planning Assistance Provided by:

**Cedar Corporation
604 Wilson Avenue
Menomonie, WI 54751
(715) 235-9081**



May 2005

**CITY OF GLENWOOD CITY
2005-2025 COMPREHENSIVE PLAN**

Prepared Under the Direction of:

Mayor

Wallace Lindholm (former Mayor)
Mark DeBehnke (current Mayor)

City of Glenwood City Plan Commission

Alfred Shrank, Chairman
Linda Sittlow
Craig Anderson
Ron Jolitz
Louise Jeske
Wallace Lindholm
Jackie Ponto

City Council

Mark DeBehnke, Mayor
Jackie Ponto, Clerk
Steve Lee
Ben DeGross
David Graese
Terry Klinger
David Kremer
Monica Schemioneck
Dottie Murphy (former Council Member)

Citizen Advisory Board

Note on Comprehensive Plan Limitations

The Comprehensive Plan is intended to act as a policy guide for the future growth and development of the City of Glenwood City, Wisconsin. Many forecasts and ideas are represented to accomplish that growth. It should be noted that although the planning period is 20 years, there will be a need for modifications on a periodic basis to adjust for deviations from growth forecasts and unforeseen variables.

Maps and drawings found within the Comprehensive Plan are a compilation and reproduction of various sources and data. The maps are intended to be used for reference purposes only and should not be used as a substitute for an accurate site survey.

TABLE OF CONTENTS

	<u>Page</u>
Chapter 0	
Introduction	0-1
♦ Location	
♦ History	
♦ Glenwood City's Comprehensive Plan	
♦ Public Participation	
♦ Purpose of the Comprehensive Plan	
♦ Overall Goals of the Comprehensive Plan	
Chapter 1	
Issues and Opportunities	1-1
♦ Introduction	
♦ Purpose	
♦ Population Forecasts	
♦ Projections	
♦ Household Forecasts	
♦ Employment Forecasts	
♦ Age Distribution	
♦ Education Levels	
♦ Income Levels	
♦ Employment Characteristics	
Chapter 2	
Agricultural, Natural, and Cultural Resources	2-1
♦ Introduction	
♦ Groundwater	
♦ Topography	
♦ Slopes	
♦ Existing Land Cover	
♦ Forests and Woodlots	
♦ Prime Agricultural Areas	
♦ Soils	
♦ Septic Tank Absorption Fields	
♦ Dwellings with Basements	
♦ Surface Water/Watersheds	
♦ Watersheds	
♦ Flood Plains	
♦ Wetlands	
♦ Environmentally Sensitive Areas/Wildlife Habitat	
♦ Threatened or Endangered Species	
♦ Parks/Open Space	

- ◆ Survey Results
- ◆ Parks Classification and Assessment System
- ◆ Park Classification Definitions
- ◆ Parks and Open Space Inventory
- ◆ Goals, Objectives, and Policies

Chapter 3 Housing 3-1

- ◆ Introduction
- ◆ Population Projections
- ◆ Historical Housing Units
- ◆ Building Permits
- ◆ 2000 Household Characteristics
- ◆ Conditions of Housing Stock
- ◆ Needed Home Repairs and Housing Conditions
- ◆ Housing Vacancy Rates
- ◆ Housing Type and Ownership
- ◆ Housing Affordability Analysis
- ◆ Housing-to-Income Analysis
- ◆ Rental Affordability
- ◆ Housing Assistance Programs/Agencies
- ◆ Projected Housing Needs
- ◆ Goals, Objectives, and Policies

Chapter 4 Economic Development 4-1

- ◆ Overall Goal
- ◆ Objectives
- ◆ Background Information
- ◆ Industrial
- ◆ Industrial Park
- ◆ Commercial – Downtown
- ◆ Economic Development & the Community Development Survey
- ◆ Labor Force
- ◆ Education
- ◆ Economic Development Programs Available
- ◆ Goals, Objectives, and Policies

Chapter 5 Land Use..... 5-1

- ◆ Introduction
- ◆ Population and Land Use
- ◆ The Built Environment
- ◆ Land Use Inventory
- ◆ Existing Land Use Analysis
- ◆ Land Use – Residential
- ◆ Housing Density
- ◆ Population Density
- ◆ Land Use – Industrial

- ◆ Land Use – Institutional/Public
- ◆ Land Use – Commercial
- ◆ Land Use – Parks/Conservancy
- ◆ Land Use – Transportation
- ◆ Land Use – Undeveloped Vacant/Agriculture
- ◆ Future Land Needs Analysis
- ◆ Residential
- ◆ Low Density Development
- ◆ Commercial
- ◆ Industrial
- ◆ Agriculture
- ◆ Goals, Objectives, and Policies

Chapter 6 Transportation 6-1

- ◆ Introduction
- ◆ Modes of Transportation
- ◆ Local Streets and Highways
- ◆ Road Network
- ◆ Functional Road Classification System
- ◆ Arterials, Collectors and Local Roads
- ◆ Traffic Volume
- ◆ Commuting Patterns
- ◆ Criteria for Future Road Corridors
- ◆ Existing, Proposed and Future Roads
- ◆ Planned Area Roadway Improvements
- ◆ Glenwood City Meadows
- ◆ Future Street Improvements
- ◆ Road Expenditure Planning
- ◆ Bicycle/Walking Trails
- ◆ Proposed Future Sidewalks/Trails
- ◆ Air Transportation
- ◆ Ride Share Lots
- ◆ Transportation for the Disabled and Aging
- ◆ Rail Transportation
- ◆ Possible Funding Sources
- ◆ Goals, Objectives, and Policies

Chapter 7 Public Facilities and Utilities 7-1

- ◆ City Administration
- ◆ Police Department
- ◆ Fire Protection
- ◆ Ambulance Service
- ◆ Library Services
- ◆ Post Office
- ◆ Educational Services
- ◆ Cemetery

- ◆ Child Care Facilities
- ◆ Health Services
- ◆ Nursing Home
- ◆ Power Plants/Transmission Lines
- ◆ Solid Waste and Recycling Facilities
- ◆ Recycling
- ◆ Existing Wastewater Treatment Plant
- ◆ Existing Watermain System
- ◆ Existing Sanitary Sewer System
- ◆ Existing Storm Sewer System
- ◆ Goals, Objectives, and Policies

Chapter 8 Intergovernmental Cooperation 8-1

- ◆ Introduction
- ◆ Existing Agreements
- ◆ Potential Intergovernmental Opportunities
- ◆ Resolving Disputes
- ◆ Contacts
- ◆ Goals, Objectives, and Policies

Chapter 9 Plan Implementation..... 9-1

- ◆ Introduction
- ◆ Existing Implementation Tools
- ◆ Financial Tools
- ◆ Local Action

0 INTRODUCTION

Location

The City of Glenwood City is located on the eastern edge of St. Croix County in western Wisconsin (*Map 0-1*). It is located approximately 50 miles from both the Twin Cities Metropolitan Area and Eau Claire, Wisconsin, and is centrally located between I-94 and S.T.H. 64. This prime location offers its residents access to a wide variety of employment and retail opportunities.

Glenwood City is known for its topography. Nicknamed "*The City of Fifty-Seven Hills*," the local landscape provides a scenic backdrop while providing challenges for planning. Tiffany Creek runs along the western and southern reaches of the City.

History

The history of Glenwood City was centered around the local forests and the Glenwood Manufacturing Company, which built the first lumber camp in 1883. Families of German and Scandinavian descent came to work in the camps and soon, numerous wood related industries were formed, manufacturing everything from staves for barrels to hubs and spokes for wheels. The City was incorporated on April 18, 1895.

When the timber industry waned, farming naturally took over because of the good soils and cleared lands.

Today, Glenwood City is one of the few communities in the area that still has a strong "Main Street." Recent efforts motivated through the creation of a TIF District have continued to strengthen the downtown as the focal point of the City.

Glenwood City's Comprehensive Plan

Glenwood City began its Comprehensive Plan in late 2003. Throughout the process, the Plan Commission has identified strengths which it would like to preserve and areas in which there is room for improvement. The Plan was written to act as a guide for the growth of the City for the next 20 years.

Public Participation

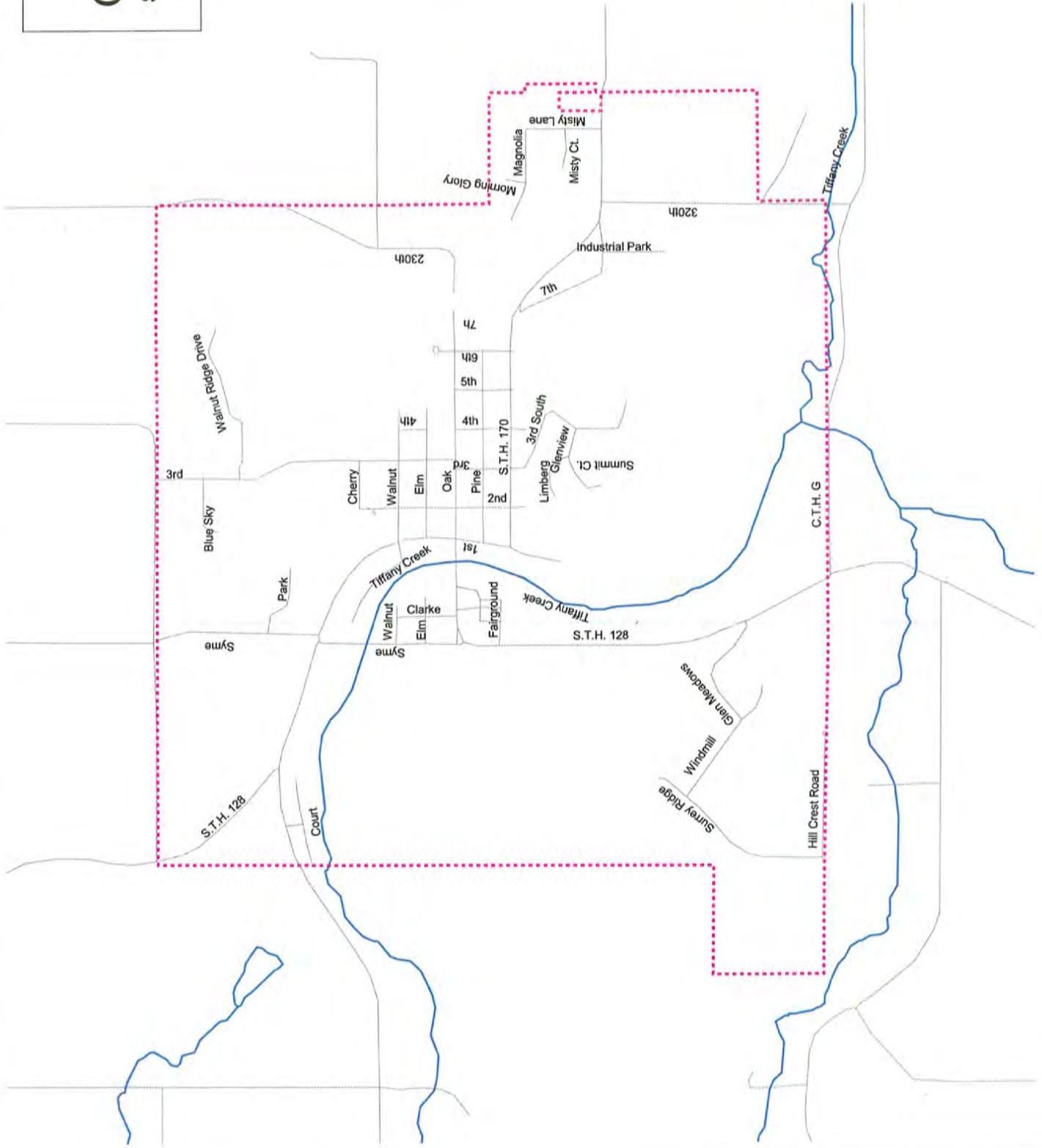
Throughout the planning process, Glenwood City has encouraged and recognizes the importance of public participation. In the early stages of the planning process, a Community Development Survey was conducted asking area residents their opinions on community facilities and services, housing, economic development issues and planning to name a few.

This was followed up by the formation of a Citizens Advisory Board (CAB). The CAB was asked to identify the strengths and weaknesses of Glenwood City and visualize what they hoped the City would look like in 20 years. The responses to the survey and CAB meeting were used as a catalyst to give the plan some direction and determine overall goals listed at the bottom of this chapter.

City of Glenwood City

St. Croix County, Wisconsin

0-1



Residents were also encouraged to participate in the plan by being invited to attend the Plan Commission meetings.

Purpose of the Comprehensive Plan

In October of 1999, the State of Wisconsin enacted legislation requiring every town, village, and city to be guided by a Comprehensive Plan by the year 2010. Wisconsin's "Smart Growth" planning initiatives were enacted to not only require long range growth planning, but to give communities a voice and allow them to define their own destiny. Prior to legislation only about one-fourth of Wisconsin communities had adopted Comprehensive Plans. Many of these Plans were simply outdated, inconsistent, or poorly conceived. As communities began to experience rapid and consistent growth in the 1990's, it became apparent that a statewide initiative was needed to provide communities with tools needed to accommodate growth and development.

Smart Growth planning is designed to provide a road map to the future. State statutes require these Plans to contain several "elements," each focusing on a unique sector of community composition. These planning elements required by the State of Wisconsin are:

- Issues and Opportunities
- Housing
- Transportation
- Utilities and Community Facilities
- Agricultural, Natural and Cultural Resources
- Economic Development
- Intergovernmental Cooperation
- Land Use
- Implementation

Each element is to be addressed in a manner which provides fluidity and consistency with the other elements, existing local and regional plans, and local and regional objectives. Communities must adopt all nine elements by January 1, 2010.

Smart Growth planning also requires citizen participation and involvement throughout the planning process ensuring that the local stakeholders are provided with a voice in the planning process. Through visioning and goal setting, a community not only determines where it wants to go, but also accepts the policies and requirements needed in order to realize this vision.

The goals of Smart Growth are to ensure that planning is responsible and comprehensive. Community objectives such as protection of environmental resources, sprawl control, urban renewal, and downtown revitalization can be accomplished thus enhancing the health and welfare of Wisconsin communities.

Overall Goals of the Comprehensive Plan

- To promote orderly growth through proper planning and responsible use of tax dollars.
- To promote the development of a variety of housing types that will meet the needs of persons of all age groups and income levels.
- To further enhance and revitalize the downtown business district using the downtown improvements project as a catalyst.
- To keep and promote a small town friendly atmosphere within the community.

1 ISSUES AND OPPORTUNITIES

Introduction

Critical to the planning process is an objective look at the situations the community is facing (at issues that need to be addressed and opportunities to make improvements). At any given time, a community can identify strategic issues, which if not dealt with, may inhibit the future quality of life of the community.

Strategic issues are issues that may be destructive to the community if not resolved, or they may present a positive opportunity to achieve a desired future. Most frequently, strategic issues focus on decisions and actions involved in changing long-term community goals, reallocating community resources, or implementing major changes in community policies or ways of doing things. Careful definition of strategic issues and opportunities enables public officials, business persons, and citizens to invest both time and dollars wisely in projects that are most likely to ensure the future health of the community.

Purpose

The purpose of the Issues and Opportunities Element is to provide background statistical information from which we will make future population, household, and employment projections. These projections will then be used throughout the various Comprehensive Plan elements. The majority of statistics are made available through, but not limited to, the U.S. Census Bureau.

Population Forecasts

Understanding the population of the Glenwood City is vital to the comprehensive planning process. Comparing trends to state and county data as well as neighboring communities allows us to develop a plan that meets the specific needs of the citizens of Glenwood City. By predicting future population, a more accurate assessment of future housing, economic, public facility, and land use needs can be made. It is important to remember that population projections are only estimates and that unforeseen events can alter these numbers significantly.

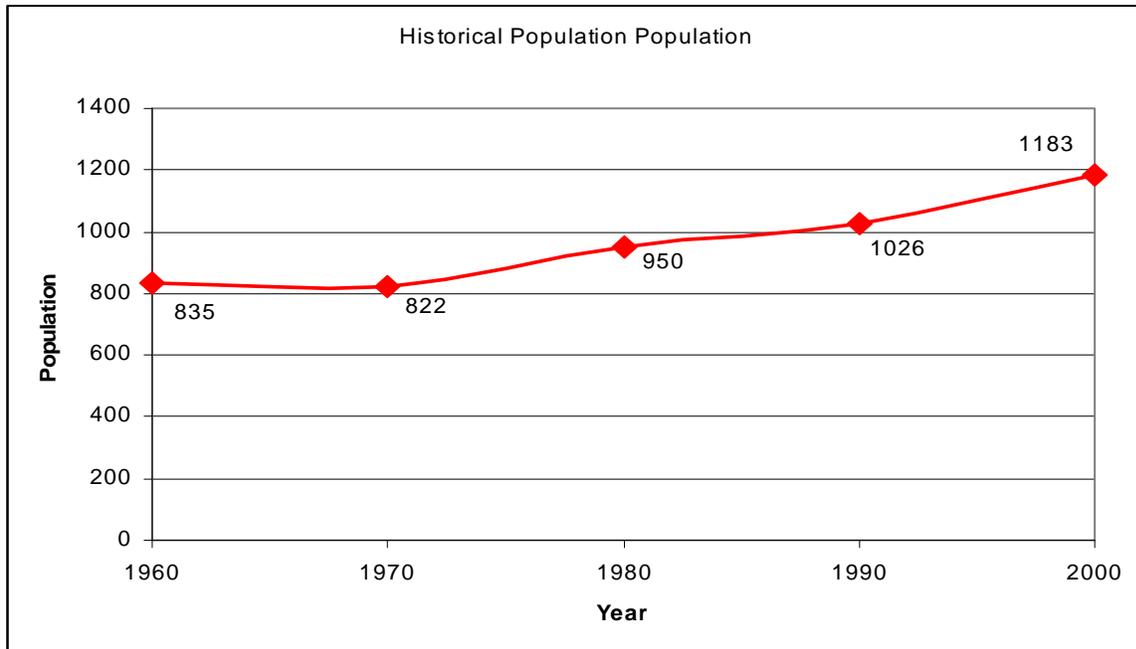
Between 1960 and 2000, the population of Glenwood City has grown considerably though at a somewhat sporadic rate. During this period, the City has grown from 835 to 1,183 residents for a 41.68% increase with the largest gains being made in the seventies and nineties (*Figure I-1*). At the same time, St. Croix County has grown by 116.6% with the fastest growth taking place in the communities closest to the Minnesota border. Much of the growth in the area can be attributed to the in-migration of Minnesota residents moving into the area due to less expensive housing and land, while still offering easy access to higher wages and more career options in the Twin Cities area. Other reasons for the elevated growth rates in St. Croix County might be attributed to the recruitment of Minnesota businesses to the county, as a result of Wisconsin's pro-business environment in the form of lower taxes on commercial and industrial property, and lower corporate income taxes.

Table I-1 Historic Population

	1960	1970	1980	1990	2000	% Chg 60-70	% Chg 70-80	% Chg 80-90	%Chg 90-00	% Chg 60-00
Glenwood City	835	822	950	1,026	1,183	-1.6%	15.6%	8.0%	15.3%	41.7%
St Croix Co.	29,164	34,354	43,262	50,251	63,155	17.8%	20.6%	16.2%	25.7%	116.6%

Source: West Central Wisconsin Regional Planning Commission and US Census Bureau

Figure I-1 Historic Population



Source: West Central Wisconsin Regional Planning Commission

Table I-2 shows many of the villages and cities located in St. Croix County along with their growth rates. Almost every Wisconsin community along the Minnesota border and near the Twin Cities Metropolitan Area has experienced large growth over the last 10 to 20 years and most feel this trend will likely continue. While the population of Glenwood City has increased by 15.3% between 1990 and 2000, the surrounding villages of Baldwin and Woodville have grown by 31.9% and 17.2%, respectively. There are several factors that can affect these figures such as capacity of utilities, developable land, and local attitudes towards growth.

Table I-2 Historic Population

Neighboring Communities	1960	1970	1980	1990	2000	% Chg 60-70	% Chg 70-80	% Chg 80-90	% Chg 90-00	% Chg 60-00
VILLAGES										
Baldwin	1,184	1,399	1,620	2,022	2,667	18.2%	15.8%	24.8%	31.9%	125.3%
Deer Park	221	217	232	237	227	-1.8%	6.9%	2.2%	-4.2%	2.7%
Hammond	645	768	991	1,097	1,153	19.1%	29.0%	10.7%	5.1%	78.8%
North Hudson	1,019	1,547	2,218	3,101	3,463	51.8%	43.4%	39.8%	11.7%	239.8%
Roberts	308	484	833	1,043	969	57.1%	72.1%	25.2%	-7.1%	214.6%
Somerset	729	778	860	1,065	1,556	6.7%	10.5%	23.8%	46.1%	113.4%
Star Prairie	331	362	420	507	574	9.4%	16.0%	20.7%	13.2%	73.4%
Wilson	140	130	155	163	176	-7.1%	19.2%	5.2%	8.0%	25.7%
Woodville	430	522	725	942	1,104	21.4%	38.9%	29.9%	17.2%	156.7%
CITIES										
Hudson	4,325	5,049	5,434	6,378	8,775	16.7%	7.6%	17.4%	37.6%	102.9%
New Richmond	3,316	3,707	4,306	5,106	6,310	11.8%	16.2%	18.6%	23.6%	90.3%

Source: West Central Wisconsin Regional Planning Commission and US Census Bureau

Projections

To develop future population projections, the Glenwood City Plan Commission considered a number of different factors. Factors used to help establish population projections included: recent census numbers which showed a 15.3% growth rate from 1990 – 2000, current trends in growth in both neighboring communities as well as St. Croix County, and Twin Cities expansion to the east which potentially will lead to greater job opportunities for Glenwood City residents. As a result, the Plan Commission agreed upon an average growth rate of 20% between 2000 and 2010. This would equate to an exponential growth rate of 1.843% a year.

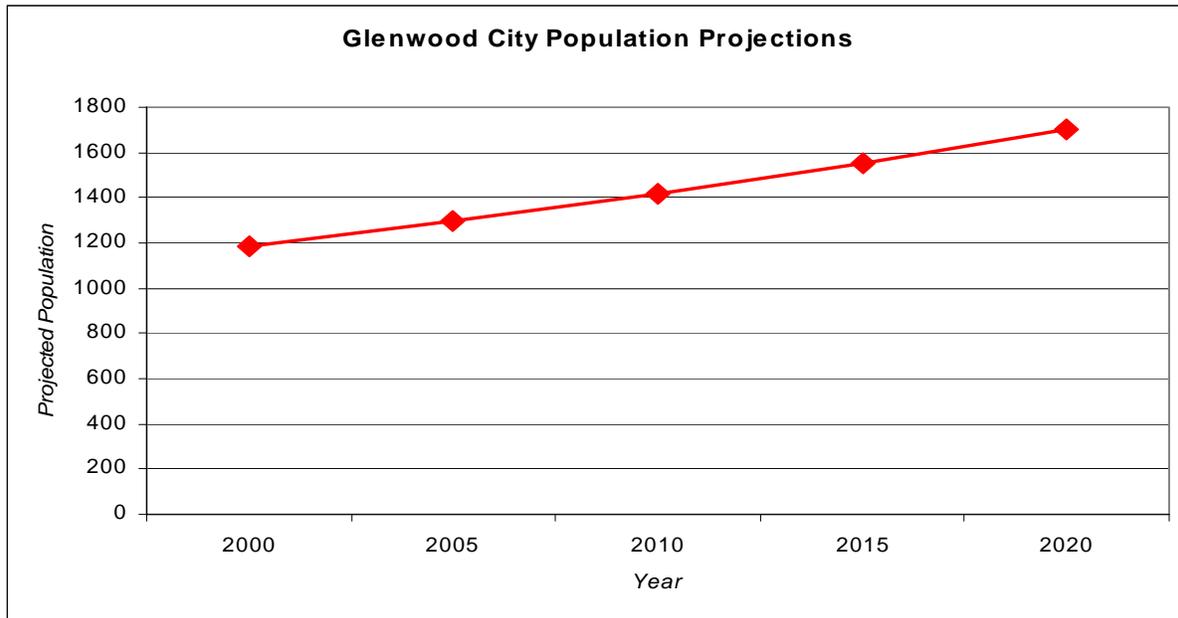
The 1.843% a year growth was taken and applied to the 2000 population and projected through the year 2020 (Table I-3, Figure I-2). The resulting population projections will be used throughout the Comprehensive Plan to calculate housing needs, land use densities, and labor force projections.

Table I-3 Population Projections

Year	2000	2005	2010	2015	2020
Max. Growth 20%	1,183	1,296	1,420	1,556	1,704

Source: Glenwood City and Cedar Corporation 2003

Figure I-2 Population Projections



Source: Glenwood City and Cedar Corporation 2003

Household Forecasts

Rapid population growth can leave a municipality unprepared to meet the housing needs of its residents. A shortage of housing often leads to higher housing costs as supply does not meet demand. Low and moderate income residents may find it increasingly difficult to find affordable housing. Glenwood City can anticipate the number of housing units needed by dividing the future population (*Table I-4*) by the number of persons per household. It should be noted that a 3% correction needs to be made in the projected population to account for persons who are institutionalized or living in group homes.

In 2000, the number of persons per household in Glenwood City was 2.48. This was consistent with the 1990 census data which listed persons per household at 2.47. Because the household size has changed little over the last 20 years, a household size of 2.48 was used in calculating additional housing units. Dividing future population projections (minus 3% correction factor) by 2.48 tells us that an additional 206 housing units will be needed by the year 2020, bringing the total number of households to 666. Of these households, approximately 69% will be owner-occupied while the remaining 31% will be renter-occupied. The percentage of owner-occupied housing has risen slightly over the past 10 years but is still consistent with other communities in the area. The future owner/renter-occupied housing percentages were derived by applying the 2000 figures to the future total number of households.

Table I-4 Housing Needs

Year	1990	2000	2005	2010	2015	2020
Population	1,026	1,183	1,296	1,420	1,556	1,704
Persons Per Household	2.47	2.48	2.48	2.48	2.48	2.48
Total Number Of Households	400	460	506	555	608	666
Additional Housing Units Needed	-	-	46	49	53	58
Owner-Occupied Housing	284	315	349	383	420	460
Owner-Occupied Percentage	71.0%	68.5%	69%	69%	69%	69%
Renter-Occupied Housing	116	145	157	172	188	206
Renter Occupied Percentage	29.0%	31.5%	31%	31%	31%	31%

Source: US Census Bureau 1990, 2000 and Cedar Corporation

Employment Forecasts

The employment forecasts were based on the 2000 Census Bureau employment rate of 97.5%, population projections, and percentage of population in the workforce (*Tables I-5 and I-6*). In 2000, the percentage of workers 16 years and over in the labor force was 63.7%. The future population projections were multiplied by the percentage of population in the workforce to arrive at the future labor force. The 2000 employment percentages were applied to these figures to determine the number of people in Glenwood City who will be working.

Employment forecasts along with employment and industry characteristics will be used in the Economic Development Element.

Table I-5 Labor Force Status 16 Years of Age and Up

	1990	% of Labor Force	2000	% of Labor Force
Population	1,026		1,183	
In Labor Force	433		575	100.0%
Employed	410	94.6%	561	97.6%
Unemployed	23	5.4%	14	2.4%

Source: US Census Bureau 1990, 2000

Table I-6 Future Labor Force

	2005	2010	2015	2020
Future Population	1,296	1,420	1,556	1,704
Future Labor Force	826	904	991	1,085
Employed	801	881	966	1,057
Unemployed	25	23	25	28

Source: US Census Bureau 1990, 2000

Age Distribution

Age statistics and trends can be a valuable tool for predicting future housing needs, public services improvements, and economic development. The population pyramids for Glenwood City reveal interesting trends (*Figures I-3 and I-4 and Table 1-7*). Some of the more significant trends are:

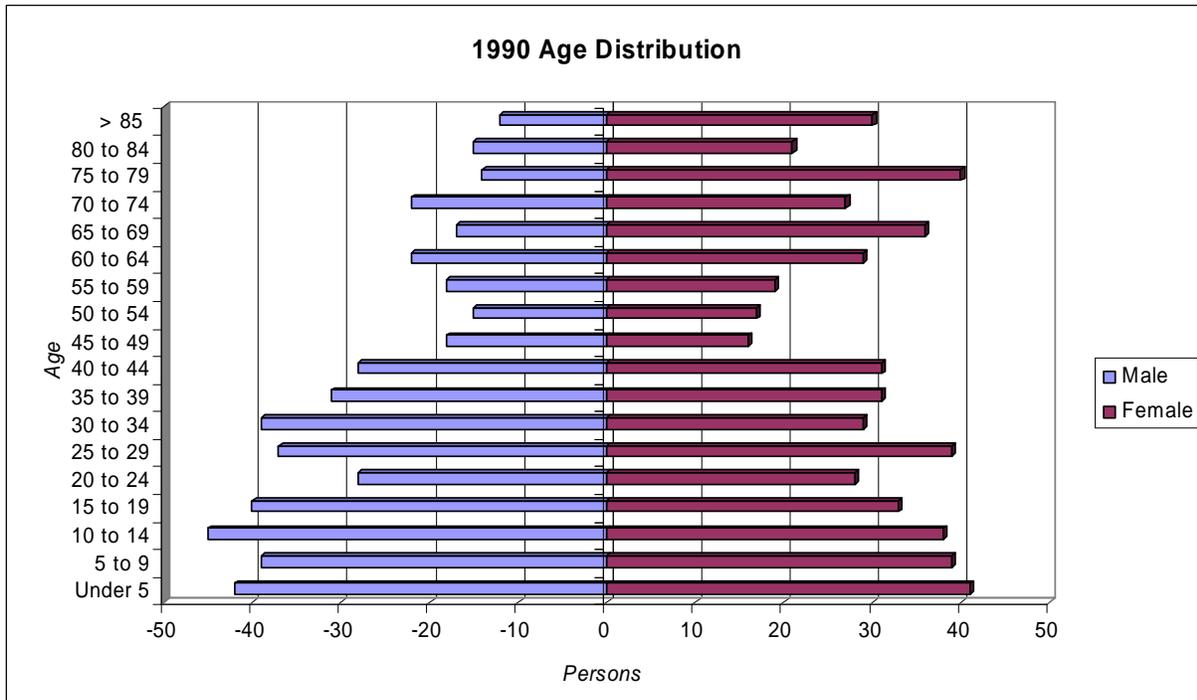
- Between 1990 and 2000 the total population of Glenwood City has increased by 157 people or 13.2%.
- Although there was 13.2% increase in the total population, percentages for age groups between 60 and 80 saw a decrease.
- Saw a large increase in 45 to 55 year old age group. This can most likely be attributed to baby boomers moving into the area.
- Saw a decrease in 25 to 29 year old age group. This is likely a result of people in this age group moving out of the community either for work or higher education.

Table I-7 Age and Sex for Total Population

	Male			Female		
	1990	2000	% Change	1990	2000	% Change
Total population	482	558	15.56%	544	625	14.89%
Under 5 years	42	36	-14.29%	41	38	-7.32%
5 to 9 years	39	48	23.08%	39	44	12.82%
10 to 14 years	45	58	28.89%	38	50	31.58%
15 to 19 years	40	51	27.50%	33	39	18.18%
20 to 24 years	28	40	42.86%	28	34	21.43%
25 to 29 years	37	29	-21.62%	39	33	-15.38%
30 to 34 years	39	41	5.13%	29	37	27.59%
35 to 39 years	31	41	32.26%	31	46	48.39%
40 to 44 years	28	46	64.29%	31	42	35.48%
45 to 49 years	18	36	100.00%	16	38	137.50%
50 to 54 years	15	34	126.67%	17	33	94.12%
55 to 59 years	18	23	27.78%	19	18	-5.26%
60 to 64 years	22	13	-40.91%	29	16	-44.83%
65 to 69 years	17	15	-11.76%	36	22	-38.89%
70 to 74 years	22	18	-18.18%	27	29	7.41%
75 to 79 years	14	12	-14.29%	40	38	-5.00%
80 to 84 years	15	8	-46.67%	21	27	28.57%
85 years and over	12	9	-25.00%	30	41	36.67%

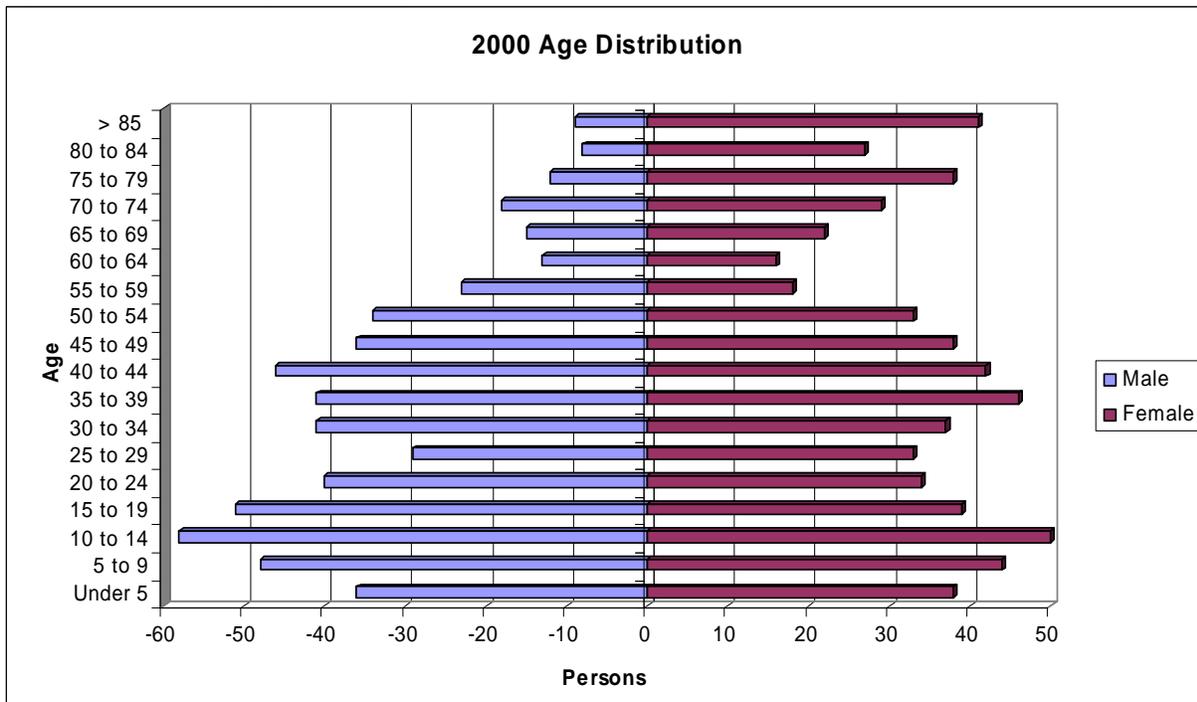
Source: US Census Bureau 1990, 2000

Figure I-3 1990 Population Pyramid



Source: US Census Bureau 1990

Figure I-4 2000 Population Pyramid



Source: US Census Bureau 2000

Education Levels

A person's educational attainment will have a large influence on many aspects of their lives. Housing, entertainment, income, and employment choices will all be affected. In turn, these choices will help influence how a city will grow and prosper. Glenwood City has seen increases in the amount of residents who have achieved high school graduation or equivalency (9.2%) and residents who have attained bachelor's degrees or higher with a modest increase of 1.9 percent. At the same time, the biggest drop occurred in the number of residents who have attained less than a 9th grade education going from 18.6% in 1990 to 10.1% in 2000 (*Table I-8*).

Table I-8 Education Levels

Year	1990	2000
Population 25 years and over	644	751
Less than 9th grade	120	76
9th to 12th grade, no diploma	77	85
High school graduate (incl. equivalency)	269	323
Some college credit, less than 1 year	65	125
Associate degree	37	39
Bachelor's degree	46	80
Graduate or professional degree	30	23
Percent high school graduate or higher	69.4	78.6
Percent bachelor's degree or higher	11.8	13.7

Source: US Census Bureau 1990, 2000

With the increase in educational attainment among its residents, Glenwood City may also see higher expectations of its schools, services, transportation system, economy, and use of its natural resources while at the same time, arrive at successful solutions when solving problems and working to achieve City goals.

Income Levels

Income levels as well as the number of households earning more money have seen a dramatic increase between 1990 and 2000. Much of this growth can be attributed to the many people who have moved to Glenwood City and work in the Twin Cities Metropolitan Area where higher wages and more employment options prevail. An increase in dual income families may also be a factor.

By 2000, Glenwood City's median household income jumped by \$14,294 or 63.1% (*Table I-9*). The largest increase in percentage of household earnings came within the \$50,000 and \$74,999 range. In 1990, 6.2% of all households earned between \$50,000 and \$74,999, while the percentage increased to 18.8% of all households by 2000 (*Figure I-4 and Table I-10*). The impressive increase in median household income may result in an increased demand for more housing, retail, and entertainment choices and should be considered when developing the Economic Development Element.

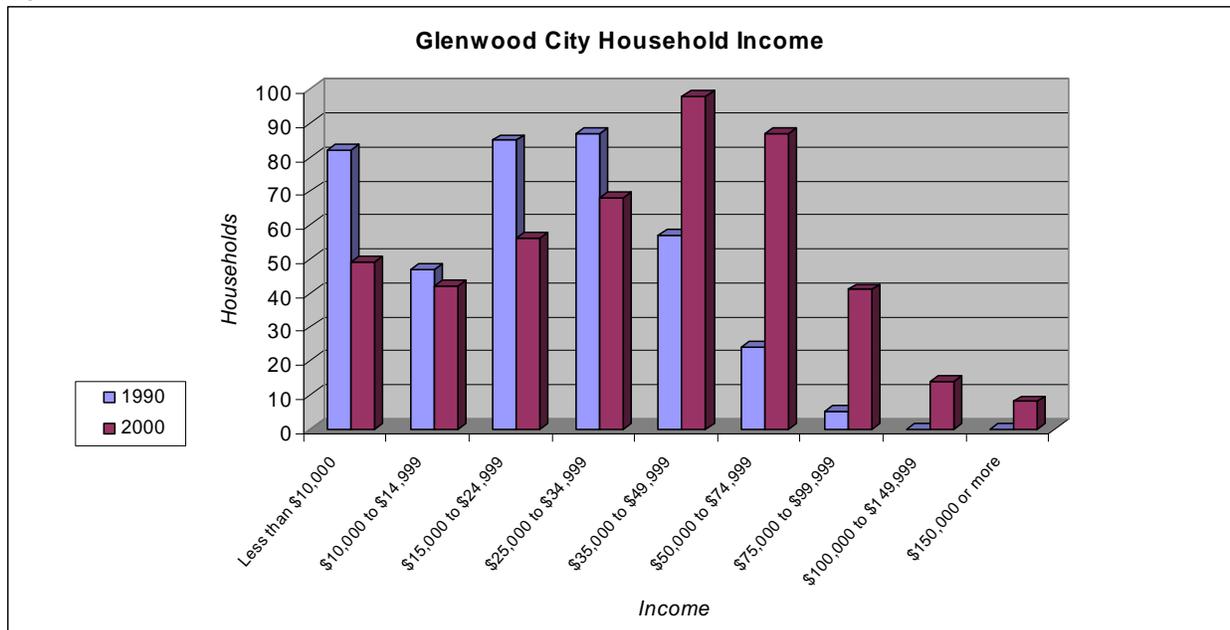
Although residents of Glenwood City have seen a substantial increase in household income, they still trail St. Croix County as a whole (*Table I-9*). Much of this can be attributed to Glenwood City's location. Glenwood City is positioned on the far eastern edge of St. Croix County increasing the distance to the Twin Cities Metropolitan area, and unlike many of the communities in St. Croix County, Glenwood City is not located on one the major corridors extending through the County.

Table I-9 Median Household Income

Median Household Income	1990	2000	% +/-
Glenwood City	\$22,670	\$36,964	+63.1%
St. Croix County	\$36,716	\$54,930	+49.6%

Source: US Census Bureau 1990, 2000

Figure I-4 Median Household Income



Source: US Census Bureau 1990, 2000

Table I-10 Household Income

	1989	% of Total	1999	% of Total	% +/-
Less than \$10,000	82	21.2%	49	10.6%	-40.2%
\$10,000 to \$14,999	47	12.1%	42	9.1%	-10.6%
\$15,000 to \$24,999	85	22.0%	56	12.1%	-34.1%
\$25,000 to \$34,999	87	22.5%	68	14.7%	-21.8%
\$35,000 to \$49,999	57	14.7%	98	21.2%	+71.9%
\$50,000 to \$74,999	24	6.2%	87	18.8%	+262.5%
\$75,000 to \$99,999	5	1.3%	41	8.9%	+720.0%
\$100,000 to \$149,999	0	0.0%	14	3.0%	-
\$150,000 or more	0	0.0%	8	1.7%	-
Totals	387	100.0%	463	100.0%	

Source: US Census Bureau 1990, 2000

Employment Characteristics

Employment characteristics remained fairly consistent between 1990 and 2000 (*Table I-11*). As the number of civilian employed increased, the percentage of workers per occupation remained about the same. Increases in the number of people working in the management, professional, service, sales, and office occupations reflect the higher educational levels of the residents.

Increases in the total number of residents employed do not reflect new jobs created in Glenwood City but most likely new residents who work in Minnesota or other Wisconsin counties.

The City will want to encourage and pursue business and industry that provides more opportunities for residents to work and spend disposable income in Glenwood City.

Table I-11 Employed Civilian Population 16 Years and Older

Occupations	1990	% of Total	2000	% of Total
Management, Professional, and Related Occupations	82	20.0%	126	22.4%
Service Occupations	94	22.9%	74	13.2%
Sales and Office Occupations	89	21.7%	102	18.2%
Farming, Fishing, and Forestry Occupations	9	2.2%	11	1.9%
Construction, Extraction, and Maintenance Occupations	61	14.9%	58	10.3%
Production, Transportation, and Material Moving Occupations	75	18.3%	190	33.9%
Totals	410	100.0%	561	100.0%

Source: US Census Bureau 1990, 2000

2 AGRICULTURAL, NATURAL, AND CULTURAL RESOURCES

Introduction

The Agricultural, Natural, and Cultural Resources Element offers an inventory of features, items, and/or land uses existing in Glenwood City in addition to goals to maintain or improve them. Agriculture represents not only a way to make a living, but provides for a landscape that most find aesthetically pleasing. Natural resources are what make this area unique to other areas and provides a quality of life that cannot be duplicated. Cultural resources reflect our history and how we have influenced the landscape whether through ancient artifacts or by the homes and institutions which shape the look of our community. Identification of these resources will help us steer development and the future growth of Glenwood City in areas that minimize the disturbance of these areas. The preservation and maintenance of these resources are the preservation and maintenance of our identity.

A thorough inventory and analysis of the natural and cultural resources of Glenwood City will serve to:

- Guide the development of the parks system.
- Protect environmentally sensitive areas from development.
- Guide development to specific sites capable of sustaining and supporting development in terms of the City's infrastructure.
- Preserve and enhance waterways and other natural areas.
- Coordinate with the land use plan.
- Protect and enhance the City's recreational opportunities.
- Guide the evaluation and upgrading of the present park facilities.
- Protect and enhance the community's cultural and historical resources.

Groundwater

Groundwater is the primary source for all water used for residential, industrial, and agricultural purposes within the planning district. The need for clean, reliable water supplies is essential as a community expands. Groundwater is stored in underground aquifers and drawn out through wells. These water supplies are recharged through rainfall and melt water, which seeps through the porous soil under the force of gravity, settling at an impervious layer such as bedrock. Recharge areas are typically located in the upland areas, with the low-lying areas being discharge zones such as lakes, streams, and wetlands. The bedrock geology of the Glenwood City area is predominantly sandstone with some dolomite.

Groundwater quality is closely linked to land use practices. Substances deposited on the land surface are transported through the porous soil to the aquifer where they may contaminate the water supply. Fertilizers, oil, lead, gasoline, and pesticides can leach into the aquifer causing contamination. Therefore, when planning for future land use it is vital that wellhead protection is considered to guard against possible groundwater contamination.

Map NR-1 shows the approximate directional flow of groundwater within Glenwood City. Groundwater flow patterns typically follow the surface topography as the water slowly seeps to the discharge areas.

Glenwood City is currently operating two municipal wells (*Map NR-1*). The wells have approved operating capacities of 250 and 1,100 gallons per minute (GPM) with normal daily pumpage equaling 972,000 gallons.

Topography

Known as the City of 57 Hills, Glenwood City's elevations range from approximately 985 feet, near the southeast corner of the City, to 1180 feet, near the north central half of the City (*Map NR-2*). The topography of Glenwood City is made up of rolling hills that blanket much of the northern and eastern portions of the City, to the floodplain which extends along the south side of the City. Careful examination of the topographic relief is necessary to determine areas where development should be avoided, or where potential constraints may be expensive or unpractical to remediate.

Slopes

The presence of steep slopes (generally greater than 20%) marks a potential barrier to future land development. Excessive sloping can pose an erosion hazard when these lands are developed, which in turn, can lead to increased sediment and pollutant deposits in waterways. Removal of hillside vegetative cover and mechanical cut/fill operations can disturb the natural drainage regime, resulting in excessive runoff and increased erosion.

Slopes within Glenwood City were derived using digital elevation models and ESRI's Spatial Analyst for ArcView (*Map NR-2a*). The map depicts the areas of excessive sloping as a percent slope (rise/run). For planning purposes, slopes in excess of 20% are considered to be steep slopes. Many areas within the Glenwood City have slopes that are in excess of the 20% benchmark.

City of Glenwood City

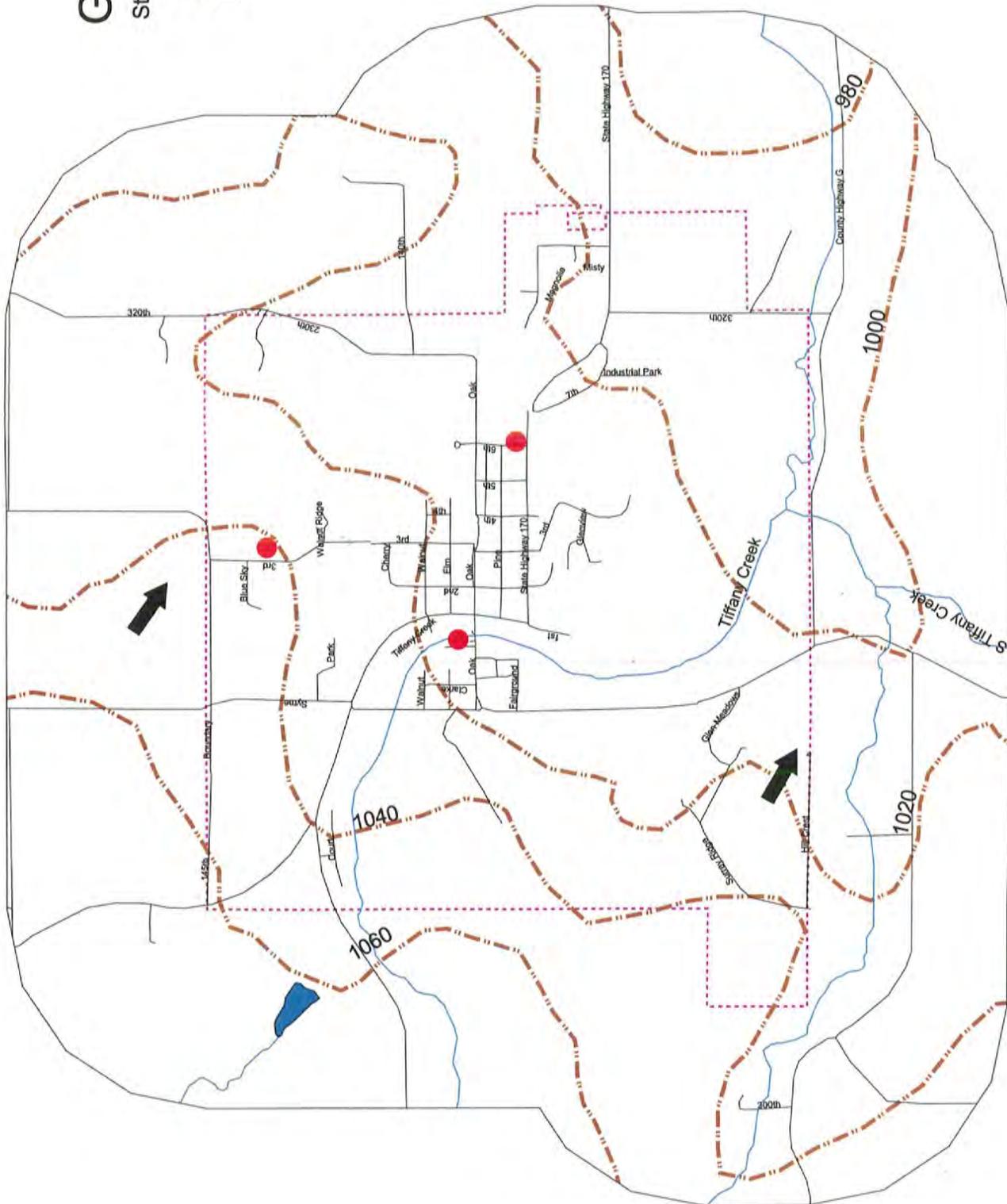
St. Croix County, Wisconsin

Ground Water Directional Flow

NR-1

LEGEND

-  Avg. Groundwater Elevation in Feet
-  Groundwater Flow
-  Well location
-  Roads
-  City Limits
-  Tiffany Creek



Source: Generalized Water Table Elevation Map of St. Croix County, Wisconsin
Geological and Natural History Survey, Lippelt, 1990

City of Glenwood City

St. Croix County, Wisconsin
Elevation
NR-2

LEGEND

Elevation Range	Color
1246 - 1279	Lightest Blue
1213 - 1246	Light Blue
1181 - 1213	Light Green
1148 - 1181	Yellow-Green
1115 - 1148	Yellow
1082 - 1115	Light Orange
1050 - 1082	Orange
1017 - 1050	Light Purple
984 - 1017	Lightest Purple

Roads
 City Limits
 Tiffany Creek



Existing Land Cover

Land cover analysis can be used to determine existing land uses and provide a “snapshot” of an area at a particular moment in time. Comparison of these data to historical records can provide insight into the evolution of growth and development patterns. Land cover classification and mapping data has been compiled through a consortium of government and private organizations in Wisconsin. The Wisconsin Initiative for Statewide Cooperation on Landscape Analysis and Data (WISCLAND) information provides a delineation of land cover based on LANDSAT satellite imagery from August 1991- May 1993.

Map NR-3 and Table NR-1 gives a breakdown of land cover within Glenwood City. The dominant land cover within the City is forestlands, which comprises over 35% of all lands within the district. Grassland comprises the second largest percentage of land cover within the district, with various types of agricultural lands being the third dominant land cover in the district. In contrast, areas that are classified as being urban, wetlands, and open water, comprise a very small portion of the planning district.

Table NR-1 Land Cover

LAND COVER CLASS	ACRES	PERCENT
AGRICULTURE	378	24%
BARREN	0	0%
FOREST	567	36%
GRASSLAND	480	30%
OPEN WATER	1	0.5%
SHRUBLAND	1	0.5%
URBAN/DEVELOPED	124	7%
WETLAND	25	2%
TOTAL	1,576	100%

Source: WISCLAND 1993

Forests and Woodlots

Woodlots and forests can have a positive affect on the people who are surrounded by them and contribute to a community's identity. Woodlots can provide commercial value whether through logging or recreational use. Trees also provide habitat for wildlife in forests and urban areas. The fragmentation of land can result in the disruption of a contiguous forest and can lead to problems between wildlife and humans.

Within a community, trees have several functions. Trees can be used for traffic calming, shading/energy reduction, park settings, erosion control, and general landscaping for residents and add to the livability of a community. Map NR-3a shows tree coverage in the Glenwood City area.

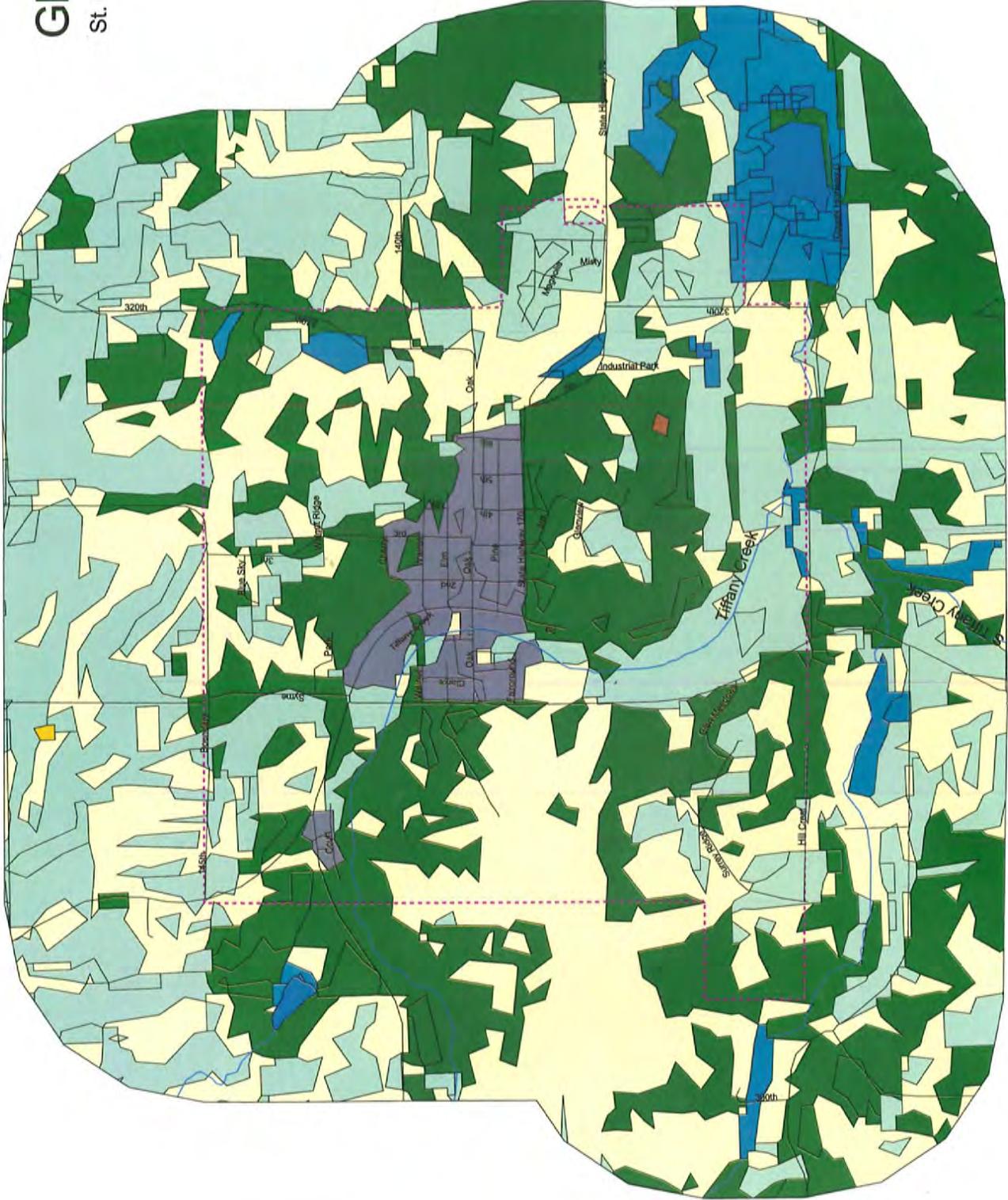
Local forestry programs, tree donations/adoptions, and subdivision ordinances are ways to ensure that the trees and forests that we enjoy today are around tomorrow.

City of Glenwood City

St. Croix County, Wisconsin

Land Cover

NR-3



Land Cover	Acres
AGRICULTURE	378.26
BARREN	0.00
FOREST	567.53
GRASSLAND	480.90
OPEN WATER	.81
SHRUBLAND/DEV.	.98
WETLAND	124.31
Open Water	25.23



Source: Wisconsin Initiative for Statewide Cooperation on Landscape Analysis and Data (WISLAND)
LANDSAT Thematic Mapper Satellite imagery 1991 - 1993

City of Glenwood City

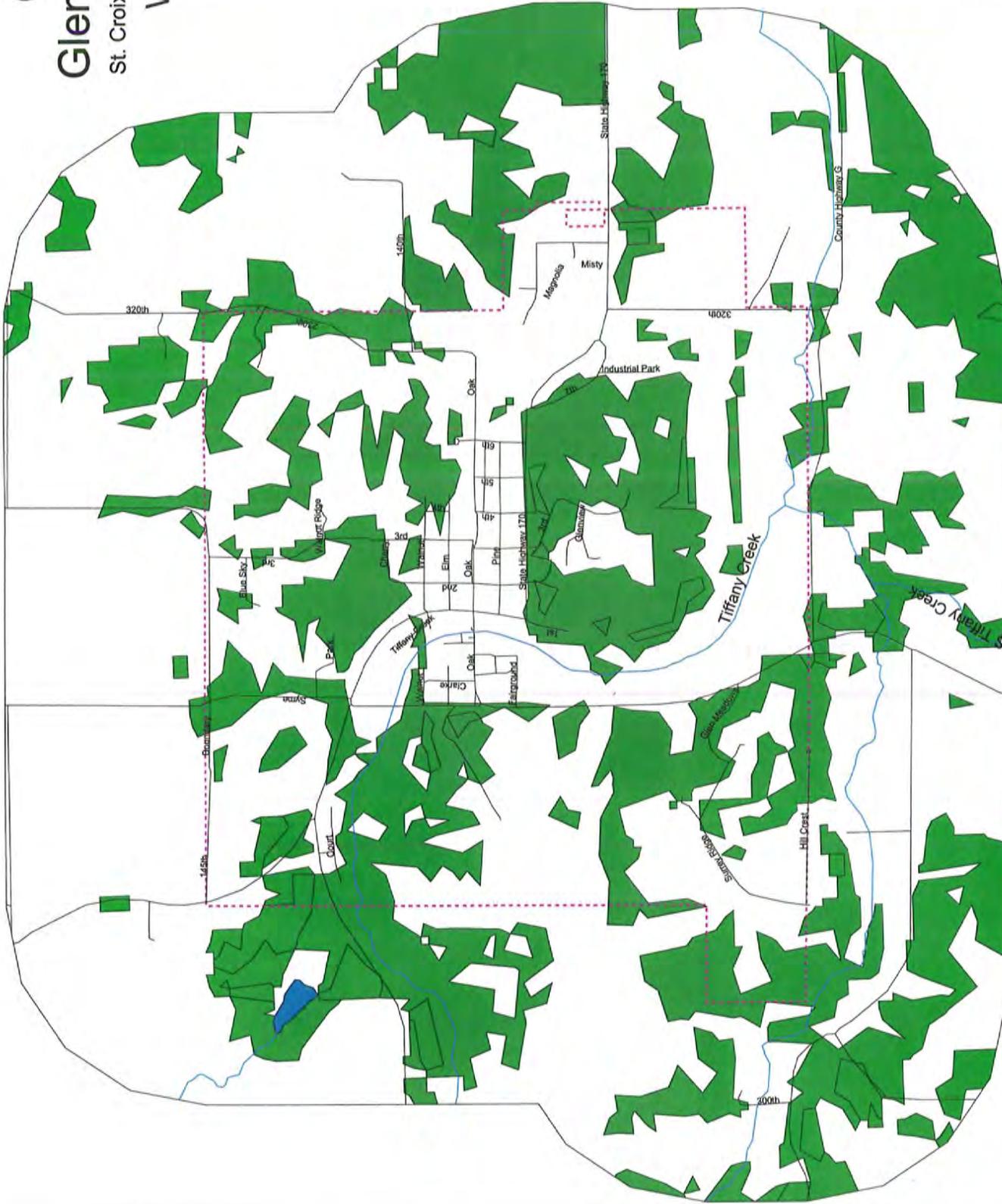
St. Croix County, Wisconsin

Woodlots

NR-3a

LEGEND

- Woodlots
- Roads
- City Limits
- Tiffany Creek



Source: Wisconsin Initiative for Statewide Cooperation on Landscape Analysis and Data (WISCLAND)
LANDSAT Thematic Mapper Satellite imagery 1991 - 1993



Prime Agricultural Areas

Prime agricultural lands provide economic benefit, as well as providing open space and aesthetic value. Preservation of these lands is important for the continued production of food and their byproducts. Farmlands are being converted to residential land uses at an ever increasing rate. Conversion of farmland to low density, scattered residential development represents a form of urban sprawl found in many communities across Wisconsin. The loss of these valuable lands is often attributed to the changing economic and social dynamics of agriculture, and the high demand for rural living.

Map NR-4 identifies the location of prime agricultural areas. The City may want to plan future roads and infrastructure that do not segment and retain prime agricultural area that are currently being used for farming.

Soils

Soil types play an important role when planning for the future of a community. The location and type of soil assists in the evaluation of a community's potential for accommodating growth and development. Limitations in soil capacity for drainage, strength, compaction, and attenuation capability can pose potentially costly problems to remediate. Soils may be unsuitable for specific land uses due to the presence of rock, depth to bedrock, saturation or shrink-swell potential. Some of the soil limitations can be overcome through engineering and site planning practices, but this is often very costly or impractical. In order to prevent soil limitations from becoming a problem, early identification of soil types, capabilities, and limitations will allow growth and development to be allocated to the most suitable areas.

Soil types within the planning area were determined using the St. Croix County Soil Survey, published by the Natural Resource Conservation Service. Each individual soil type has specific characteristics and limitations based on the chemical and structural composition of the soil. Soils are assigned ratings for specific common uses, such as dwellings with basements, septic tank absorption fields, and construction of local roads and streets. Soil types are also classified on their ability to support agricultural crops, recreational uses, and suitability for wildlife habitat.

Restrictive properties of particular soil types are conveyed through the soil ratings *slight*, *moderate*, and *severe*. Restrictive features identify the soil property that creates the limitation for the specified use. The extent to which the restriction will limit a soils use will depend on the severity of the limiting factor and/or cost incurred to correct the limitation.

A rating of *slight* indicates: the soil properties are generally favorable for the specified use. The limitations are generally minor and may be easily overcome. Soils that exhibit slight limitations can be developed for almost any urban use with few, if any, difficulties.

A rating of *moderate* indicates: some properties of the soil are generally unfavorable for the specified use. These properties may be overcome or modified by special planning or site design. A soil may be classified as having a moderate limitation for a variety of reasons, including excessive slope (8-15%), depth to bedrock, and shrink-swell qualities that may cause uneven settling.

A rating of *severe* indicates: soil properties are unfavorable for a specified use and present difficulty to overcome. Such soils require major soil reclamation, special designs, or intensive maintenance. Reasons for a soil being assessed a severe limitation include: flooding, excessive slope (<15%), shrink-swell potential, low soil strength, and a seasonal high water table. Soils with severe limitations should generally be regarded as unsuitable for urban uses and alternative sites should be examined.

Septic Tank Absorption Fields

Septic tank absorption fields are subsurface systems of tile or perforated pipe, which distribute effluent from a septic tank into the soil. Soil properties are evaluated for both construction of the system and the absorption of effluent. Soil suitability ratings for septic tank absorption fields are generally moderate to severe in the area (*Map NR-4a*). The limiting factors are determined to be slope and the rapid permeability of soils found near Glenwood City.

Due to the problems associated with septic tank absorption fields, it is recommended that those soils exhibiting severe limitations not be opened up to development until municipal sewers can be extended to provide service. It should be noted that special site planning and/or system design can accommodate development, but this is often very costly.

Dwellings with Basements

Soils are rated for the construction of dwellings fewer than three stories in height, which are supported by footings placed in undisturbed soil. Factors such as soil capacity to support load, resistance to settling, and ease of excavation is examined to assess soil suitability. Soil ratings range from slight to severe in Glenwood City, depending on location. Limiting factors for this particular use include slope, wetness, low strength soils, and shrink-swell potential of the soil. As seen on Map NR-4b, much of the City lies within the severe range much of what can be attributed to the topography of Glenwood City, and the large floodplain that extends throughout the corporate limits.

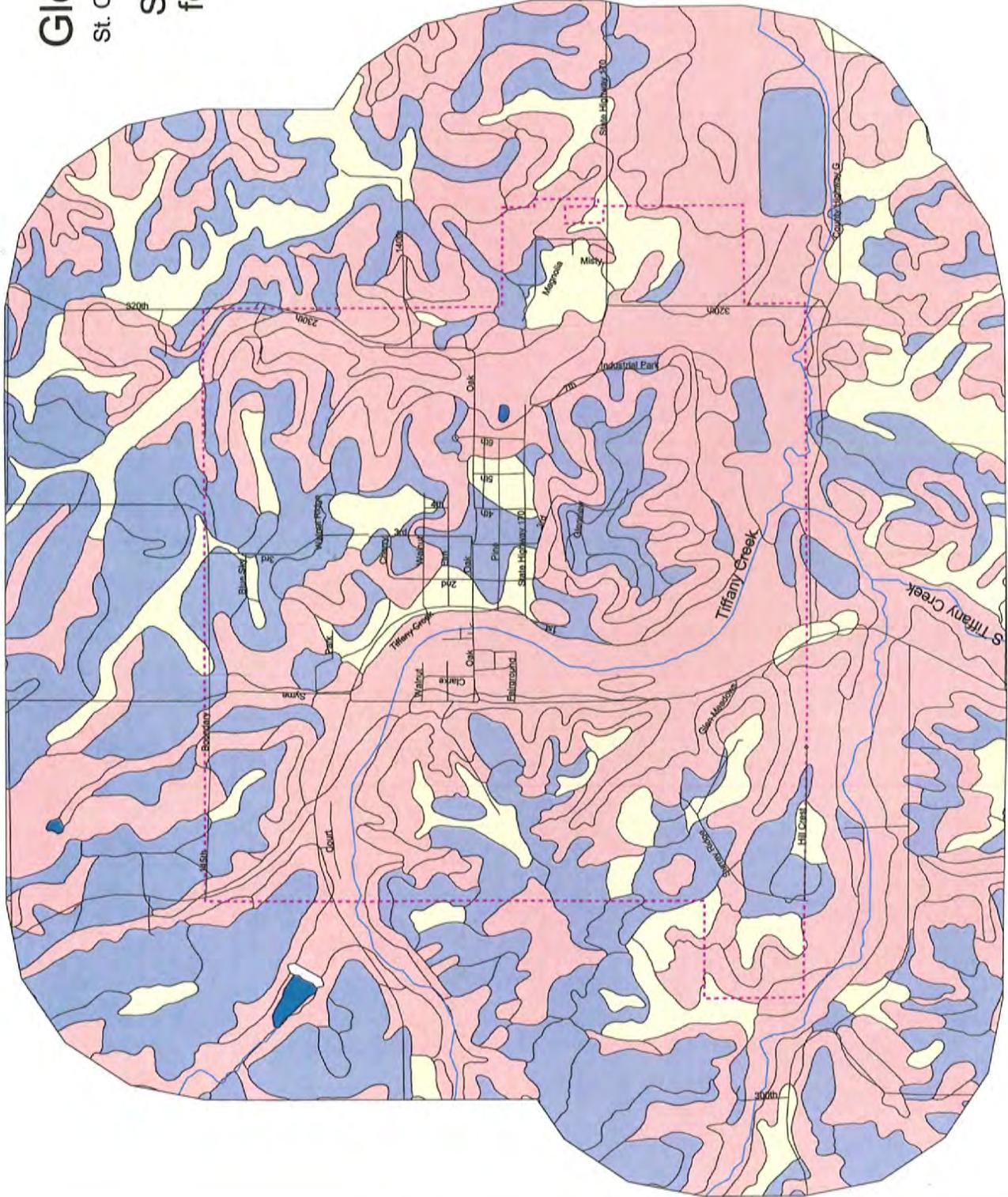
The purpose of analyzing soil is not to restrict development, but to inform residents of potential problems. Limitations can be overcome, in some cases, through proper measures such as site planning and engineering. Extra cost can be expected, though, in constructing proper streets, foundations and stormwater drainage systems, and minimizing erosion. Care should be taken when development is considered in the areas with severe rated soil.

City of Glenwood City

St. Croix County, Wisconsin

Soil Limitations for Basements

NR-4b



LEGEND

SEPTIC LIMITATIONS

- SEVERE (Red)
- MODERATE (Blue)
- LIGHT (Yellow)
- OPEN WATER (Dark Blue)

Roads (Solid line)
City Limits (Dashed red line)
Tiffany Creek (Blue line)

N

0 1000 Feet



Surface Water/Watersheds

Watersheds are land areas which drain to a nearby wetland, lake or stream. Land uses within a watershed can dramatically affect water quality in that watershed. As rain or melt water flows across roads, parking lots or agricultural fields, chemicals and sediment are transported to lakes and rivers where they are deposited, disrupting the natural system. With the exception of some small springs and Tiffany Creek, there is very little surface water within the planning area.

Shoreland areas are critical habitats found along surface waters. Shoreland zones are generally characterized by vegetated streambanks and lakeshores, which provide a buffer between development and surface water resources. Vegetative cover in the shoreland buffer serves to filter runoff, and to anchor and stabilize lake/stream banks. Shoreland zoning is mandated by the State of Wisconsin, and applies to all lands within 300 feet of a river or stream or to the landward edge of the floodplain or within 1000 feet of a lake, pond, or flowage. These regulations limit the type and amount of permitted development within the jurisdictional boundary, and regulate general land uses within this boundary.

Watersheds

Glenwood City is located in the southeast portion of the South Fork Hay River Watershed as depicted in (*Map NR-5*). The South Fork Hay River Watershed is 181.99 square miles in size and part of the Lower Chippewa Basin.

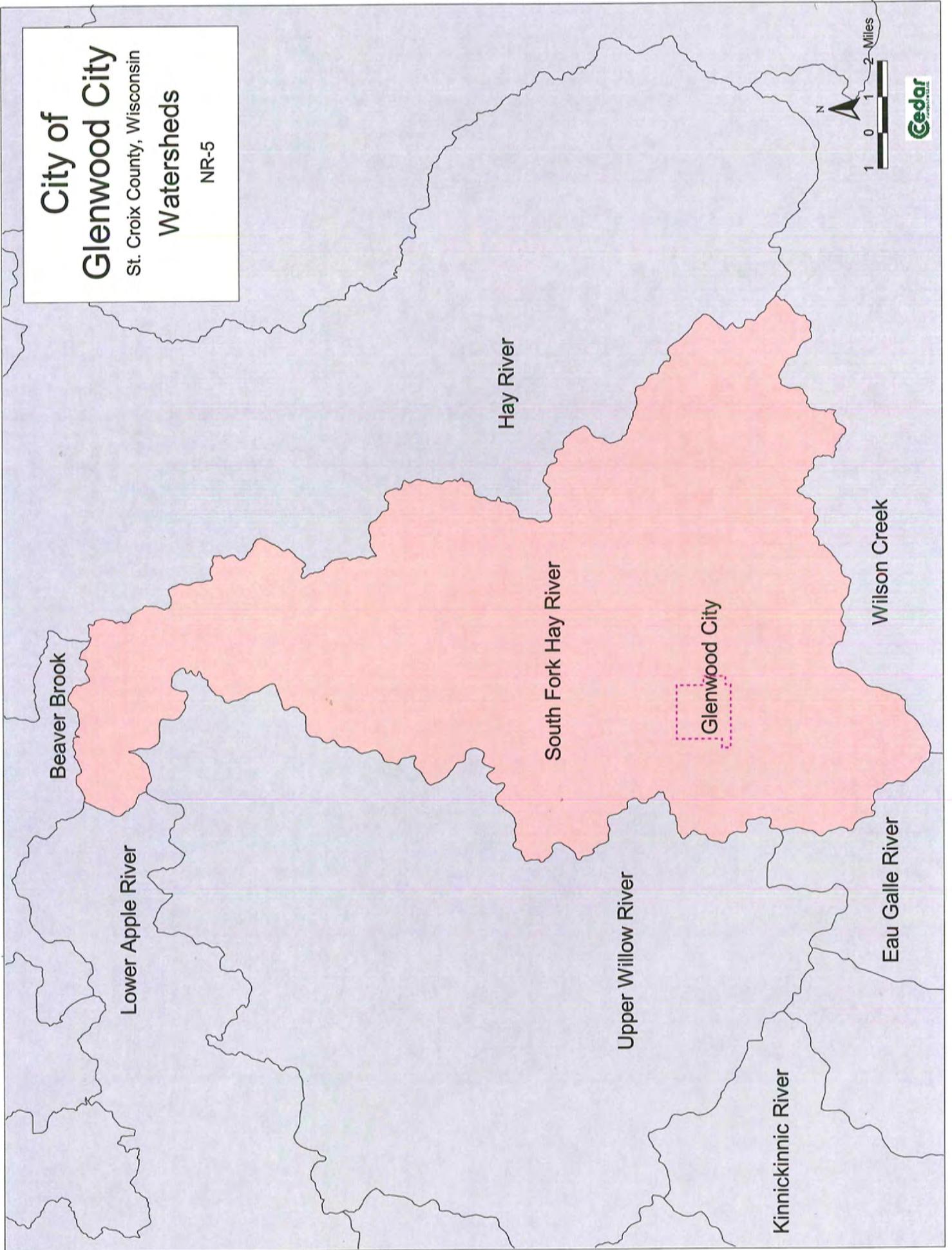
Watersheds are land areas where all water that is under it or drains off of it goes into a nearby lake or stream. Land uses within a watershed can dramatically affect water quality in that watershed. As rain or melt water flows across roads, parking lots or agricultural fields, chemicals and sediment are transported to lakes and rivers where they are deposited, disrupting the natural system. Contamination at one point within the watershed can have lasting effects 50 miles away or further.

City of Glenwood City

St. Croix County, Wisconsin

Watersheds

NR-5



Floodplains

Floodplains are lands that have been, or may be covered with water during a regional flood. Floodplains are comprised of two components, the floodway and floodfringe. Floodways are areas that directly adjoin the channel of a stream, and are characterized by deep, fast moving water. The floodway is typically the most dangerous part of a floodplain, and uses in this area should be limited to conservation areas or open space. The floodfringe is generally associated with standing or slow flowing water adjacent to the floodway. Development within the floodfringe is generally accepted, provided adequate floodproofing measures are in place. Section 87.30, of the Wisconsin Statutes, direct all counties, cities, and villages to adopt floodplain zoning ordinances. Development in floodplain areas should be discouraged in accordance with state law.

Glenwood City has approximately 500 acres of floodplain that extends across the southern and eastern portions of the City (*Figure NR-6*). At present much of the land within Glenwood City's floodplain is either vacant property or used for agricultural production. Glenwood City has two separate mechanisms that can be used to regulate development within the floodplain. The first is the floodplain ordinance the City adopted in September of 1986. The second is the local zoning regulations which classify lands within the floodplain as conservancy.

In relation to the floodplain, there are three earth and dam structures located above the City which directly impact the size of the floodplain (*Map NR-6a*). The dams are currently maintained by St. Croix County and are classified as high hazard dams. The dams have been beneficial to Glenwood City in that their presence has helped protect the City from floods and decreased the size of the floodplain. In the future the City will need to work closely with neighboring municipalities and the County on issues related to floodplain such as annexation, development and zoning. A close working relationship will help lessen the potential for damage to property as well as the environment.

Wetlands

Wisconsin statutes define a wetland as "an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic ('water-loving') vegetation and which has soils indicative of wet conditions." Wetlands provide many services such as natural flood control and act as filters by removing sediments and contaminants from water. Wetland areas also provide habitat for wildlife, including threatened and endangered species. Wetlands also serve as rest areas for migratory waterfowl during the fall and spring months. Historically, wetlands have been viewed as "wastelands," with no real economic potential. This view has resulted in wetlands being drained or filled and converted to other land uses. In the past decade, however, strict regulation of wetland conversion has slowed the loss of habitat and made conversion to other uses too expensive and impractical.

Wetlands within the planning district should be managed in accordance with the benefits they provide. Consideration of future land uses in the planning district should include emphasis on wetland habitats, and development should be guided to more appropriate areas. Map NR-7 shows wetlands within the Glenwood City planning area.

Environmentally Sensitive Areas/Wildlife Habitat

Environmentally sensitive areas and wildlife habitat are extremely important for the protection of aquatic and terrestrial wildlife and plants. The preservation and possible expansion of these areas is vital to maintain a diverse ecosystem. Areas that may be considered environmentally sensitive area or wildlife habitat are forests, lakes, streams, rivers, wetlands, steep slopes, and highly permeable soils.

Threatened or Endangered Species

The Wisconsin Natural Heritage Inventory Program run by the Wisconsin Department of Natural Resources (WDNR) maintains data on the location and status of natural features, rare species, and natural communities in Wisconsin. Because endangered and threatened species are so vulnerable, the WDNR will only generalize where occurrences have been found. At this point in time there have been no known occurrences of rare species and natural communities found within the planning area. However, if in the future, occurrences do occur within the planning area, the City will work closely with the WDNR and the U.S. Fish & Wildlife Service to help manage and protect identified endangered or threatened species.

City of Glenwood City

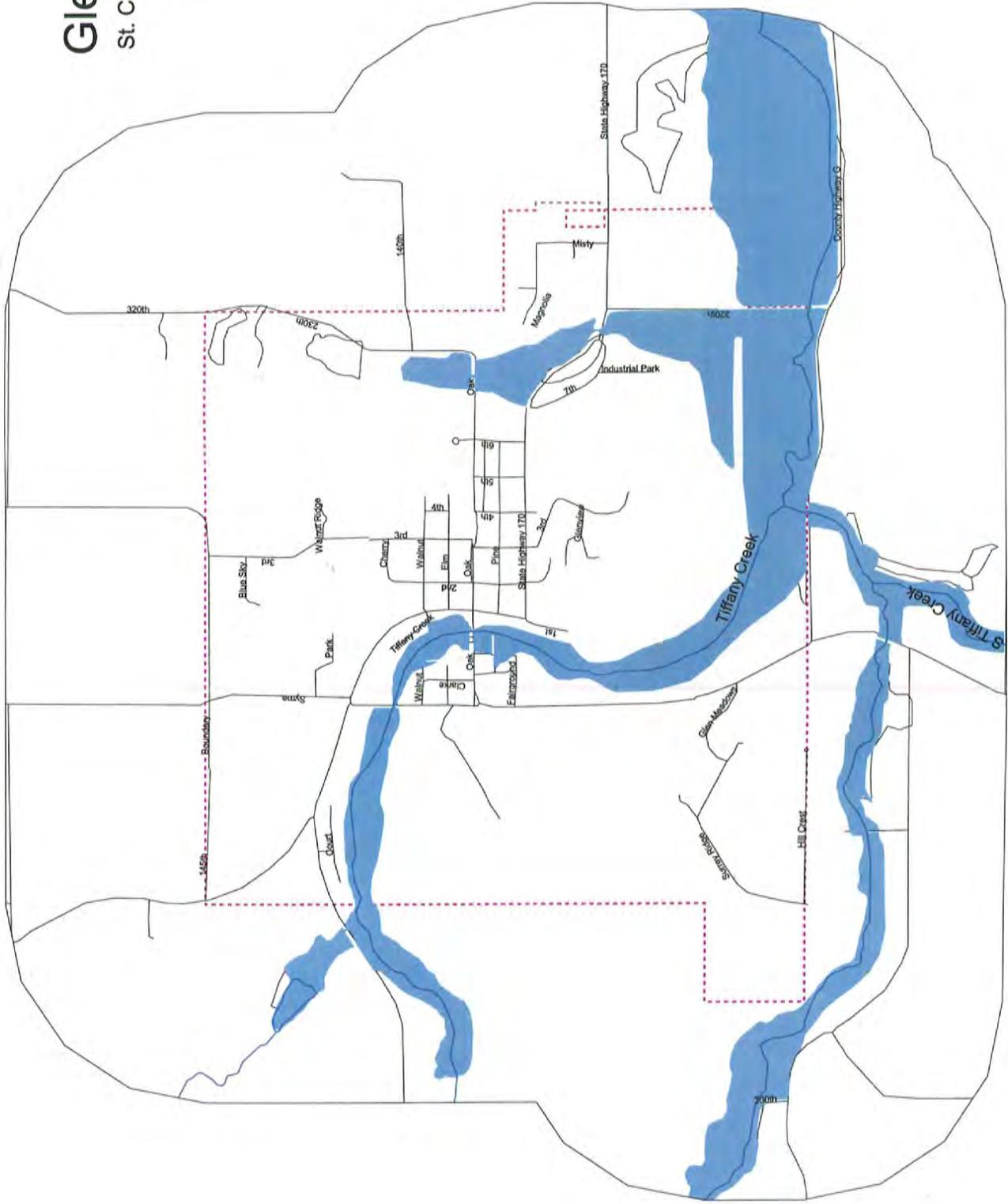
St. Croix County, Wisconsin

Floodplain

NR-6

LEGEND

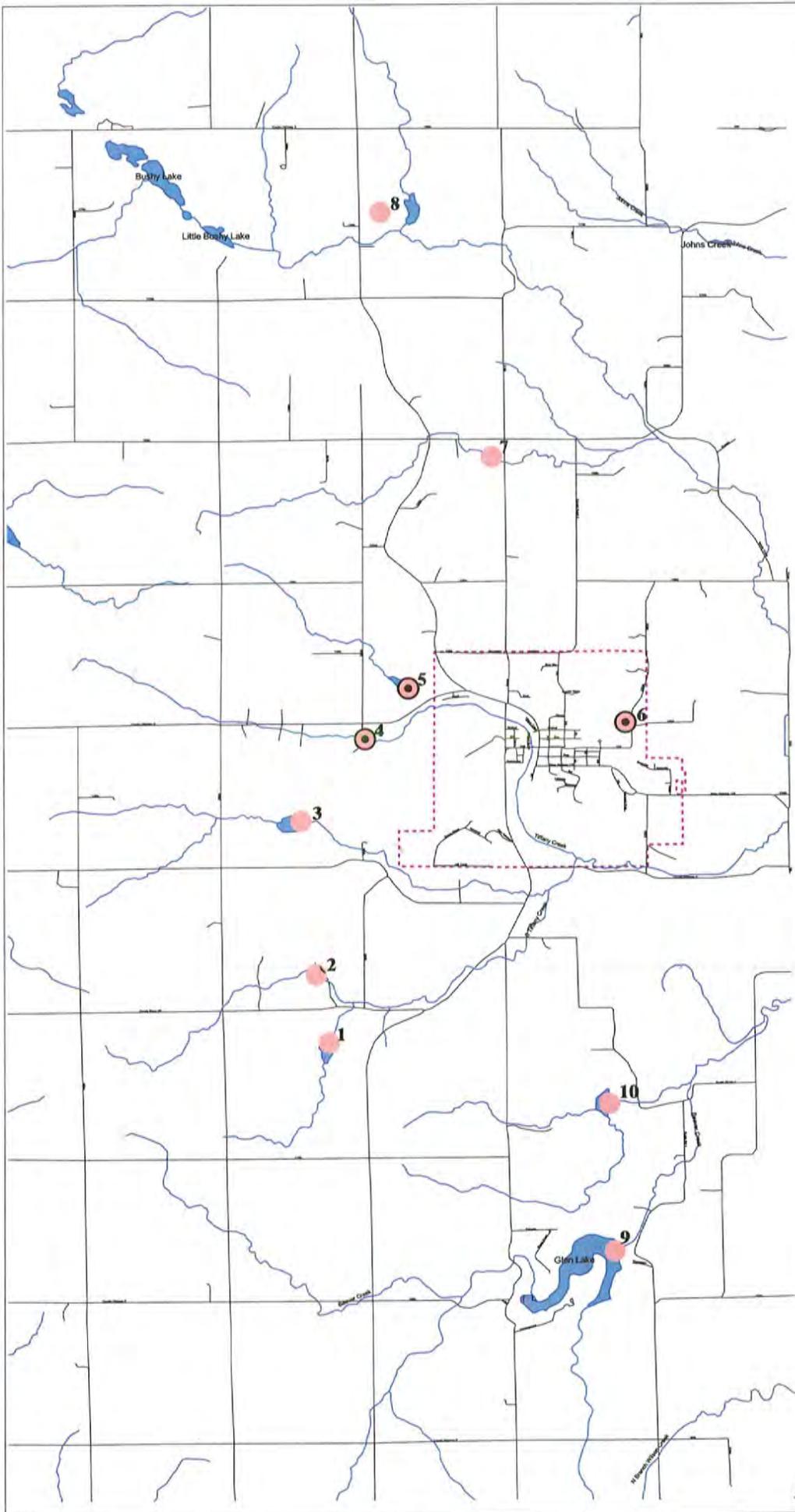
-  Floodplain
-  Roads
-  City Limits
-  Tiffany Creek



City of Glenwood City

St. Croix County, Wisconsin
Glen Hill
Dam Locations

NR-6a



LEGEND

-  Dam locations
-  Highwater Alarms
-  Roads
-  City Limits
-  Creek
-  Floodplain



 Cedar
LANDSCAPE ARCHITECTS

City of Glenwood City

St. Croix County, Wisconsin

Wetlands

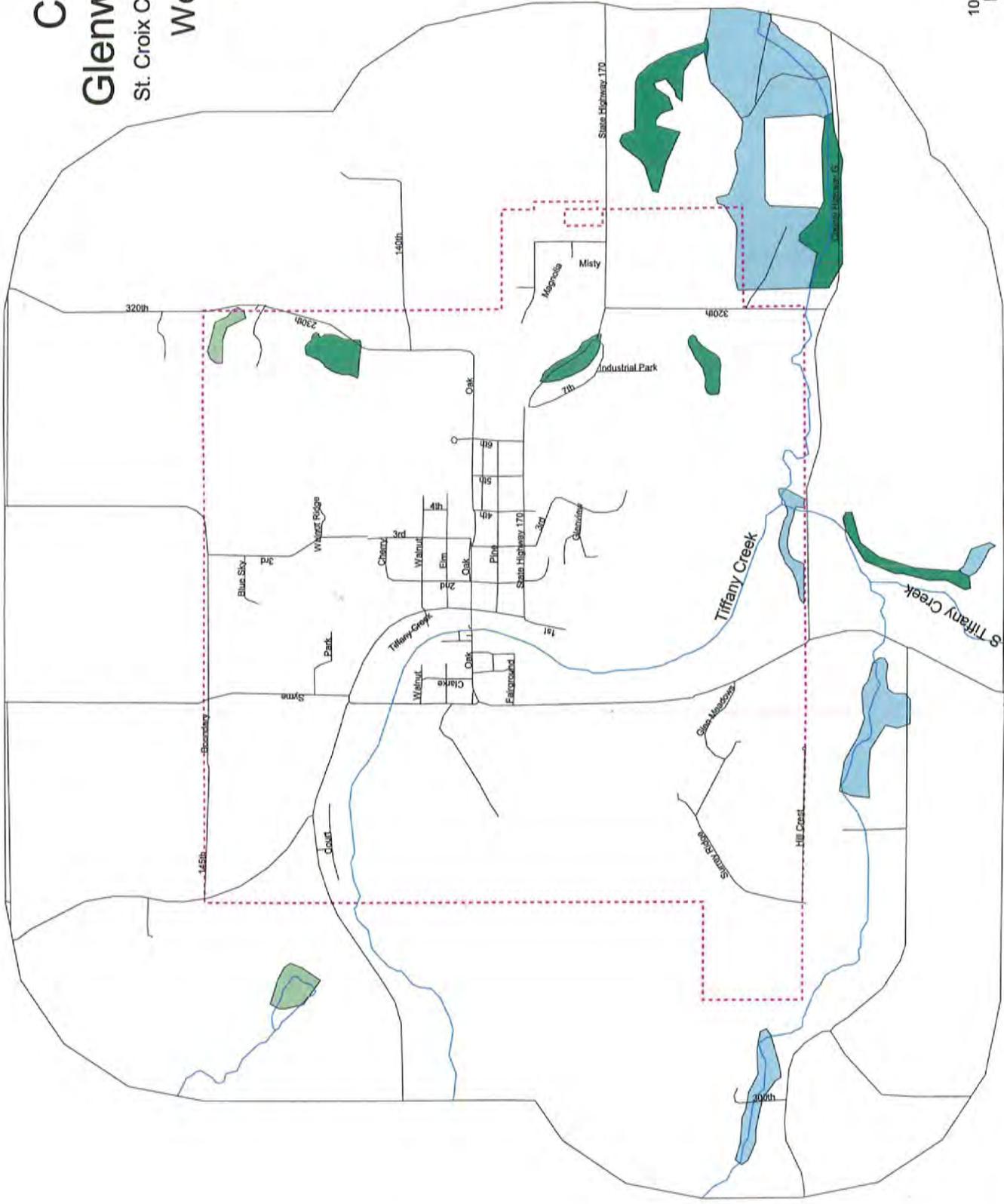
NR-7

LEGEND

- Wetland Types
 - Emergent/wet meadow
 - Forested
 - Open water
 - Scrub/shrub
- Roads
- City Limits
- Tiffany Creek

N

1000 0 1000 Feet



Parks/Open Space

Glenwood City acknowledges the important roles recreation and open space play as vital components of the quality of life. With that in mind, the City commits to provide and manage park and recreational opportunities for a sustainable quality of life by balancing human needs and natural systems.

The results of the community survey conducted in October 2003 indicate that the majority of households surveyed are satisfied with the current park facilities (*Table NR-2*). However, as new development occurs, there will be a need for additional parks and open space to serve new residents. Land acquisition for new parks and open space should come primarily through land dedications as described in section 14-1-16 of Glenwood City's Code of Ordinances.

Survey Results

Is there a need for a park in your neighborhood?

1. 19.4% Yes 2. 73.6% No

Table NR-2 Park System

Rating of Current Park System				
	Adequate	Needs Improvement	Not Available	Don't Know
Playground Equipment	51.7%	18.9%	1%	12.9%
Benches and Picnic Tables	50.2%	21.4%	1.5%	9%
Ball Fields	66.2%	7.5%	0.5%	8.5%
Sheltered Area	61.7%	12.4%	0.5%	7%
Tennis Courts	54.7%	6%	4.5%	14.9%
Parking	51.2%	24.9%	7%	16.4%

Parks Classification and Assessment System

Park facility categories and standards have been developed based on factors as site function, size, use, service area, and degree of facility development in order to analyze and evaluate the adequacy of a community's municipal park and open space system. Relating these categories to quantifiable standards provide a method of assessing the municipal park and open space needs and deficiencies of the community. Such criteria and standards, when used appropriately, can also serve to promote an equitable distribution of these facilities throughout the community. In addition, they can be used to evaluate the attainment of the community's goals and objectives with respect to the quantity and quality of the parks.

Park Classification Definitions

Local recreation needs can best be met by providing a variety of parks which serve all age groups, neighborhoods and activity levels of the resident population. The following definitions classify the parks into categories: neighborhood parks, neighborhood playgrounds, community parks, regional parks, trail systems and special areas.

The classifications summarized in Table NR-3 should be used to make park inventory and planning more meaningful.

Table NR-3 Park Classifications

Rec. Type	Age Group Served	Area Served	Minimize Size	Facilities & Equipment	Other Considerations
Neighborhood Passive Park	All ages, especially elderly and mothers with children	¼ mile radius	2-acres	Sidewalk, benches, landscaping, tot lot	Undeveloped
Neighborhood Active Playground	5-12	¼ mile	2-acre radius	Playground facilities apparatus	
Community Park Providing One or More Activities, Passive and Active Picnicking	All ages	Community-wide	5-acres	Tennis courts, ballfields, basketball courts, toilets, picnic areas, swimming area	
Trail System, Jogging, Walking, Skiing	All ages	¼ mile	¼ mile access	Exercise course minimum	
Specialized Areas Passive	All ages	Access to water, plaques with descriptions			
Waterfront Corridors Passive	All ages			Trails, benches, look-outs, picnic areas	
Regional Park Active and Passive	All ages	Multiple		Swimming, facilities to accommodate county skating, restrooms, picnic areas, region crows, playground equipment	

Parks and Open Space Inventory

In order to assess the needs and deficiencies of the City's park and open space system, it is important to inventory not only the existing facilities provided by the City, but facilities provided by others to the residents of the City. A total of 19.3 acres of public park and open space land exists within Glenwood City, as well as 1.6 miles of trails. This land is primarily provided by the City, including municipal parks, recreation areas, nature areas and many specialized recreation uses. Map NR-8 shows the current park system within Glenwood City. Also included in the inventory is Glen Hills Park which is located four miles south of Glenwood City. The City currently meets the minimum acreage standards as shown in Table NR-4.

Neighborhood Parks:

Total 3.5 acres

City Park – the 3.5 acre park is located between the south side of Sunny Hill Addition and the north side of 1st Street. The Park has a Picnic Shelter, tables and Grills.

Community Parks:

Total 15.8 acres

Hinman Park – located on the east end of Pine Street is Glenwood's primary park. The 10.8 acre park includes a swimming pond, two ball fields, two picnic shelters, tennis courts, basketball court and playground equipment.

Ball Field – the five acre park located on the west side of Magnolia Drive has one ball field and a parking lot.

Trail Systems:

Total 1.6 miles

Old Railroad Bed Trail

Length: Approximately 1.3 miles

Surface: Crushed Rock

The trail extends from the fairgrounds on the west side of Glenwood City to the Schools athletic fields on the southeast side of town.

Hinman Trail

Length: Approximately 0.3 miles

Surface: Paved

Located on the south side of Highway 170, the Hinman Trail extends from the southeast corner of Hinman Park to the Glenwood City School Grounds.

Regional Parks:

Total 700 acres

Glen Hills Park - Glen Hills Park is approximately 700 acres in size. Within the Park there is a wide range of recreational facilities. A 60 unit campground with a sanitary dumping station, picnic area, group area, playgrounds, hiking trails, swimming beach and change houses, scenic overlook, and parking lot for 200 cars.

Table NR-4 Standards and Criteria for Municipal Park and Open Space Areas

	Standard	Current
Type of Area	Acres/1,000 Population	Acres/1,183 Population
Neighborhood Parks	2.0	3.5
Neighborhood Playgrounds	2.0	
Community Parks	5.0	15.8
Other Park and Open Space Areas include	3.0	
-Regional Parks		700
-Trail Systems		1.6 Miles
-Specialized Areas		
Total	12.0	719.3

Note: the 700 acres listed under regional parks is Glen Hills Park which is located 4 miles south of Glenwood City. Glen Hills Park was included due to it's proximity to the City.

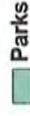
City of Glenwood City

St. Croix County, Wisconsin

Parks and Trails

NR-8

LEGEND



Parks

Hinman Park - 10.8 Acres

City Ball Field - 5.0 Acres

City Park - 3.5 Acres



Trails

Hinman Trail



Roads



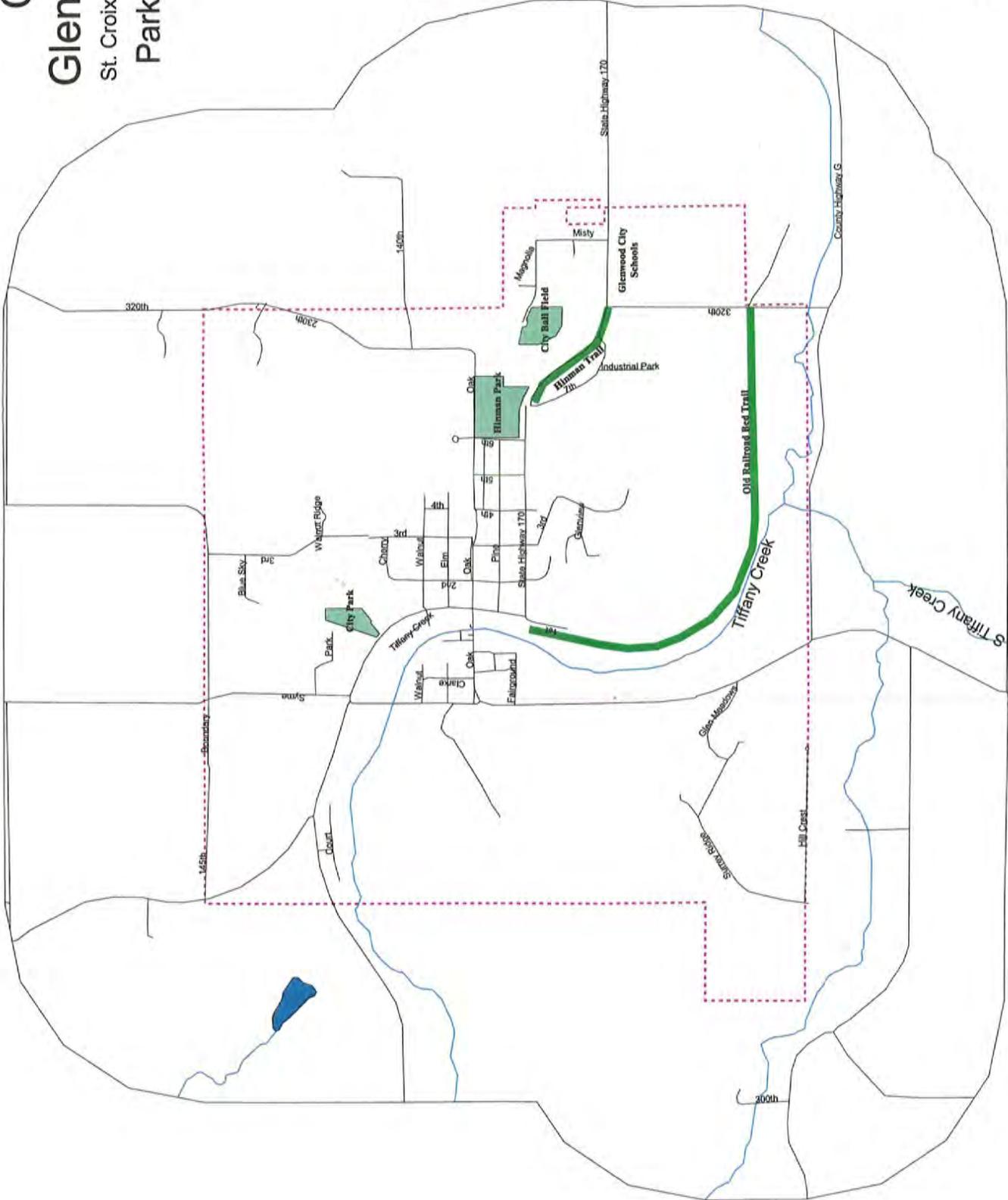
City Limits



Tiffany Creek



1000 0 1000 Feet



GOALS, OBJECTIVES AND POLICIES

Goal 1: Protect, preserve, and enhance the significant environmental resources of Glenwood City including soils, ground and surface water, topography, historical sites, floodplains, shorelands, threatened and endangered species, parks, open space, and wetlands.

Objective: Consider environmental impacts at all levels of the land use decision-making process.

Policies:

- The City shall compile environmental resource master maps related to:

Soil Types	Floodplains
Viewsheds	Slopes
Wetlands	Topography
Surface Waters	Shorelands

- All applications for zoning adjustments will be reviewed based on potential environmental impacts based on interpretation of these data.

Objective: Protect surface water and wetland quality.

Policies:

- Glenwood City will follow and support state regulations when applicable regarding the placement of permanent vegetative buffers between surface water resources and new development.
- Prevent stormwater runoff of pollutants from roads and highways, spreading of residual waste, erosion and sedimentation, salt/sand storage sites through zoning, subdivision, other land use controls and best management practices.
- Glenwood City will ensure that development on slopes in excess of 20% must meet of the requirements of the City's development standards for erosion control and soil stabilization.
- Glenwood City will promote delineation, preservation, and reclamation of wetlands and open spaces with an emphasis on remediation drainage problems, protecting water quality, and enhancing stormwater management.
- Glenwood City will encourage development that minimizes the amount of impervious surface cover through site design.
- Locate nonresidential development that manufacture, store, or use toxic substances away from the City's surface water resources.

- Glenwood City will protect drainage ways and areas that drain to surface water from pollutants. The use of natural vegetative cover will be encouraged.

Objective: Protect groundwater quality and quantity.

Policies:

- Glenwood City will not allow development to occur within the wellhead protection area, or other areas identified as groundwater recharge zones.
- Glenwood City will work to limit development where septic wastes will be stored in holding tanks. This provision affects all new development.
- Glenwood City will take reasonable land use control measures to prevent the contamination and pollution of the groundwater supply.

Objective: Protect floodplain in order to preserve human health, prevent costly flood damage to homes and personal property, and preserve ecological services provided by this resource.

Policies:

- Glenwood City will create a checklist to ensure proper procedures are followed when development occurs in the floodplain.
- Glenwood City will work closely with neighboring municipalities and St. Croix County in determining zoning for flood plain when land is annexed into the City.

Objective: Protect and preserve open space.

Policies:

- Glenwood City will selectively acquire, as feasible, additional property suitable for open space.
- Glenwood City will coordinate all open space acquisitions and recreational areas with a growth management strategy.
- Glenwood City will work with developers to ensure that land dedication requirements are met.
- Glenwood City will encourage developers to submit management plans for areas dedicated as private or open space.

Objective: Protect sites of historical significance.

Policies:

- Glenwood City will work with the Glenwood Historical Society to areas or buildings of historical significance.
- Glenwood City will use discretion and consideration of historical value regarding development in areas identified as being “historically significant.”

Objective: Preserve and enhance public parks and recreation facilities to meet the needs of all residents within the community.

Policies:

- Glenwood City will ensure that the amount of park lands in the City meet standards and criteria for municipal park and open space areas.
- Glenwood City will utilize land dedications of new subdivisions to provide new active neighborhood parks and green space.

3 HOUSING

Introduction

Housing represents one of the most important aspects of our lives and our communities. Aside from providing shelter, housing connects people to neighborhoods and communities, and provides a foundation for our social structure. For government, housing represents a major source of tax revenue and expenditures, such as new streets, sewer, water, protective services and other associated community support services.

For most people, housing expenditures consume the largest share of their personal income. According to the consumer expenditure survey (2000-2001) done by the Bureau of Labor, Midwestern households spent an average of 31% of their personal incomes on housing, compared with 13.1% for food and 19.4% for transportation. Community growth and vitality is linked directly with the quantity and quality of available housing. Communities with rapid growth can experience housing shortages, which can cause prices to rise. Housing costs can also influence growth and development patterns, often leaving communities facing an under supply of low- to moderate-income housing. These types of housing patterns contribute to urban sprawl, cause increased traffic congestion, and affect community character.

There are several benefits a community can discover through the Housing Element:

- Deficiencies in housing options can be addressed.
- More control can be exercised over future housing developments.
- Citizens will have a better understanding of the local housing situation.

Population Projections

Population projections are a critical tool used in planning. These forecasts provide guidance to the City in determining future needs for public facilities and services, housing, and for land development. It is important to remember that these projections are estimates only and unforeseen events may change these numbers at any time.

Historical population growth in Glenwood City has been somewhat sporadic since 1960. The City lost population between 1960-1970 but showed gains of over 15% between 1970-1980 and 1990-2000 (see Table H-1).

Table H-1 Historical Growth 1960-2000

City of Glenwood City	1960	1970	1980	1990	2000
Population	835	822	950	1,026	1,183
Percent Change	-	-1.6%	15.6%	8.0%	15.3%

Source: 1950 -2000, US Census Bureau and Wisconsin Department of Administration

Figure H-2 represents a 20% growth rate over the next 20 years for Glenwood City. As discussed in Chapter 1, a 20% growth rate was used by the Plan Commission based on a number of factors, which included: recent census numbers showing a 15.3% growth rate from 1990 – 2000, current trends in growth in both neighboring communities as well as St. Croix County and Twin Cities expansion to the east, which potentially will lead to greater job opportunities for Glenwood City residents. By looking at all of these factors, it was determined that Glenwood City would likely experience a quicker pace of growth over the next 20 years than previous historical trends.

Table H-2 City of Glenwood Population Estimates

	2000	2005	2010	2015	2020
Glenwood City	1,183	1,296	1,420	1,556	1,704
Projected Housing Units	460	506	555	608	666

Source: Glenwood City and Cedar Corporation 2003

The projected expectations for an increase in growth rate could yield a potential population of 1,420 and 1,704 in the design years 2010 and 2020, respectively. The number of new housing units required by an increase in population is represented in the Glenwood City population estimates chart (*Table H-2*). Based on forecasted population, and dependant upon population growth rate, a significant number of new housing units will be required to meet future demand.

Historical Housing Units

One trend that can be seen in Table H-3 is a slight decrease in the number of owner occupied homes. This could be attributed to rising housing costs and a change from construction of single-family homes to multi-family. Although Glenwood City's home ownership has decreased, it still remains relatively high compared to neighboring communities. The other item that should be noted from Table H-3 is that the average household size between 1990 and 2000 has remained fairly constant for both owner and renter occupancy. This was taken into account when calculating future housing needs.

Table H-3 Housing Units (Glenwood City)

	1990	% of total	2000	% of total
Housing Units (occupied)	400		460	
Owner Occupied	284	71%	315	68%
Renter Occupied	116	29%	145	31%
Household Size Owners	2.61		2.58	
Household Size Renters	2.12		2.26	

Source: US Census Bureau

Building Permits

Table H-4, Residential Unit Building Permits 1993–2003, provides a breakdown of the residential building permit types issued from 1993 through 2003. A majority of residential units were new homes but many of them may have been rented.

Table H-4 Residential Unit Building Permits

Year	New Homes	Duplex	Apartments
1993	2	1	
1994	3		
1995	4		
1996	5	1	
1997	3		2
1998	7		
1999	20		
2000	7	1	
2001	6	1	
2002	7		
2003	5		

Source: City of Glenwood City

2000 Household Characteristics

Table H-6 Housing Characteristics

Subject	Glenwood City		St. Croix County	State of Wisconsin
	Total	%		
Total Households	460	NA	23,410	2,084,544
Family Households	306	66.5%	72.4%	66.5%
Family Households with children under 18	167	36.3%	38.0%	31.9%
Households with Individuals 65 Years and Over	140	30.4%	26.5%	33.7%
Married Couple Family	225	48.9%	61.6%	53.2%
Female Household, No Husband Present	55	12.0%	7.0%	9.6%
Non Family Households	154	33.5%	27.6%	33.5%
Householder Living Alone	135	29.3%	21.2%	26.8%
Households with Individuals Under Age 18	174	37.8%	31.5%	24.4%
1 Person Households with Individual 65 Years and Over	81	17.6%	7.31%	9.90%
Average Family Size	3.08	N/A	3.12	3.05
Average Household Size	2.48	N/A	2.66	2.50

Source: 2000 US Census

A key component in determination of future housing need is notable change in household composition. It is important to assess the characteristics of households within a community, as these characteristics will affect future housing demand, and will dictate the type of housing needed by a community.

Within Glenwood City, nearly 30% of all households are comprised of single resident homes. This is slightly higher than the County and State percentages. This figure is significant to note since single occupant dwellings tend to require less floor area, and subsequently smaller dwellings and lots than multiple occupant dwellings. The 2000 US Census figures also indicate that 30.4% of all households have individuals 65 years of age and older, and that 17.6% of households are occupied by a single individual 65 years of age or older. It should be noted that although the percentage of households with individuals 65 years and older falls between the County and State percentages, the number of households with a single individual 65 or older deviates fairly significantly from the County and State figures. As a result, the City will need to ensure that senior housing needs are met.

Conditions of Housing Stock

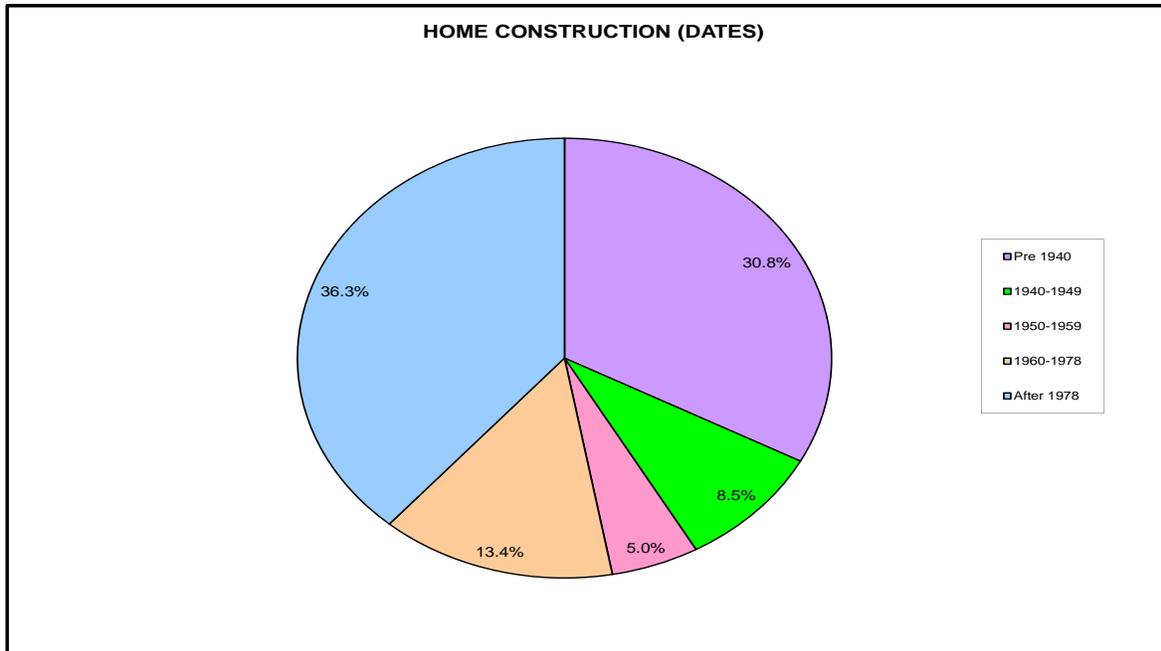
The condition of housing stock is difficult to assess without a comprehensive door-to-door survey or inspection. However, based on the responses of the Community Development Survey (*Graph H-1*), analysis of US Census information (*Table H-7*), and a windshield survey conducted in November of 2003, the overall quality of housing in Glenwood City can be estimated. According to the 2000 Census, just over 30% of homes in the City were constructed prior to 1939 and over 50% built before 1970.

Table H-7 Structures Built

Date Constructed	Homes	Percent in 1990
1999 to March 2000	24	4.9%
1995 to 1998	37	7.7%
1990 to 1994	34	6.9%
1980 to 1989	56	11.3%
1970 to 1979	82	16.6%
1960 to 1999	17	3.4%
1940 to 1959	92	18.6%
1939 or earlier	152	30.8%

Source: 2000 Data, US Census Bureau

Graph H-1 Home Construction Dates



Source: Community Development Survey

Needed Home Repairs and Housing Conditions

Windshield Survey

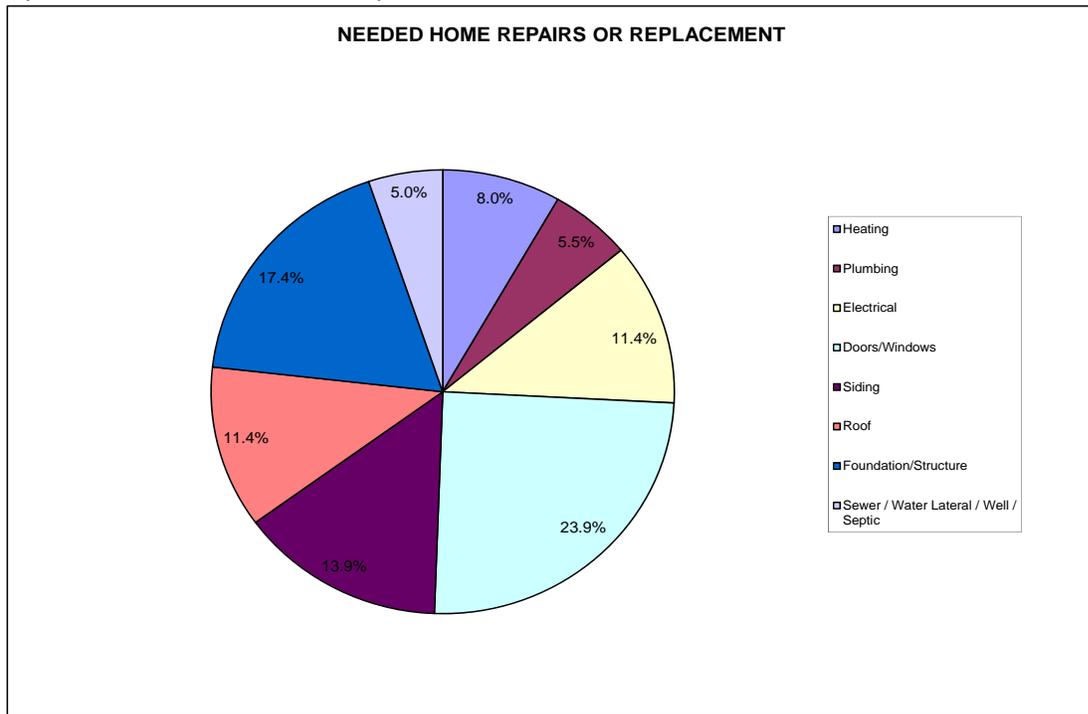
The windshield survey that took place in November of 2003 found the housing stock to be in relatively good shape. Most of the homes that had been constructed prior to 1960 (approximately 50%) have seen renovation in the form of new siding and upgrades to roofs. Homes in this age category are primarily found within the original plat of the City. Homes located outside of the original plat are generally larger and have also experienced renovations and upgrades to roofs and exterior siding, depending on the vintage. There are instances found mainly in the older areas of the Glenwood City, where homes are in need of minor maintenance including painting, replacement of siding or new shingles. However, there are no areas that contain concentrated numbers of units that are in need of repair.

Community Survey

According to survey responses, most of the home repairs needed in the City would be classified as minor items such as replacement of doors/windows. However, over 22% of those responding indicated that their homes do require major structural/foundational improvements or well/septic improvements (*Graph H-2*). The greatest concern with regards to housing conditions is that with the increasing proportion of personal income expended for housing, less discretionary income is available for housing repairs and improvements. One way residents have been able

to get assistance with home maintenance is through the *Community Development Block Grant-Small Cities Housing (CDBG)*. Glenwood City residents who met income eligibility requirements have been able to take advantage of this program. To date, 47 home owners have utilized approximately \$430,000.00 for home repairs.

Graph H-2 Needed Home Repairs



Community Development Survey

Source:

Housing Vacancy Rates

Home and rental vacancy rates are indicators of the availability of housing in a community. Low rental vacancy rates can indicate a housing shortage. According to the US Housing and Urban Development Agency (HUD), an overall vacancy rate of around 3% is considered desirable. In Glenwood City, the overall vacancy rate indicated by the 2000 US Census was 8.3% (Table H-8). Both the rental and owner vacancy rates are within normal tolerances and the housing market appears to be healthy.

Table H-8 Housing Vacancy Rates*

	Owner	Rental
Glenwood City	2.5%	5.8%
St. Croix County	0.8%	2.9%
State of Wisconsin	1.2%	5.6%

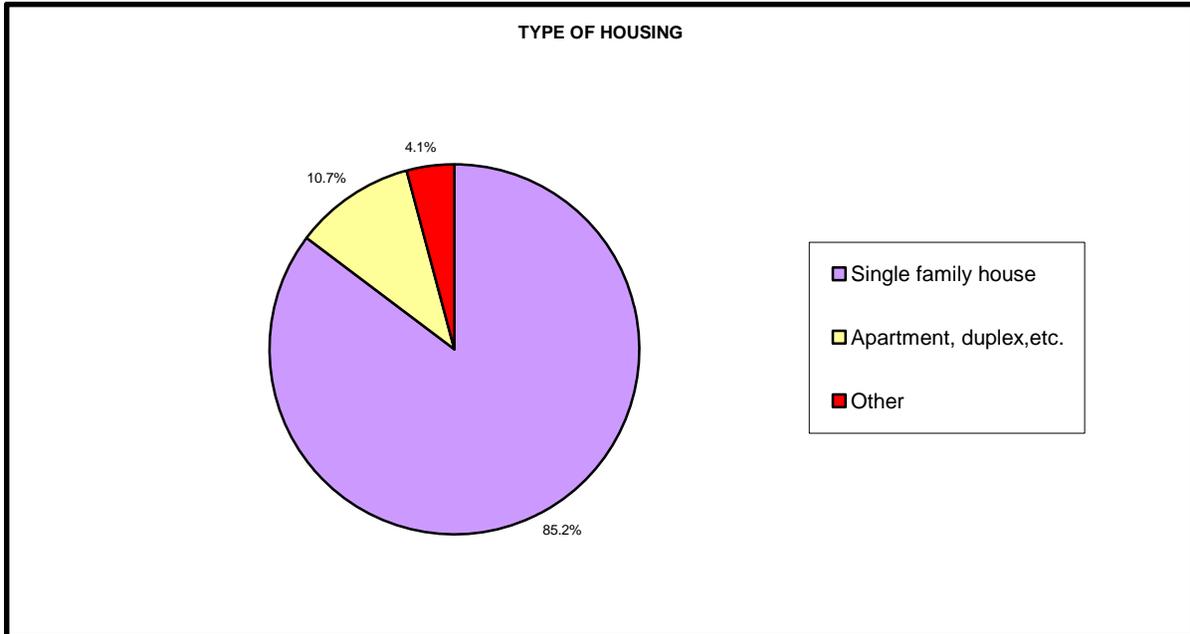
Source: 2000 US Census Bureau

*Vacancy Rate = Number of Vacant Units/Total Number of Units

Housing Type and Ownership

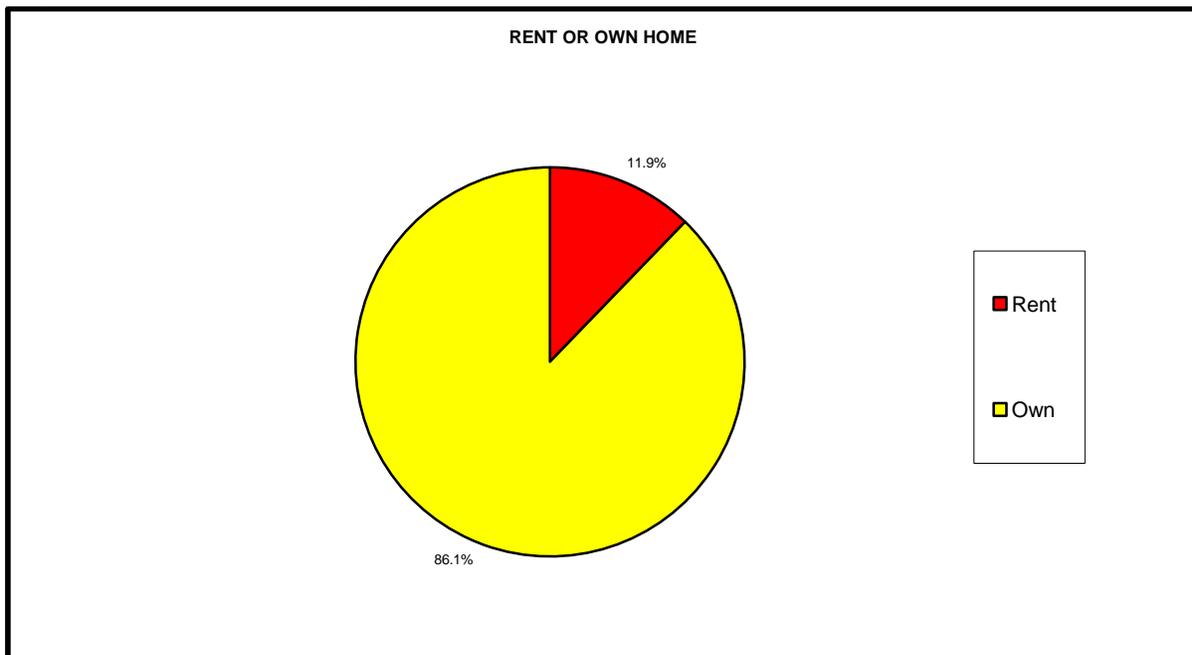
As shown in Graphs H-3 and H-4, the Community Development Survey indicates that over 80% of Glenwood City residents live in single family homes while approximately 10% of City residents occupy apartment units.

Graph H-3 Types of Housing



Source: Community Development Survey

Graph H-4 Home Ownership



Source: Community Development Survey

Housing Affordability Analysis

According to the 2000 Census data, the median home price was \$82,000 in Glenwood City and \$139,500 in St. Croix County. However, in order to get a more accurate representation of median home values in Glenwood City we will use the Regional Multiple Listings Service (MLS) figures. According to the MLS, the median home price in Glenwood City in 2003 was \$108,250.00 (*Table H-10*).

Table H-10 Home Sale Prices

Glenwood City Home Sales 2001 - 2003			
	Sale Price 2001	Sale Price 2002	Sale Price 2003
	\$50,000.00	\$59,750.00	\$55,000.00
	\$52,000.00	\$75,000.00	\$69,600.00
	\$62,600.00	\$90,500.00	\$85,000.00
	\$80,000.00	\$92,022.00	\$91,000.00
	\$109,900.00	\$96,200.00	\$99,000.00
	\$115,900.00	\$101,000.00	\$117,500.00
	\$116,000.00	\$116,665.00	\$168,500.00
	\$132,000.00	\$141,900.00	\$250,000.00
	\$162,000.00	\$149,000.00	\$250,000.00
		\$217,500.00	\$322,700.00
Median Value	\$109,900.00	\$98,600.00	\$108,250.00

Source: Regional Multiple Listing Service 2001 – 2003

The County median household income (CMI) based on the 2000 Census was \$54,930. The median household income in Glenwood City obtained from the 2000 Census was \$36,964. Higher incomes equate into more expensive homes, which in turn tends to raise overall property values.

Table H-11 Income Levels for LMI (Low-Moderate Income)
Classification for St. Croix County

CMI%	1 person	2 person	3 person	4 person	5 person	6 person	7 person	8 person
30%	16,100	18,400	20,700	23,000	24,850	26,700	28,550	30,350
50%	26,850	30,700	34,500	38,350	41,400	44,500	47,550	50,600
80%	39,550	45,200	50,850	56,500	61,000	65,550	70,050	74,600

Source: Department of Housing and Urban Development 2/20/2003

- 30% CMI = Very Low Income (VLI)
- 50% CMI = Low Income (LI)
- 80% CMI = Moderate Income (MI)

Table H-11 reveals the income limits of low-moderate income for St. Croix County as determined by HUD. The United States Department of Housing and Urban Development defines the term *affordable housing* as housing costs which do not exceed 30% of the gross household income of any given income group. Housing affordability is divided into categories based on the percentage of the County Median Income level each attains. The affordability classes include:

Extremely Low: A household earning a gross yearly income equal to 30% or less of the County Median Income, adjusted for household size.
Very Low: A household earning a gross yearly income between 31%-50% of the County Median Income, adjusted for household size.
Low: A household earning a gross yearly income of more than 50% but not to exceed 80% of the County Median Income, adjusted for household size.
Moderate: A household earning a gross yearly income of more than 80%, but less than 95% of the County Median Income.
Middle: A household earning a gross yearly income of 96% to 120% of the County Median Income.

In Glenwood City, housing affordability can be classified based on the 2000 City Median Income (\$36,964), using the HUD classifications. These figures represent maximum annual housing affordability levels, including utilities and maintenance (Table H-12).

Table H-12 Minimum Income Housing Affordability Levels

INCOME GROUP	UPPER LIMIT OF INCOME	AFFORDABLE HOME PRICE
Extremely Low	\$11,089	\$ 36,964
Very Low	\$18,482	\$61,607
Low	\$29,571	\$98,570
Moderate	\$35,115	\$117,050
Middle	\$44,357	\$147,856

Source: Department of Housing and Urban Development 2/20/2003

Results of the Community Development Survey indicated that approximately 65% of the respondent's income fell below the moderate income range. At this income level and assuming the survey is representative of all of Glenwood City, a majority of households could not afford to purchase a median priced home of \$108,250.00.

Housing-to-Income Analysis

This model compares the sum of monthly housing expenses to monthly gross income. The mortgage industry's conservative guideline is that housing expenses should be 28% or less of income.

The following represents a general affordability analysis using the median priced home in Glenwood City for a hypothetical first time homebuyer with the minimum down payment (20%).

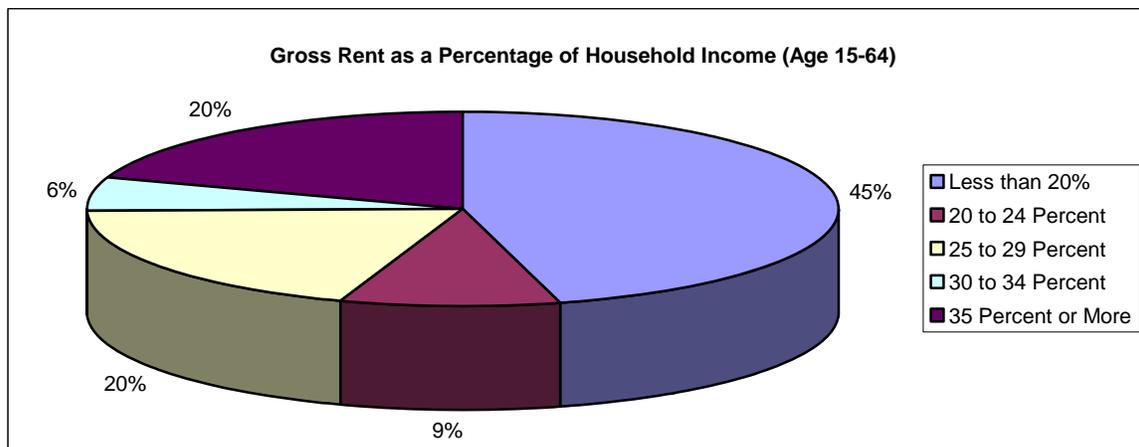
Median Home Price	\$108,250 (Based on MLS, 2003)
Down Payment (Minimum 20%)	\$21,650 (General industry standard)
Mortgage Principal	\$86,600
30 Year Fixed Rate	7.0%
Principal and Interest Payment	\$576/mo
Homeowners Insurance	\$335
Property Taxes	\$2,735/year (Glenwood City 2002)
Maintenance and Repairs	\$500 (Estimated)
Total Annual Housing Costs (HC)	\$10,482
Income Needed (HC = 28%MI)	\$37,436

In the above example the total annual housing cost would be \$10,482. The median household income in Glenwood City is \$36,964. Using this model, housing costs would equate to slightly over 28% of median household income and housing would be considered to be generally affordable. The affordability model uses the housing industry standard down payment of 20%. If this is reduced to 10%, housing affordability is reduced approximately 5%. This model is designed to represent an assessment of affordability for households earning the median annual household income, and should not indicate that housing is affordable to all economic segments of the population in Glenwood City.

Rental Affordability

Rental cost structures reveal the affordability of different housing types in Glenwood City. Conclusions can be drawn based on cost structure, i.e. if a 4-bedroom unit costs as much as a 1-bedroom unit, it is probably in poor condition, in an undesirable neighborhood, or lacks common amenities. Rental affordability is not determined by gross rental costs, but rather by the percentage of rental costs to household income. To be considered affordable housing, rental costs should not exceed 35% of total monthly household income.

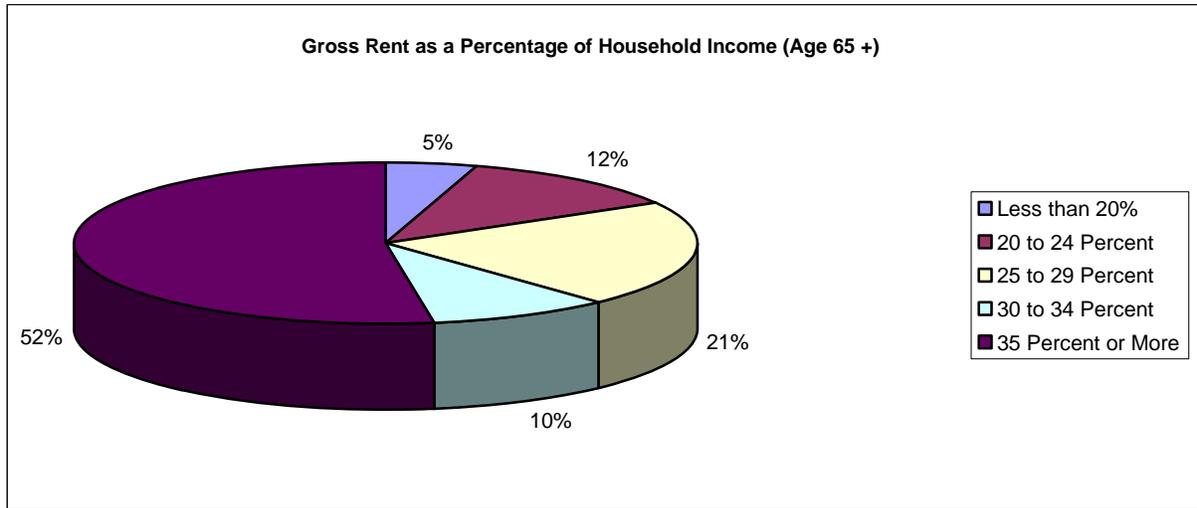
Graph H-5 Gross Rent as a Percentage of Household Income Ages 16-64



Source: 2000 US Census

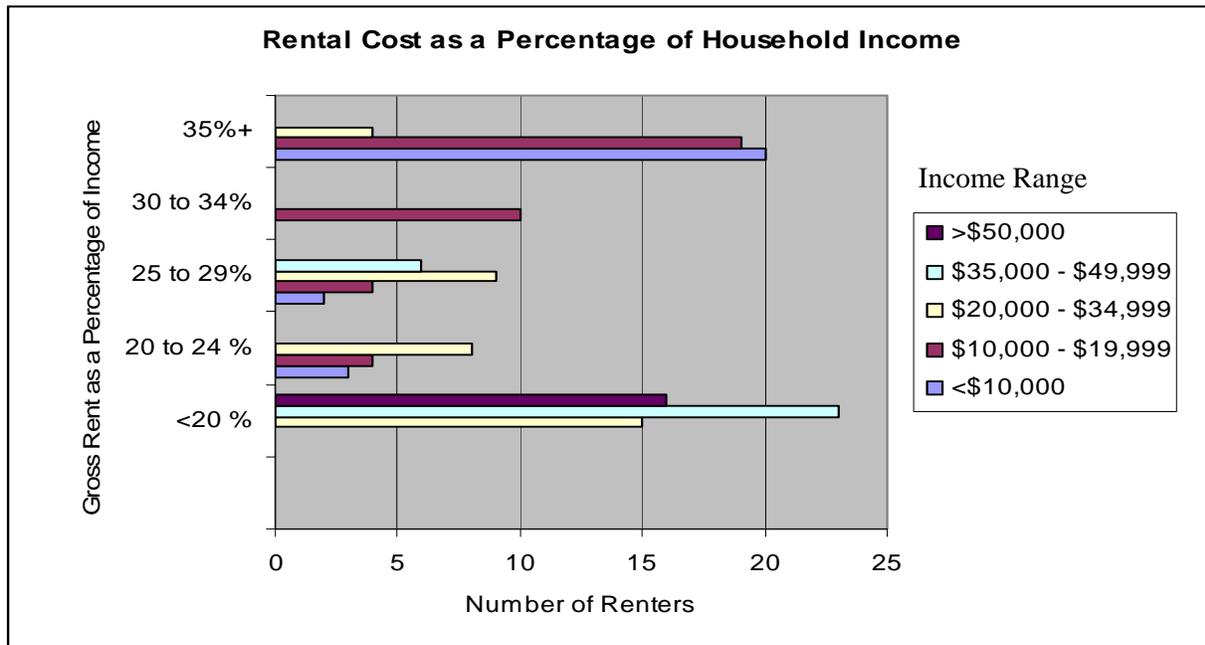
Graph H-5 shows a comparison of gross rent as a percentage of household income. According to the 2000 Census, 20% of all renter-occupied housing units expended 35% or more of their gross income on rental costs in the age class 15-64. Graph H-6 depicts the rental comparison for renters age 65 and older. In this age group, 52% of all renters are paying 35% or more of their gross monthly income for rental costs.

Graph H-6 Gross Rent as a Percentage of Household Income Ages 65+



Source: 2000 US Census

Graph H-7 Rental Cost as a Percentage of Household Income



Source: 2000 US Census Bureau

Table H-13 Rental Costs as a Percentage of Household Income

Income Range	<20%	20 to 24 %	25 to 29%	30 to 34%	35%+
<\$10,000	0	3	2	0	20
\$10,000 - \$19,999	0	4	4	10	19
\$20,000 - \$34,999	15	8	9	0	4
\$35,000 - \$49,999	23	0	6	0	0
>\$50,000	16	0	0	0	0

Source: 2000 US Census Bureau

Graph H-7 and Table H-11 indicate the gross rent as a percentage of household income. All three charts indicate that many households are paying at least 35% of their gross income for rental housing related costs. In the age 65+ age class, nearly 31% of households are spending in excess of the affordability standard of 30%. This figure is especially significant in the senior population as these households are typically on fixed incomes.

Housing Assistance Programs/Agencies

There are several state and federal programs and agencies that help first time homebuyers or subsidize LMI households to meet rent needs.

HUD

The US Department of Housing and Urban Development provides subsidized housing through low-income public housing and the Section 8 Program. Under the Section 8 Program, rental subsidies are given to low-income households, including households renting private apartments. HUD is also responsible for providing funds to communities through various grant programs.

Rural Development –United States Department of Agriculture

Providing housing opportunities for individuals living in predominantly rural areas (population <10,000). The Rural Development Program provides support for rental housing, mortgage loans for homebuyers, and support for cooperative housing development.

Department of Commerce, Bureau of Housing (BOH)

State of Wisconsin agency that administers housing programs funded by the State and by HUD.

Wisconsin Housing and Economic Development Authority (WHEDA)

This agency finances housing development through the sale of bonds. WHEDA provides mortgage financing to first-time homebuyers, and financing for multi-family housing.

Projected Housing Needs

Projected housing needs in Glenwood City will be a factor of population (refer to “Population Projections and Historical Housing Units”), condition of existing housing stock, and affordability based on forecasted population. The projected population for Glenwood City is 1,420 by 2010 and 1,704 by 2020. Using the number of existing households in the City as a baseline, the projected number of required additional housing units is 95 for the year 2010, with an additional 111 units required by the year 2020. In order for Glenwood City to meet its housing needs, projections were done based on population, current trends, land use and census data. The figures below are expressed in more detail in the Land Use Element.

Acreage figures for single family and multi-family units are based on the percentage of existing lands used for these purposes, applying these figures to the projected population, and using minimum lot size required by Glenwood City Zoning Code. The figures below are expressed in more detail in the Land Use Element.

Table H-14 Housing Needs

Year	1990	2000	2005	2010	2015	2020
Population	1,026	1,183	1,296	1,420	1,556	1,704
Persons Per Household	2.47	2.48	2.48	2.48	2.48	2.48
Total Number Of Households	400	460	506	555	608	666
Additional Housing Units Needed			46	49	53	58
Owner-Occupied Housing	284	315	349	383	420	460
Owner-Occupied Percentage	71.0%	68.5%	69%	69%	69%	69%
Renter-Occupied Housing	116	145	157	172	188	206
Renter Occupied Percentage	29.0%	31.5%	31%	31%	31%	31%
Additional Single Family Acreage	-	-	8	9	9	10
Additional Multi-Family Acreage	-	-	2	2	2	2

Source: US Census Bureau 1990, 2000 and Cedar Corporation

GOALS, OBJECTIVES, AND POLICIES

Goal 1: Promote the development of a variety of housing types that will meet the needs of persons of all age groups and income levels.

Objective: Provide for the housing needs of existing and future Glenwood City residents.

Policies:

- Ensure that adequate land is available to meet forecast residential housing demand.
- Encourage and promote a wide mix of housing types and densities, which are available at varying price ranges.

Goal 2: Promote housing that blends in with surrounding neighborhoods.

Objective: To promote and assist in the preservation of homes with significant historical value within the city.

Policies:

- To retain existing housing (historic) and strengthen community identity.
- Review zoning ordinances to ensure the protection of historical sites.
- The City will encourage conservation of homes with significant historical value.
- Establish a historical district and list suggestions for building standards structures within.

Goal 3: Use Future Land Use Map as a guide for future housing development.

Objective: Direct residential development to occur in economically and environmentally sound locations.

Policies:

- Encourage development adjacent to public utilities.
- Encourage the redevelopment of lots in existing neighborhoods.
- Develop land use regulations that will protect prized features of the natural environment.

Goal 4: Provide affordable housing opportunities for residents of Glenwood City.

Objective: Promote and assist in the preservation of affordable housing for seniors, low- to moderate-income persons, and disabled residents.

Policies:

- Encourage the rehabilitation of housing of low and moderate income residents through the CDBG loan program.
- Develop a schedule for funding programs to apply for to help meet the established goals.

- Identify neighborhood land plans and studies that should be undertaken in anticipation of potential grant applications and potential development or redevelopment.
- Maintain the stock of existing affordable and rent-assisted housing.
- Utilize existing housing grant and assistance programs.
- Review existing developmental controls, to see if they need to be changed to encourage the development of housing for seniors.
- Encourage assisted living housing for the elderly.

4 ECONOMIC DEVELOPMENT

The Economic Development Element of the Glenwood City Comprehensive Plan will include:

- An analysis of the labor force and economic base of Glenwood City.
- Assessment of categories or particular types of new businesses and industries that are desired by the local governmental unit.
- Assessment of Glenwood City strengths and weaknesses with respect to attracting and retaining businesses and industries.
- Designation of an adequate number of sites for such businesses and industries.
- Evaluation and promotion of the use of environmentally contaminated sites for commercial or industrial uses.
- Identification of county, regional and state economic development programs that apply to Glenwood City.

Overall Goal

Work to maintain a strong downtown business district while promoting commercial and industrial expansion that will contribute to the community's quality of life and fit within Glenwood City's social and physical environment.

Objectives

- Work to maintain and expand the tax base by identifying areas suitable for development and redevelopment.
- Continue to support and revitalize Glenwood City existing businesses and structures.
- Promote opportunities for industrial expansion in the City Industrial Park.
- Develop/improve infrastructure to meet business needs.

Background Information

Glenwood City has an economy that reflects the makeup of its people, landscape, and location to neighboring communities as well as the Twin Cities Metropolitan Area. Glenwood City has a strong downtown business district with a small industrial park and a limited amount of industry. The local government has been proactive in recruiting new business, which has proven challenging due to Glenwood City's location. Since 1988, Glenwood City has created three separate Tax

Incremental Districts (TIDs). The TIDs have played an instrumental role in attracting new business as well as revitalizing blighted areas in the downtown district. There are currently two active TIF districts in Glenwood City. TID Two is an industrial district that includes the industrial park and some residential lands to the north of the park, while TID Three is a redevelopment district that encompasses much of the downtown business area.

The economic activity within and around Glenwood City has a direct impact on the growth and land use of Glenwood City. As Glenwood City plans for the future, development and expansion of commercial businesses and new industries will play a vital role in the establishment of job opportunities for Glenwood City residents.

Industrial

At this point Glenwood City has had limited industrial development. There are currently two locations where industrial development has occurred, which include the industrial park and approximately 11 acres of land located to the south of 7th Street.

Industrial Park

The Glenwood City Industrial Park is located on the north side of State Highway 170 and extends east-west along Misty Court. The park, which was developed in 1997, is approximately 9.3 acres in size and is divided into eight separate lots. All of the lots have City water and sanitary sewer extended to them. Current residents of the park include the Tribune Press Reporter, Lenard's Autobody and the Fire Hall. The remaining lots are vacant at this time.

Since the formation of the park in 1997, it has been slow to fill up. This can most likely be attributed to Glenwood City's location. Although the park sits adjacent to State Highway 170, there may be a perception that it is too far off of Interstate 94 and farther away from the Twin Cities Metropolitan Area than many of its neighboring communities. This has put Glenwood City at a disadvantage when competing for new business and industry. Another issue Glenwood City faces is the lack of industrial land for future expansion. The current park has five remaining lots that could easily be used up by one or two businesses, leaving the park full. As a result, it will be crucial for the City to identify new areas for industrial expansion.

The other area in Glenwood City where industrial expansion has taken place is 11 acres located on the south side of 7th Street. There are currently two businesses located there – Misty Meadows Wood Products and Dejons Trucking. Further development in this area is limited due to floodplain, wetland and bedrock issues.

Commercial – Downtown

The downtown commercial area, while older, has been going through a positive transformation. Private reinvestment is on-going in many areas. The new grocery store began the revitalization. In January 2000, the City, through extensive planning, created a redevelopment TIF district to further assist in this growth.

From these efforts, the local clinic constructed a \$1 million facility. The bank is investing \$2.1 million to provide a local business center including the bank, post office, and office space. Other redevelopment is occurring all along Oak Street. The revitalization of Oak Street is an essential element to continue this private reinvestment, draw residents and visitors to the stores and protect the value of the adjacent buildings.

In March of 2004, the City was awarded a Community Development Block Grant to help revitalize the area along Oak street. Through planning and incentives, there is a great deal of private investment occurring in the downtown district. The reconstruction of the streets, sidewalks, and amenities is the last piece of the puzzle. With this project, the City will have a vibrant, safe downtown that other communities will want to emulate.

This project should dramatically improve pedestrian safety while restoring the historic ambience of Glenwood City by providing a streetscape reminiscent of the early 1900s.

Glenwood City has several strengths and weaknesses with respect to attracting and retaining businesses and industries.

Strengths include:

- A local government that is proactive in attracting new businesses into the area.
- The development of local industrial sites to accommodate prospective businesses.
- The utilization of TIF districts.
- Highway system that can accommodate most businesses.
- Good school district.
- Community that is family orientated.

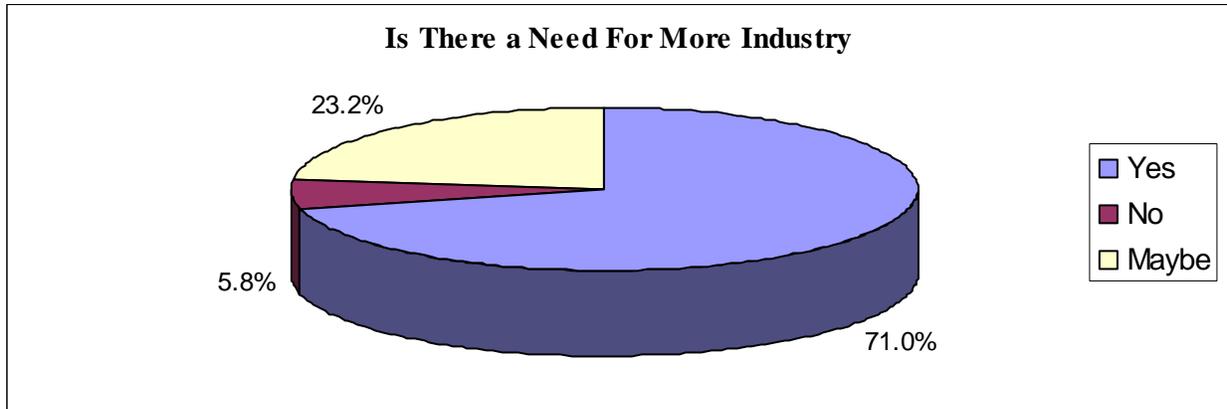
Weaknesses include:

- Perceived long distance from Interstate 94.
- Distance from Twin Cities Metropolitan Area when competing with neighboring communities to the west.
- Limited area for industrial and commercial expansion due to the geography and environmental limitations of the area.

Economic Development and the Community Development Survey

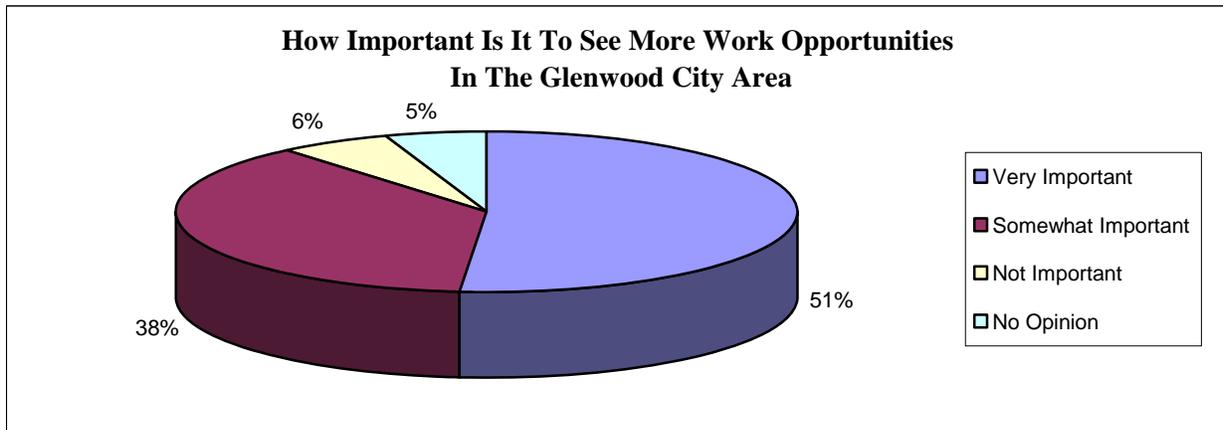
In conjunction with the Community Development Survey conducted in December of 2003, there were a number of questions asked related to economic and job related issues. It should be noted that the following is based upon the 201 responses received, which constituted a 41% response rate. Of households responding, a majority felt there is a need for more industry and job creation within the Glenwood City area (*Figures ED-1, ED-2*).

Figure ED-1



Source: Community Development Survey December 2003

Figure ED-2

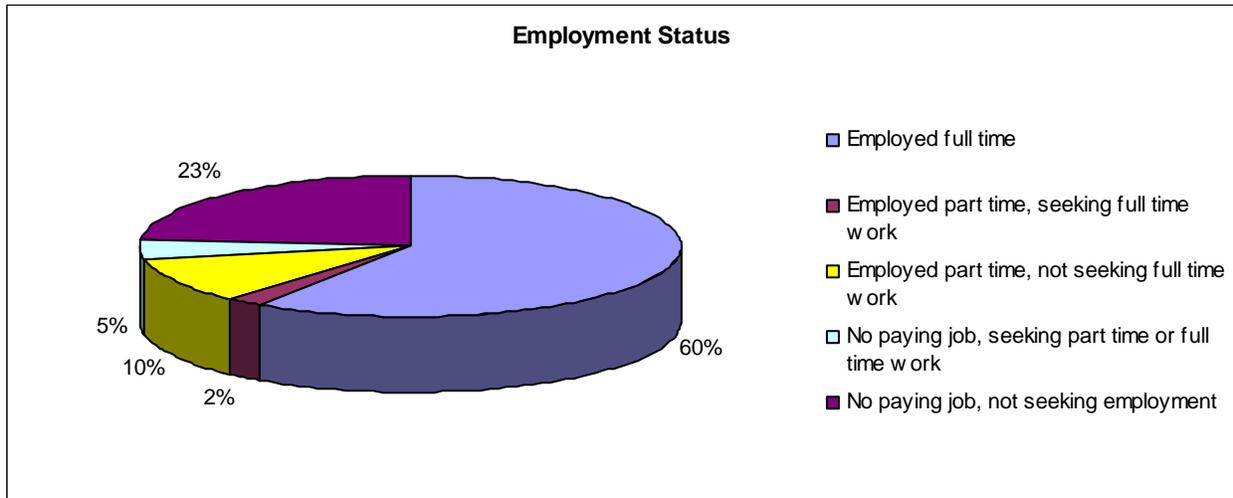


Source: Community Development Survey December 2003

Residents were also questioned about their current employment status and location of employment. Responses indicated that currently 5% of residents were unemployed and seeking full-time or part-time employment. Two percent of respondents indicated that they were currently employed on a part-time basis, but were seeking full time employment (*Figure ED-3*).

As illustrated in Figure ED-4, the majority of Glenwood City residents work inside of the community (41%) with a large percentage of residents commuting to jobs in Baldwin and the Twin Cities Metropolitan Area (25%).

Figure ED-3



Source: Community Development Survey December 2003

Figure ED-4



Source: Community Development Survey December 2003

Labor Force

According to 2000 Census data, the labor force participation rate (LFPR) for Glenwood City, St. Croix County and the State of Wisconsin were 63.7%, 75.4% and 69.1%, respectively. LFPR is defined as the number of residents who are either working or looking for work divided by the total, non-institutional population. The LFPR for Glenwood City is lower than both the State's and County's rates. This can most likely be attributed to Glenwood City's aging population.

Table ED-1 shows employment by category for Glenwood City, State of Wisconsin and St. Croix County. Comparatively speaking, most of the occupational categories between St. Croix County and Glenwood City are fairly close. However, when looking at managerial positions versus production positions there is a fairly large discrepancy. Glenwood City's workforce has a much smaller percentage of its workers employed in management positions while a much larger percentage of its workers are in production, transportation and material moving occupations. This could be attributed to a number of different factors:

- Glenwood City offers very few professional and management position jobs.
- Although large, Glenwood City residents commute to higher paying management and professional positions in the Twin Cities at a much smaller rate than other communities in St. Croix County.
- There are a smaller percentage of workers in Glenwood City with advanced education degrees (*Figure ED-5*). This is again most likely due to the distance one has to travel to find higher paying jobs in the Twin Cities.

Table ED-1 Occupation

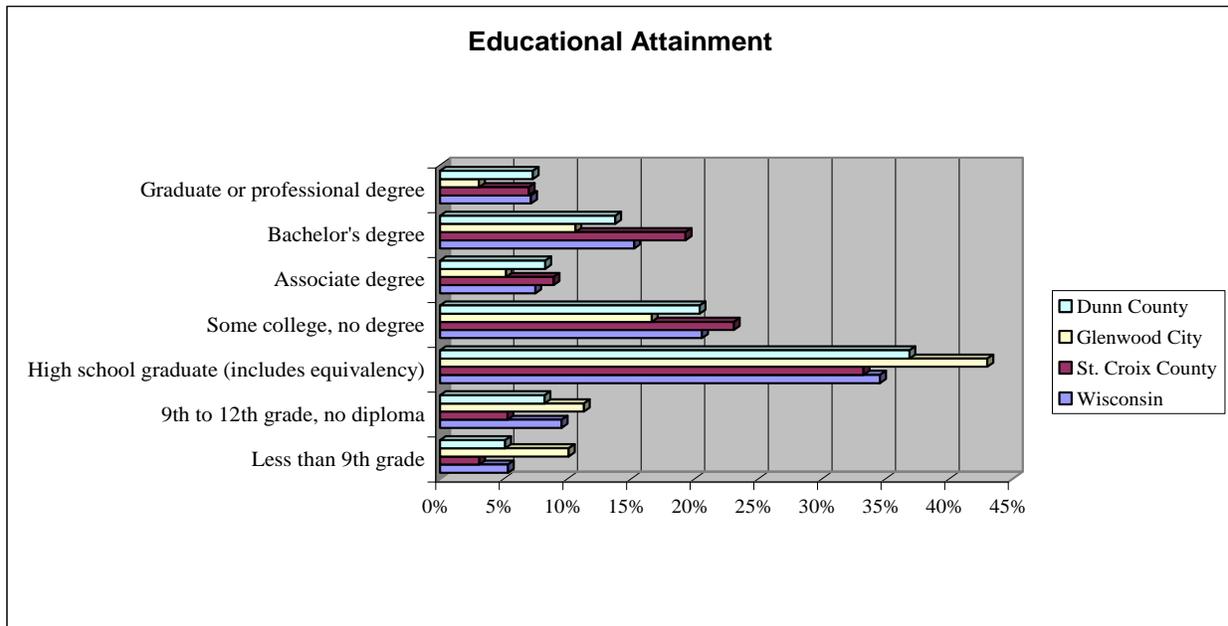
OCCUPATION	Wisconsin		St. Croix County		Glenwood City	
	Total	%	Total	%	Total	%
Management, professional, and related occupations	857,205	31.3	11,744	33.6	126	22.5
Service occupations	383,619	14	4,378	12.5	74	13.2
Sales and office occupations	690,360	25.2	8,521	24.4	102	18.2
Farming, fishing, and forestry occupations	25,725	0.9	321	0.9	11	2
Construction, extraction, and maintenance occupations	237,086	8.7	3,509	10.1	58	10.3
Production, transportation, and material moving occupations	540,930	19.8	6,432	18.4	190	33.9
Employed civilian population 16 years and over	2,734,925	100	34,905	100	561	100

Source: US Census Bureau

Education

The more education an individual obtains, the higher the wage he or she usually earns in a lifetime. Advanced education will also increase employment opportunities in most cases. Although uncontrollable economic conditions can have a large impact on one's employment situation, the odds of being unemployed are reduced if an individual has continued education beyond high school. Figure ED-5 indicates educational attainment for Glenwood City adults, 25 years old and over.

Figure ED-5



Source: US Census Bureau 2000

Economic Development Programs Available

Community Development Block Grant for Economic Development – Department of Commerce

CDBG-ED programs were developed to assist businesses that will invest private funds and create jobs as they expand or relocate into the state. Since 1982, the Wisconsin Department of Commerce has made more than 324 CDBG-ED awards in excess of \$113 million. St. Croix County has an active revolving loan fund program which can assist with business start up costs and will be available to finance additional economic development in the future.

Rural Economic Development Microloan (RML) – Department of Commerce

This is a program designed to provide working capital or fixed asset financing for businesses. Since its inception in 1990 the RML program has provided more than \$1.4 million to over 110 Wisconsin businesses. The business must be located in a town with a population of less than or equal to 6,000 or be located in a county with population density of less than 150 persons per square mile.

Rural Economic Development (RED) Early Planning Program – Department of Commerce

The goal of RED Early Planning Program is to stimulate the start up and expansion of small business in rural and small communities within Wisconsin. To accomplish this goal, RED Early Planning Program provides financial assistance to rural entrepreneurs and small businesses so they may obtain the professional services

necessary to determine the feasibility of the proposed start-up or expansion. Since its inception in 1990, the RED program has provided more than \$1.4 million to over 110 Wisconsin businesses. Eligible applicants for the RED program include for-profit or cooperatives that, when combined with affiliates, subsidiaries or parent entities, have fewer than 100 employees. The business must also be located in a town with a population of less than or equal to 6,000 or be located in a county with population density of less than 150 persons per square mile.

Rural Business Enterprise Grants Program – Wisconsin Rural Development

Rural Development has grants for financing and developing small and emerging private businesses with less than \$1 million in revenues, and which will have fewer than 50 new employees. There is no maximum dollar limit for any one project. Funds can be used for technical assistance, revolving loan program, industrial buildings, and industrial park improvements. Applicants are public bodies, non-profit associations, and Indian Tribes. This program serves areas with populations less 50,000, and the applicants should also meet income and unemployment standards.

Tax Incremental Financing

TIF districts can help municipalities undertake a public project to stimulate beneficial development or redevelopment that would not otherwise occur. It is a mechanism for financing local economic development project in underdeveloped and blighted areas. Taxes generated by the increased property values pay for land acquisitions or needed public works. Glenwood City currently has two TIF districts open for the downtown and industrial park.

GOALS, OBJECTIVES AND POLICIES

Goal 1: Create a strong economic environment, which will provide a business friendly atmosphere and competitive wage jobs.

Objective: Encourage the redevelopment and revitalization of the downtown retail center on Main Street; and actively pursue land annexation outside of the City limits for industrial growth.

Policies:

- Using the downtown enhancement project as a catalyst, work to increase the number of visitors to the downtown commercial district.
- Work to eliminate the loss of local shoppers to other communities.
- Work to retain existing downtown businesses, to the extent of their effectiveness in the market place.
- Recruit and attract new businesses that can fill niches within the community.

- Maintain the older buildings within the downtown district, and redevelop buildings that have become run down or obsolete.
- Identify and zone areas for industrial expansion, which will create more economic expansion.
- Use the St. Croix County Economic Development revolving loan fund program to help attract new businesses.
- Utilize the Chamber of Commerce, use promotional material to showcase businesses.

5 LAND USE

Introduction

The purpose of the Land Use Element within the Comprehensive Plan is to graphically designate the general distribution and extent of the uses of land within Glenwood City. The locations of residential, commercial, industrial, and public use lands will be displayed on the Land Use Plan map. The goal of the Land Use Element is to establish future land use patterns and to specify the appropriate residential density and development intensity. The Land Use Element is interconnected with all other plan elements, and will reflect the goals, objectives, and policies of the other elements.

Land use patterns, and changes to these patterns, can have adverse consequences or beneficial effects on the neighborhood and community. It is the intent of this section of the Comprehensive Plan to direct land uses to the most appropriate locations based on community goals, environmental restrictions, and cost effectiveness.

Population and Land Use

As the population changes, so do land uses and development within a community. Population increases tend to be the single most influential factor driving growth and development. Increases in population equate to a need for more housing. A larger population typically demands a more diversified housing base, which reflects incomes, desires, and needs. Also, larger populations will require more commercial and industrial development to serve the larger citizen base with jobs, goods, and services. Demand for recreational/park land can also be expected to increase as the community grows.

The general trend in Glenwood City is continued population growth into the foreseeable future, and certainly within the planning horizon. As the community expands, pressures to develop vacant and agricultural lands will undoubtedly become evident. Through the planning process, early identification of suitable development zones and restrictive natural features can guide future development into the most suitable areas.

The Built Environment

The built environment is the portion of land that has been developed in some way with manmade structures or other artificial physical alterations to the landscape.

Land Use Inventory

The study area for this project includes the land within the City limits and the surrounding planning area within a one mile radius of City limits.

Land uses within Glenwood City were derived through a visual survey (“windshield survey”), conducted by Cedar Corporation in February of 2004, and a land use map that was put together by the City in 1999. The survey consisted of driving City streets and assigning classifications based on interpretation of existing land use and through survey. Verification of data was done through survey, individual site examination, and review of land use maps during the planning process.

Classification of land uses is divided into seven categories:

Residential Single-family: All lands used for single-family residential, including rural farm and non-farm.

Residential Multi-family: All lands used for multiple family dwellings. These typically include apartment complexes, town homes, and duplexes.

Commercial: All lands used for commercial purposes. Commercial development includes retail establishments, personal service businesses, restaurants, banks, taverns, and other service businesses.

Industrial: All lands used for industrial purposes. These include factories, warehouses, and distribution facilities.

Institutional/Public: All lands used for quasi-public and instituted use such as churches, schools, hospitals, libraries, cemeteries, police, fire, and other government services.

Park/Conservancy: All lands used for normal park uses including: playgrounds, ball fields, passive open space, and boat landings.

Agriculture and Vacant: All lands in incorporated areas not having specific types of development. This could include agricultural areas and undeveloped land.

The current land use within the City can be found on Map L-1.

Existing Land Use Analysis – City of Glenwood City

The total land area within Glenwood City limits equals approximately 1,578 acres. At present there is approximately 63% of the land within the City limits undeveloped and classified as vacant or park/recreational land (*Figure L-1*). However, it should be noted when figuring future land use, recreational/park land will probably not be available, bringing the percentage of undeveloped land to approximately 40%. A breakdown of land by acreage is shown in Table L-1.

City of Glenwood City

St. Croix County, Wisconsin

Current Land Use

L-1

LEGEND

-  Water
-  City Limits
-  Land Use Classifications
-  Agricultural Residential
-  Commercial
-  Industrial
-  Institutional
-  Parks / Conservancy
-  Single Family
-  Multi Family
-  Vacant
-  Parks / Conservancy
-  Vacant Agriculture

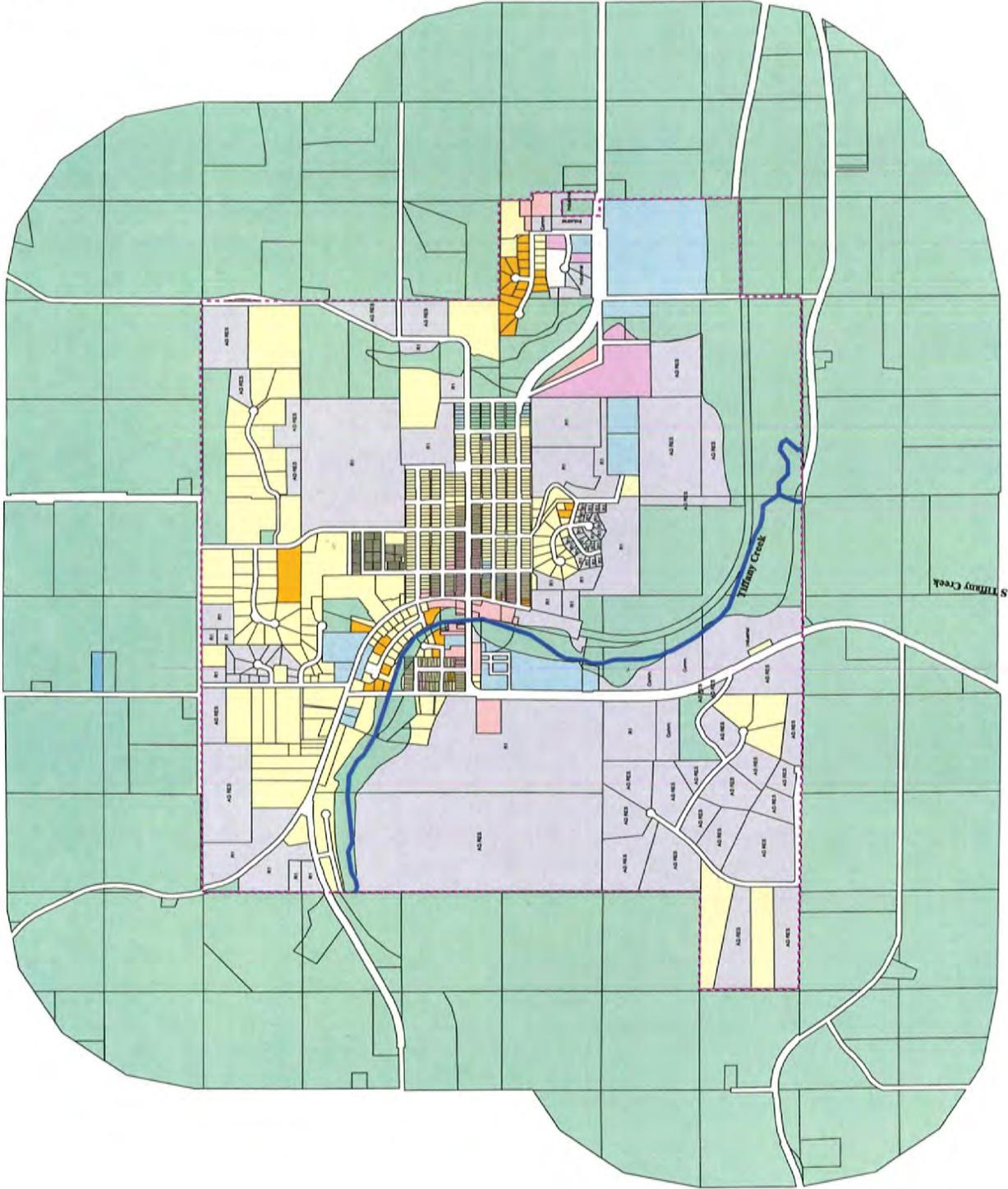
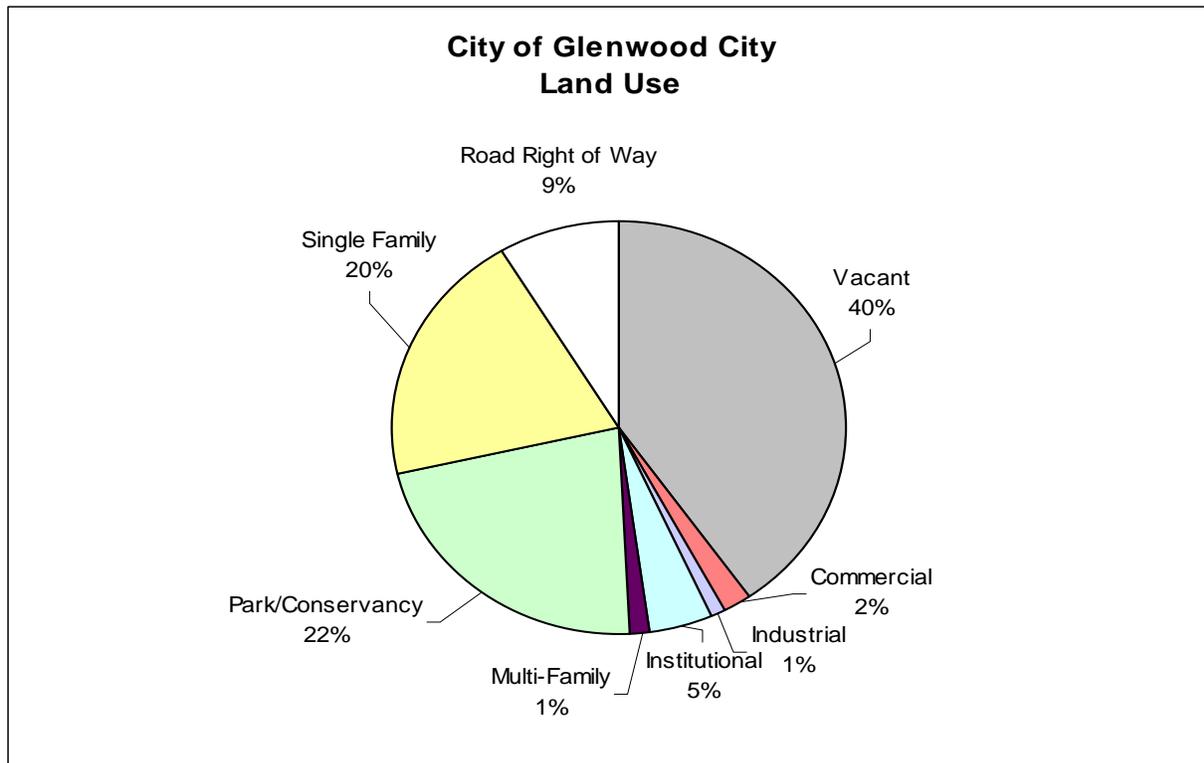


Figure L-1 Existing Land Use



Source: Cedar Corporation Field Study and City of Glenwood City

Table L-1 Land Use Acreage

Land Use	Acres	Percent
Single Family	316.45	20.1%
Multiple Family	20.55	1.3%
Industrial	18.65	1.2%
Institutional	82.46	5.2%
Commercial	27.46	1.7%
Right of Way	137.10	8.7%
Total Developed	593.81	37.5%
Conservancy/Park	338.06	21.4%
Vacant	634.83	40.4%
Total Land	1578.14	100.0%

Source: Cedar Corporation Field Study and City of Glenwood City

Land Use – Residential

Residential land use is a vital component of community composition. The type, condition, size, character, and cost of housing greatly influence the quality of life within a community. To some extent, these issues can also define the type of people who live in communities. As Glenwood City continues to grow, vacant lands that mainly consist of agricultural land will be converted to residential land to accommodate the growing population.

Currently, residential land use makes up approximately 21% of all land use within Glenwood City. Single-family residential equates to approximately 20%, while multi-

family accounts for the remanding 1% of total City residential land use. Overall, housing densities range from one housing unit per acre for single family residential to seven units per acre for multi-family as seen in Table L-2. It should be noted that Glenwood City has three separate zoning classifications allowing for different minimum lot area requirements as well as different types of residential development. R-1 and R-2 both allow multiple and single family development and have the same minimum square footage requirement of 9,600 square foot. A-1 only allows for single family development and has a minimum lot requirement of three acres. This information will be important when calculating acreage available for future residential development. Table L-3 shows population densities for Glenwood City in 2000.

Housing Density, City of Glenwood City

Table L-2 Housing Density

Residential Land Use	2000	Gross Density/Acre
Population	1,183	
Total Housing Units	460	1.36
Single Family Units	315	1.00
Multi-Family Units	145	7.05
Single Family Acres (Developed)	316.45	
Multi-Family Acres (Developed)	20.55	

Source: 2000 U.S. Census

Population Density, City of Glenwood City

Population density within Glenwood City is base on total area of the municipal boundary (1,578 acres) and the total developed area (594 acres). This was then divided by the 2000 population of 1,183 to give us the densities shown in Table L-3.

Table L-3 Population Density

	Density/Acre	Square Miles	Density/Square Mile
Total Urban Area	.75	2.46	481
Developed Area	1.99	.93	1,272

Source: 2000 U.S. Census and Cedar Corporation Field Study

Land Use – Industrial

Industrial development provides employment opportunities for City residents and offers a significant source of tax revenue for municipalities. Industrial land use may also be a source of potential conflict in a community, as this type of development poses transportation and utility challenges and has the potential to affect the aesthetic character of the landscape. Proper planning ensures that the placement of industrial facilities will provide maximum safety and compatibility with existing development and will minimize environmental damage and loss of aesthetic value.

Currently, industrial land use only accounts for 1% of the existing land within the City. The City's Industrial Park is located in the southeast corner of the City and positioned on the north side of State Highway 170. Other areas in Glenwood City that have been

identified as possible industrial sites include: approximately four acres located directly to the east of the existing industrial park, 16 acres of land located on the east side of State Highway 128 in the southwest corner of the City and approximately 11 acres of land located to the south of 7th Street in the southeast corner of the City.

Land Use – Institutional/Public

Schools, nursing homes, community centers, hospitals, cemeteries and public buildings represent institutional land uses within a community. These land uses provide valuable and needed services to community residents and are often viewed as community assets. These uses tend not to conflict with most other land uses and thus, may be located within most other districts. Institutional and public land use planning requires consideration of traffic and pedestrian safety along with community needs and desires.

The expansion of educational facilities and a greater need for municipal services will likely account for the greatest need in this land use area.

Within Glenwood City, institutional land use accounts for approximately 82 acres, or 5.3% of the total acreage. Institutional sites include:

- Glenwood City Educational Facilities and Public Library
- Red Cedar Medical Center
- Nursing Home
- Historic Masonic Temple
- Fire Hall
- Community Center
- Public Utilities Buildings
- Water Towers and Public Wells
- Cemetery

Land Use - Commercial

Commercial land uses within a community provide employment opportunities, goods and services to the community, tourism, and tax revenue for the municipality. Commercial development can differ widely in form and structure. Common forms of commercial development include strip development and large office buildings.

The amount of land devoted to commercial use within Glenwood City equates to 27.46 acres or approximately 1.7%. Currently, the majority of commercial land use is found within the downtown business district located primarily along Oak Street. Commercial lands can also be found extending north – south along 1st Street, 7th Street, and Misty Lane.

Land Use – Parks/Conservancy

Recreational and parklands provide valuable community services. These lands are used by residents for activities such as baseball, softball, walking, jogging, hiking, biking, and many forms of passive recreation. These areas also serve as meeting and community gathering places for picnics, family reunions, and other social events.

Glenwood City acknowledges the need and benefits of park/conservancy land within the City. At present there are approximately 338 acres within the City classified as

either park or conservancy lands. Parkland consists of approximately 19 acres while the remaining 319 acres are classified as Conservancy. Much of the land classified as conservancy has been identified as floodplain along Tiffany creek or lands located within the City that are seen as unsuitable for development due to wetland or slope issues. Park and recreation facilities are dispersed throughout the community, which include:

- City Park
- Hinman Park
- City Ball field
- Old Railroad Bed Trail
- Hinman Trail

Land Use – Transportation

A well planned road network is vital for safe travel and sound infrastructure within a community. Glenwood City has approximately 137 acres (8.7%) of lands that fall within this category which include all road rights-of-way. The largest percentage of this land can be found along State Highways 128 and 170.

Land Use – Undeveloped Vacant/Agriculture

Lands included within this classification are primarily undeveloped areas such as woodlots and fields as well as lands currently being used for agricultural production. Vacant lands can also be areas with abandoned structures, including brownfields, grayfields and other reclamation sites. Brownfields and grayfields are abandoned or under-utilized commercial or industrial properties where expansion or redevelopment is hindered by real or perceived contamination. Vacant lands are extremely important to a community's land base, as these are the land bank for future development and growth. Infill and redevelopment of vacant lands is a mechanism commonly used to promote cost effective growth while conserving undeveloped lands.

Agricultural lands within Glenwood City account for approximately 199 acres or 31% of all vacant lands. Larger tracts of lands currently dedicated to agricultural production within the city can be found in the following locations:

- West side of the City on both the north and south sides of State Highway 128
- South side of the City adjacent to Tiffany Creek
- Northeast central part of the city adjacent to 3rd Street

It should be noted that lands currently in production, but previously platted off, were not included in agricultural land calculations. These lands will be considered residential when looking at future land use.

Future Land Needs Analysis

The future land needs analysis for Glenwood City will attempt to display a general overall look to the City by projecting general locations of land use patterns out to the year 2020 as seen in Map L-2.

The map should not be used as a strict end all, but rather as a tool to help shape the community's growth. The analysis will also estimate acreage out to the year 2020 for residential, agricultural, commercial and industrial land uses.

Residential

The minimum amount of land needed to accommodate the projected population can be estimated based on a combination of population projections, the number of persons per household and the density of development.

The first step is to estimate the number of housing units needed. Using a growth rate of 20%, population projection for the year 2010 will be 1,420. The average household size for Glenwood City, based on the 2000 census is 2.48. Assuming the average household size remains constant, it is estimated that there will be a need for an additional 95 housing units for the design years 2010. The same logic can be applied to figure out the growth rates and housing needs through the year 2020.

The amount of land needed for the projected housing units depends on the density of the development. Densities vary widely between housing types. When figuring single-family densities, the density will be assumed at four units per acre for lands zoned R1 and R2 while lands zoned A-1 will support one unit per three acres. This represents the maximum number of single family units allowed per acre, as to the Glenwood City Municipal Code.

It is difficult to estimate the number of units for multiple-family housing because designs range from duplexes to high rise apartment buildings. This analysis assumes that the multiple family housing will develop at the current density of 7-8 units per acre. It is also assumed that the proportion of single-family units to multiple family units will remain at the 2000 census level (68.5% single family and 31.5% multiple family units). Tables L-4 and L-5 show projected housing and acreage requirements out to the year 2020 using a 20% growth rate.

Table L-4 20% Growth Rate

Year	1990	2000	2005	2010	2015	2020
Population	1026	1183	1296	1420	1556	1704
Persons per Household	2.47	2.48	2.48	2.48	2.48	2.48
Total # of Households	400	460	506	555	608	666
Additional Housing Units Needed			46	49	53	58
Total Single Family Units	284	315	361	410	463	521
Additional Single Family Units			31	34	36	40
Total Multi-Family Units	116	145	160	175	192	210
Additional Multi-Family Units			15	15	17	18

Source: 2000 U.S. Census and Cedar Corporation

Table L-5 Additional Acreage Needed Utilizing High Density Development

Year	2000	2005	2010	2015	2020
Single Family Acreage Total	316	324	333	342	352
Additional Family Acreage		8	9	9	10
Multi-Family Acreage Total	20	22	24	26	28
Additional Multi- Family Acreage		2	2	2	2

Source: Cedar Corporation

Low Density Development

There are currently 354 acres of vacant property within Glenwood City that are zoned for large lot or low density development. These lands will currently allow development densities of one unit per three acres. Most of this land can be found along the fringe of the City and is currently being utilized for agricultural production.

As growth extends outward, large lot development can create a problem. For financial reasons, urban development is conducive to the extension of municipal utility services.

Because rural development results in large lot sizes and long frontages, providing city utilities is usually not feasible except at great cost. Assuming development will occur because of market and population demands, rural developments within the City or adjacent to its borders will essentially halt extension of municipal infrastructure. One possible solution to combat this problem is to allow for cluster development. This will preserve open space and natural features while permitting higher density development within a rural estate subdivision.

Ideally it would be best to have infill development within the City limits as it will decrease sprawl and make utility extensions more cost effective. However, because property owners ultimately reserve the right to develop their land, the City may need to look at approving annexation requests as a means of meeting their growth needs until infill development occurs.

Because growth *will* occur, it is beneficial to allow denser development to happen in a transitional zone close to city infrastructure in an effort to control sprawl in the rural landscape. Considering that an urban environment can typically be developed to provide eighty single family residences on only 20 acres of land (1/4 acre lots), while a rural area would require 180 acres to accommodate the same number of homes (3 acre lots) along with a much larger need for transportation infrastructure because of a rural development's spread out nature, it is clear that orderly urban expansion is a key element of sprawl reduction and preservation of rural landscapes. Relatively denser development within the City will therefore help to ease sprawl in the overall rural countryside.

Commercial

The need for commercial land in Glenwood City will increase as the population increases. Sites must be made available for expanded retail, services, and wholesale operations. It is difficult to predict the amount of land that will be needed for commercial expansion, but the need should be anticipated and suitable land must be identified to accommodate the growth.

Two areas for future commercial growth are shown in Map L-2. The first is located at S.T.H.'s 128 and 170 meet near the southwest corner of the downtown area. The second is a parcel of land on S.T.H. 128, in the southern part of the city. These two areas add an additional seven acres of potential commercial property (Table L-6). It is recommended that future commercial growth is tied into the downtown area to retain its position as the City's focal point.

Table L-6 Commercial Land Use

	Land Use Commercial				
Year	2003(existing)	2005	2010	2015	2020
Current Acreage	27	-	-	-	-
Additional Acres		1	1	2	3
Total Acres		28	29	31	34

Source: Cedar Corporation

Industrial

There is no room for additional industry within the current industrial park. The largest areas ideal for and expansion of the park, when needed, are located outside the City Limits. These are approximately three 40 acre parcels located to the east and south of the City. Table L-7 lists the projected additional industrial acreage needed.

Table L-7 Industrial Land Use

	Land Use Industrial				
Year	2003(existing)	2005	2010	2015	2020
Current Acreage	18	-	-	-	-
Additional Acres		0	5	5	6
Total Acres		18	23	28	34

Source: Cedar Corporation

Agriculture

Currently, Glenwood City has approximately 346 acres classified as Agricultural/Residential lands which are located mostly on the western side of the City and outer fringes. As the population grows, these lands will likely be converted into residential. Table L-8 lists the projected loss of agricultural acreage.

Table L-8 Agricultural Land Use

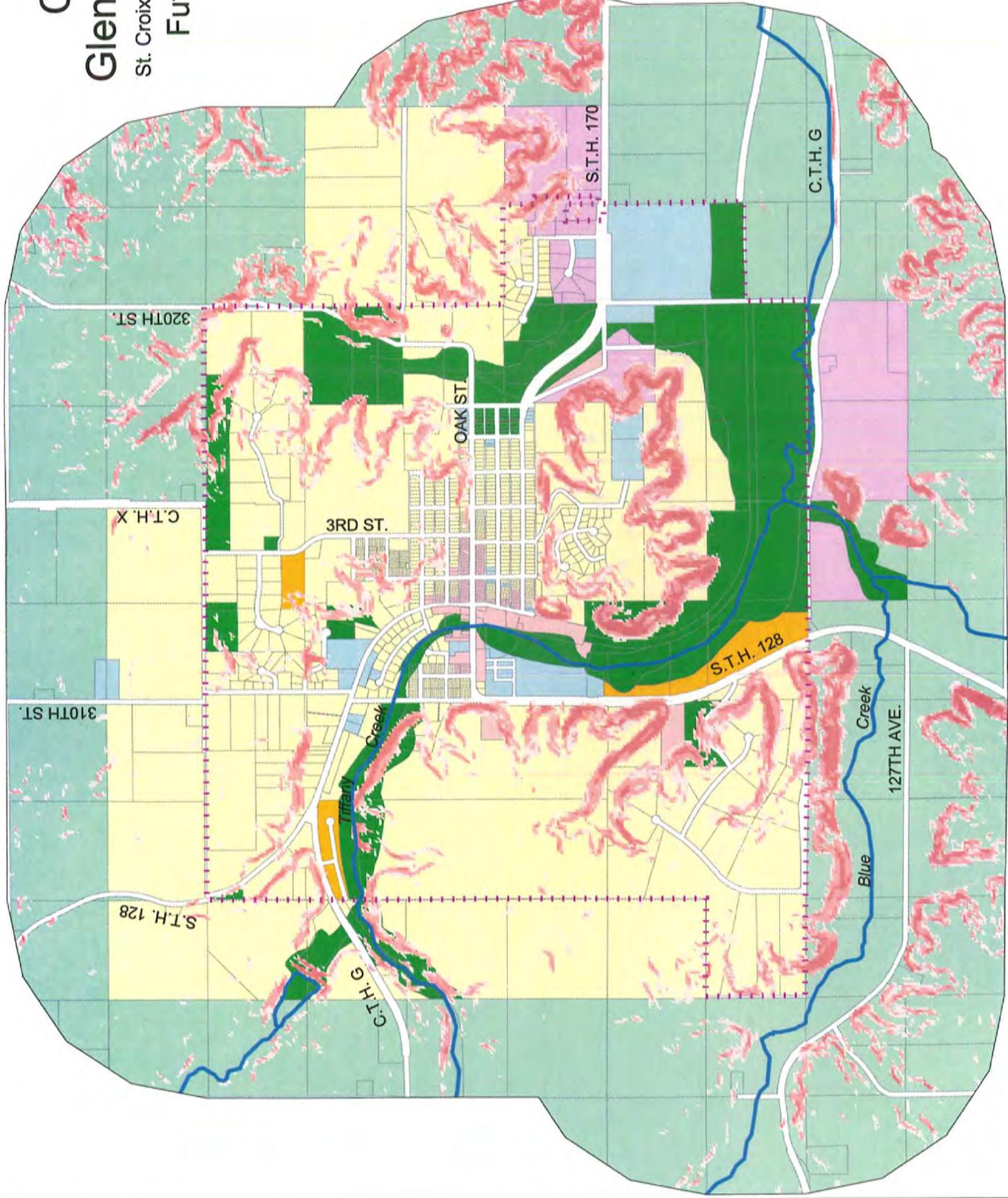
	Land Use Agriculture				
Year	2003 (existing)	2005	2010	2015	2020
Total Acreage	346	-	-	-	-
Lost Acreage to Development		-5	-10	-10	-10
Total Acres		341	331	321	311

Source: Cedar Corporation

City of Glenwood City

St. Croix County, Wisconsin

Future Land Use L-2



LEGEND

- City Limits
- Water
- Slopes 20-121.shp
- 20-25%
- 25-35%
- > 35%
- Future Land Use
- Commercial
- Industrial
- Institutional
- Parks / Conservancy
- Residential
- Multiple Family
- Vacant Agriculture

N

1000 0 1000 Feet



GOALS, OBJECTIVES AND POLICIES

Goal 1: Work to promote fiscally and environmentally responsible developments.

Objectives: Promote development within the City consistent with the City plans for future streets, utilities and land uses.

Policies:

- Unsewered development would be discouraged, but would be allowed on a limited basis within designated residential areas.
- Land should be developed according to community standards for curb, gutters, parks, street widths, storm sewers, etc.
- Encourage land use and roadway patterns compatible with existing neighborhoods.
- Promote the redevelopment of residential areas that become blighted.
- Promote preservation of greenspace within existing and proposed developments.
- Encourage densities that minimize utility, road, and sidewalk/trail costs.
- Support appropriate commercial development near the Central Business District.
- Acquire land for future industrial expansion so opportunities for industry will not be missed.

6 TRANSPORTATION

Introduction

To many people, a transportation system consists of highways and local streets. But a transportation system encompasses much more than that. Attitudes towards health and quality of life issues have changed this thinking. Communities now give more consideration to planning for the safe movement of pedestrians, bicyclists, and residents with special needs.

There are also other items to consider when planning for transportation. A community must also take into account jurisdictional control, maintenance, and future transportation corridors.

A well-planned transportation system provides for the efficient and safe movement of people and goods through various means and lays the foundation for growth and economic success while improving the quality of life in the City of Glenwood City. Though the best possible multi-modal transportation system is desired, it does not come without a price.

Construction of new roads, bridges, and trails is expensive and can have negative environmental impacts. After these are built, they have to be maintained on a regular basis.

As a guide for the design and construction of future transportation facilities, the transportation planning element will examine existing transportation corridors with respect to land use, environmental concerns, and economy while examining alternative forms of transportation. This will ensure the adequacy of the network to support future growth, while minimizing costs and protecting environmental resources and increasing the quality of life for the citizens of Glenwood City and the surrounding area.

Modes of Transportation

The movement of people and goods is accomplished through a variety of transportation modes. These modes include car, truck, rail, public transportation, ship, air, bicycle and pedestrian. For the most part, each mode fits a particular need. Automobiles function as the dominant mode for the movement of people. Trucking provides for the rapid movement of goods and products over the highway network. Air travel helps to move people and lightweight products quickly over long distances. The railroad functions primarily for the movement of bulk commodities over long distances while bicycle paths and sidewalks provide for the movement of people. The most dominant mode of transportation in Glenwood City (and nearly all communities) is the automobile.

Local Streets and Highways

Streets and highways provide different levels of service. For example, highways provide for movement of through traffic while streets provide access to property. Most public roads in Wisconsin are classified according to their function and jurisdiction. A functional classification system groups roads and streets according to the character of service that they provide. It also helps determine eligibility for federal aid. Classifications are divided into urban and rural categories, based on population. Glenwood City falls under the rural functional classification system.

Functional Road Classification System (Rural <5000 Population)

Principal Arterials: Serve interstate and interregional trips. These routes generally serve all urban areas greater than 5,000 people. The rural principal arterials are further subdivided into:

- Interstate highways.
- Other principal arterials.

Minor Arterials: In conjunction with the principal arterials, they serve cities, large communities, and other major traffic generators providing intra-regional and inter-area traffic movements.

Major Collectors: Provide service to moderate sized communities and other intra-area traffic generators, and link those generators to nearby larger population centers or higher function routes.

Minor Collectors: Collect traffic from local roads, and provide links to all remaining smaller communities, locally important traffic generators, and higher function roads. All developed areas should be within a reasonable distance of a collector road.

Local Roads: Provide access to adjacent land and provide for travel over relatively short distances. All roads not classified as arterials or collectors are local function roads.

Arterials, Collectors, and Local Roads

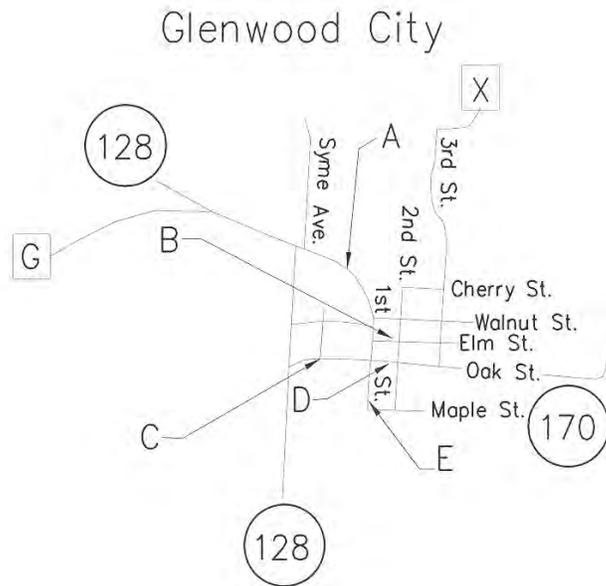
Glenwood City is served by primary access points State Highway 128, State Highway 170, County Highway X, and County Highway G. Access is also provided through a network of local roads and streets.

According to the Wisconsin Department of Transportation, State Highway 170 and 128 are classified as minor arterials and are the largest traffic carriers in the area. Both State Highways fall under WisDOT jurisdiction. County Highway G traveling west out of Glenwood City is classified as a major collector, while County Highway G extending east and County Highway X extending north out of Glenwood are classified as minor collectors. The State highways fall under State jurisdiction and County highways under County jurisdiction. All other roads are listed as local and fall under local government jurisdiction (*Map T-1*).

Traffic Volumes

Growing population brings increased traffic. Traffic volumes within the planning area are determined by the Wisconsin Department of Transportation. This data is collected every three years based on traffic counts at a specific location (*Figure T-1*). These data represent 1997 and 2000 Annual Average Daily Traffic for the specified roadway. Table T-1 shows volume increases at points C and E while all other collection points saw decreases. It should be noted that in 2000 when the traffic volume data was last collected, County Highway G was being reconstructed, which probably affected traffic flow patterns in and around the City.

Figure T-1 Traffic Data Collection Points



Source: WisDOT Wisconsin Highway Traffic Volume Data

Table T-1 Glenwood City Traffic Volumes

Year	1997	2000	Change in Number
Point A	2,000	1,900	-100
Point B	1,300	730	-570
Point C	2,600	2,800	+200
Point D	2,800	2,200	-600
Point E	2,500	3,300	+800

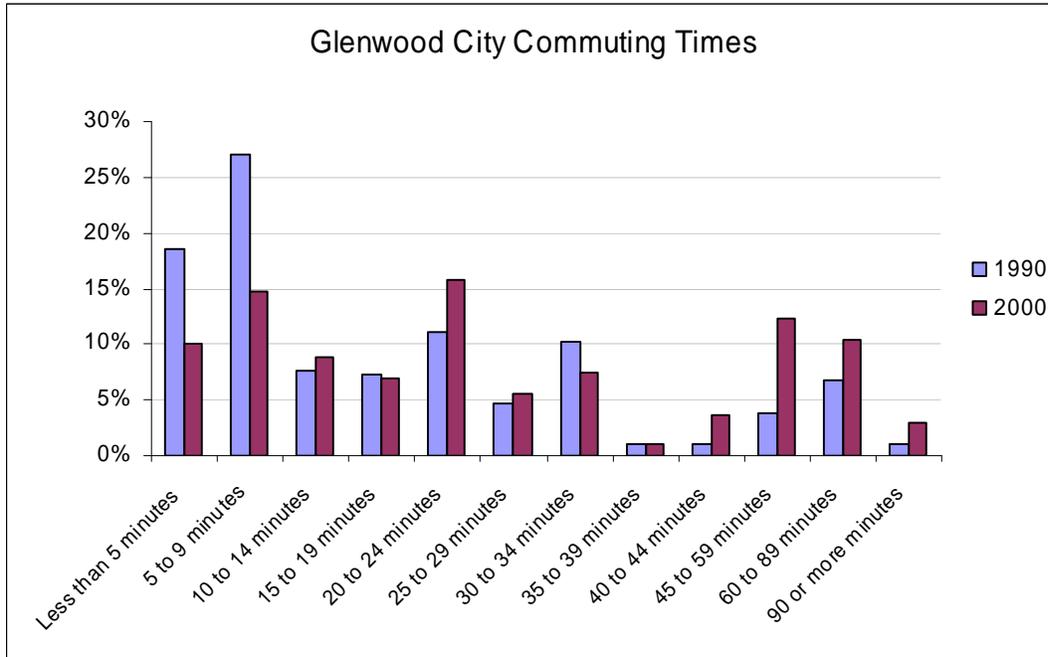
Source: WisDOT Wisconsin Highway Traffic Volume Data

Commuting Patterns

Commuting patterns in Glenwood City mirror the patterns of many communities in St. Croix County. According to the Wisconsin Department of Work Force Development, many of the residents living in St. Croix County are increasingly commuting to the Minneapolis-St. Paul Metropolitan Area and its surrounding communities for work. Although Glenwood City lies on the eastern edge of the

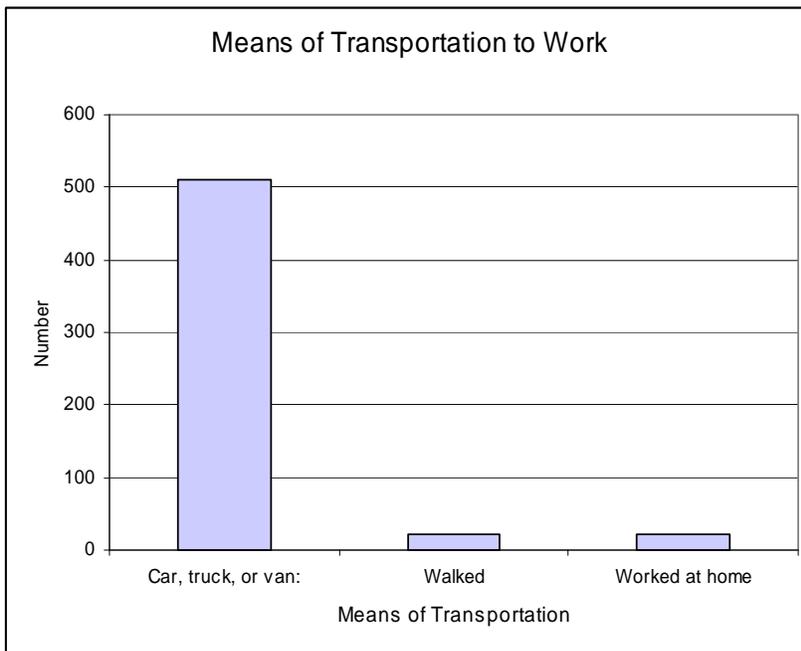
county, Figure T-2 illustrates that many residents are still willing to commute longer distances to the Twin Cities Metropolitan Area for work though there are still large numbers of workers who are employed in Glenwood City and nearby surrounding areas. A majority of these are traveling by car, truck, or van (Figure T-3).

Figure T-2 Commuting Times for Workers 16 Years and Older



Source: US Census Bureau 2000

Figure T-3 Means of Transportation to Work for Workers 16 Years and Older



Source: US Census Bureau 2000

Travel time to work varies substantially, with many residents driving 40 minutes or more. Transportation choices reflect access to services, distances traveled, and personal preference. Like much of the county, single-occupant vehicles are the dominant mode of transit, however, as illustrated in Table T-2, there is a high percentage of Glenwood City residents utilizing carpooling which can most likely be attributed to costs of longer distances residents are traveling to reach job locations in the Twin Cities Metro area.

Table T-2 Workers Who Drove Car, Truck, or Van to Work

	Number	Percentage of Total
Drove Alone	408	79.8%
Carpooled	103	20.2%
Total	511	100.0%

Source: US Census Bureau

As in-migration continues to increase, demand and impact on the transportation network will increase significantly. Potential construction of a new four-lane bridge between Stillwater, Minnesota and Houlton, Wisconsin, will influence transportation decisions within the planning area. If the bridge is constructed, elevated traffic volumes may cause increased congestion in and around Glenwood City. Also, as residential and commercial development patterns are influenced by improved access to neighboring communities, traffic concerns must be anticipated and adjusted accordingly.

Criteria for Future Road Corridors

One of the biggest challenges of transportation planning in Glenwood City is dealing with the topography. The steep slopes greatly reduce the ability to have future streets connect to existing streets.

When planning, we try to ensure smooth traffic flow within and through the community. To do this, these factors are considered when planning future road corridors:

- Connect existing dead ends and stub roads where possible.
- Multiple access points for certain developments.
- Increase/improve east-west, north-south corridors.
- Follow natural features and topography of the land.

Existing, Proposed, and Future Roads

Map T-1 shows the existing roads within Glenwood City and surrounding area as well as currently proposed future roads. The future roads were designed using the criteria for future road corridors and represent the most logical and cost efficient way to enhance the existing transportation system. It should also be said that these locations are generalized and could be moved several hundred feet if necessary after serious consideration and further investigation.

Proposed Future Roads

- A: Extension of 150th Avenue between 310th Street and C.T.H. X. This would provide for a continuous east-west corridor north of the City.
- B: Road to the west of Syme Avenue into future residential area on western edge of the City. This would provide close access to a minor arterial if residential development occurs.
- C: Road that connects C.T.H. X to 5th Street providing two access points to future residential area.
- D: Extension of Industrial Road south and west to future residential area.
- E: Through streets north of 145th between S.T.H. 128 and C.T.H. X to provide traffic flow.

Planned Area Roadway Improvements

Besides the above-mentioned criteria for future road corridors, plans by outside agencies must also be taken into account. The WisDOT has a (District 6) 2002-2007 Major Projects Plan that currently lists no projects for the Glenwood City area. The WisDOT has two nearby projects that will most likely have an effect on Glenwood City.

Part of the Wisconsin DOT (District 6) 2002-2007 Major Projects Plan is a major highway development starting in Houlton, WI and ending in New Richmond, WI. The preparation phase of reconstructing the existing Wisconsin 35/64 two lane highway into a four lane rural expressway began in the fall of 2002. The construction phase, started in 2003, will finish in 2006. This 12.94-mile project will extend from 150th Avenue to 145th Street, east of New Richmond. This \$79,594,000 project is designed to relieve traffic congestion, improve safety, and move products and people to their destinations more efficiently.

Inclusion of the Stillwater Bridge construction project in the Glenwood City Comprehensive Plan is imperative to address future growth and transportation impacts and to facilitate long range planning. Construction of the bridge could result in an increase in traffic volume from 15,100 cars per day to 34,400 by the year 2020 (MnDOT). This project can be expected to stimulate growth and expansion within the planning area and it's environs. This project, along with the 35/64 expansions can be expected to increase local traffic volume, as Glenwood City becomes more accessible to the larger metropolitan areas to the west.

Glenwood Meadows

Private development for Glenwood Meadows Phases II and III. New construction with curb and gutter, water, sanitary, sidewalks, and storm sewer.

Future Street Improvements

The City evaluates projected road improvements each time it applies for grant monies through the State's Municipal Street Improvement Program (MSIP). Improvements are projected out five years. Projects listed in the 2003 application were:

- 2004 Trailer Court and Oak Street (currently being done)
- 2005 Tiffany Creek Road
- 2006 2nd Street from Oak Street to Cherry Street
- 2007 Syme Avenue from S.T.H 128 north to the City Limits
- 2008 Glen Meadows Lane

Road Expenditure Planning

With infrastructure comes maintenance. A sound transportation plan should be able to foresee and responsibly plan for upcoming expenses. Two ways of doing this is by participating in the Pavement Surface Evaluation and Rating or PASER program and devising long-range public works plans. Glenwood City does both.

Pavement ratings can be used for planning maintenance and budgets for local roadways. In 2001, a state statute was passed that requires municipalities and counties to assess the physical pavement condition of their local roads. A common method of doing this is referred to as PASER rating. PASER rates roadways from Failed (needs total reconstruction) to Excellent (no visible stress). PASER allows for better allocation of resources, a better understanding of pavement conditions, and allows for long term planning.

The City also develops a Public Works Five-Year Plan that lists possible projects as well as their estimated costs. This list is continually updated during MSIP application years.

Glenwood City can also fund future road projects through impact fees. Impact fees are fees charged per lot on new development because of the impact they have on roads and community facilities and utilities. Glenwood City adopted an Impact Fee Ordinance in December of 2004.

Bicycle/Walking Trails

Today, more people are interested in physical fitness than ever before. Besides basic transportation, biking and walking are increasingly popular ways to exercise regardless of age. Besides health benefits, sidewalks provide a safe way for pedestrians to move throughout the City while bike trails can offer an aesthetic and relaxing way to enjoy Glenwood City while bringing in financial benefits to local businesses as well.

The future sidewalk/bike trail plan will take these factors into consideration:

- Providing safe passage to generators of traffic including parks, schools, and the downtown area.
- Locate sidewalks or trails along roads with heavy traffic such as arterials and collectors.
- Build sidewalks that provide connectivity to other sidewalks.
- Provide adequate road width and shoulder space for safe sharing of road space with vehicles.

Proposed Future Sidewalks/Trails

Map T-2 shows existing and proposed sidewalks and pedestrian trails for Glenwood City. The majority of existing sidewalks are located in the Central Business District (CBD) and surrounding neighborhoods. Existing trails lead to Hinman Park and the Glenwood Area School.

When looking at possible locations for future sidewalks and pedestrian trails, we first identify local traffic generators. Traffic generators are locations within the City that generate large amounts of traffic. In Glenwood City, these are identified as the City Park, Hinman Park, City ball field, grocery store, CBD, and the Glenwood Area Schools. We then try to connect these locations through a series of sidewalks and trails. This gives residents opportunities to travel to these locations by means other than a motor vehicle and provides them with safe routes. An explanation of the proposed future sidewalks and trails is listed below:

- A: Proposed sidewalk along proposed street allowing residents access to CBD, parks and schools.
- B: Proposed future trail to future residential areas.
- C: Proposed trail to existing residential areas and future development.
- D: Proposed sidewalk along proposed road in future residential area.
- E: Future trail and crosswalk connecting existing development to schools.
- F: Proposed trail from residential area, a crosswalk across S.T.H 128, with trail continuing and connecting with railroad bed trail.
- G: Proposed trail from existing development to CBD.

The St. Croix County 1995-2015 Proposed Bikeway Plan System established the proposed bike route shown (*Map T-2*). The dashed green line represents routes that are more suited than others based on available information at that time. The bike routes are designated as shared roadway meaning that these routes can be safely shared by bicyclists and motorists with no additional improvements necessary.

Construction and repair of sidewalks and trails can be expensive. Currently, the property owner is responsible for costs associated with new, repaired, or reconstructed sidewalks. Glenwood City's subdivision ordinance states that the Common Council may require a pedestrian path through the center of a block more that 900 feet long where deemed essential. This is to provide access to schools, playgrounds, shopping centers, transportation, and other community facilities. Impact fees may also be used to construct trails. Other possible funding sources are listed at the end of this chapter.

Air Transportation

The closest public air access facility is located two miles north of the City of New Richmond (*Figure T-4*). The New Richmond Municipal Airport (NRMA) can handle most business-sized aircraft but does not offer passenger or freight service. The airport is staffed 7:00 am to 5:00 pm seven days per week with aviation fuel available. NRMA has one asphalt and one grass airstrip (*Table T-3*).

Figure T-4 New Richmond Airport Location

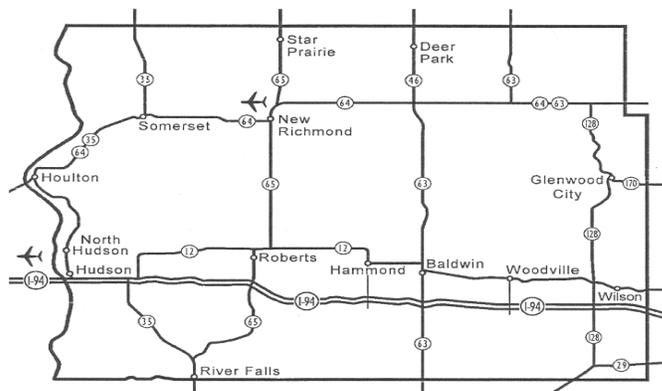


Table T-3 New Richmond Municipal Airport

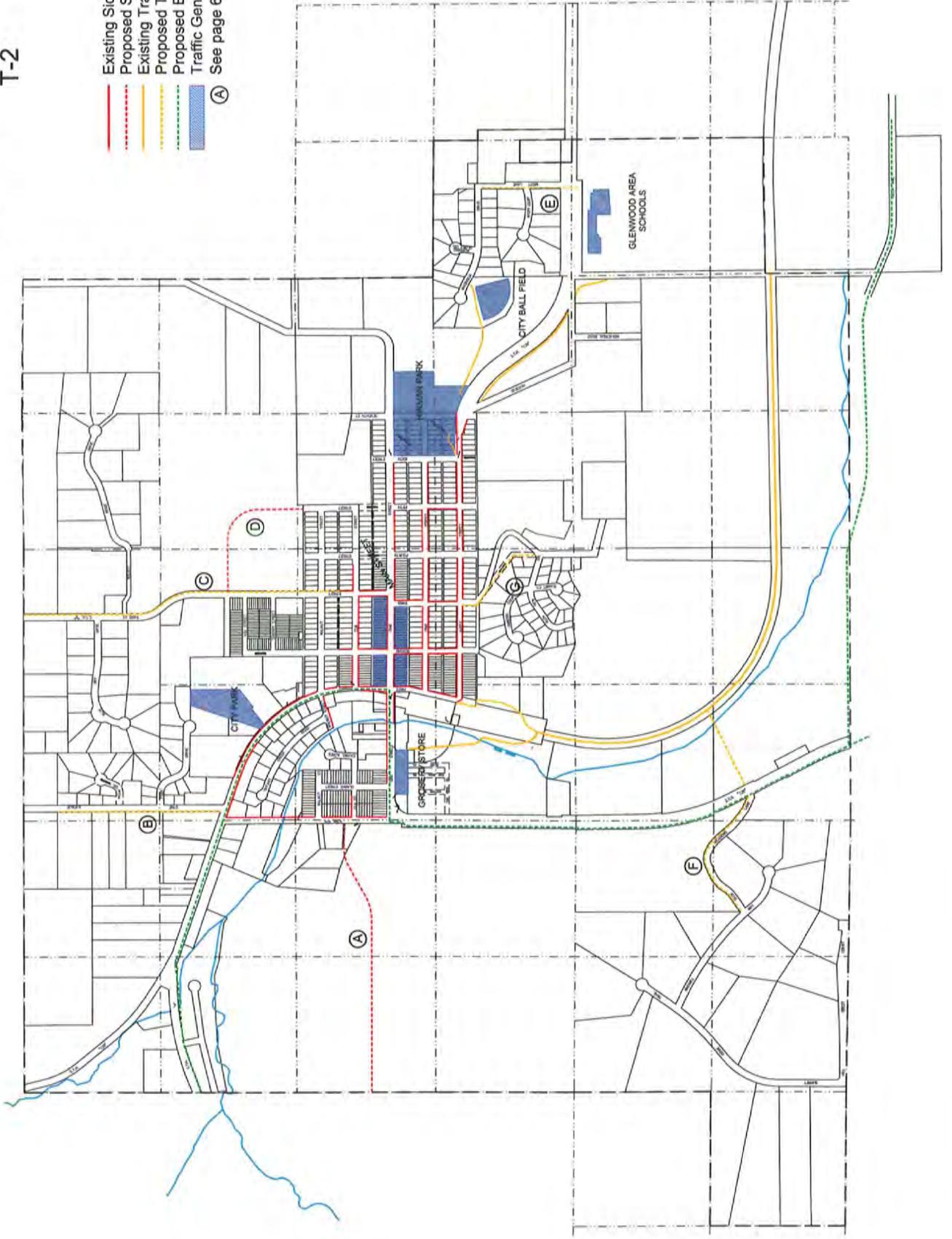
Surface	Length	Lights
Asphalt	4001' x 75'	Yes
Grass	2110' x 75'	No

Source: New Richmond Municipal Airport Website

Access to commercial air service is provided through the Minneapolis-St. Paul International Airport (MSP). MSP provides direct access to 175 domestic destinations, as well as many international access points and furnishes the primary air transportation needs for Glenwood City.

CITY OF GLENWOOD CITY Proposed Future Sidewalks and Trails T-2

- Existing Sidewalks
- Proposed Sidewalks
- Existing Trails
- Proposed Trails
- Proposed Bicycle Route
- Traffic Generators
- See page 6-9



Ride Share Lots

Residents who commute to other communities along I-94 can use an unofficial ride share lot located in the parking lot of the Kwik Trip at the interchange of I-94 and S.T.H 128. There is also an unofficial lot located on S.T.H. 64, west of S.T.H. 128.

Transportation for the Disabled and Aging

The St. Croix County Department of Aging provides two different services for the elderly. First, seniors can get rides to the Senior Center or to a clinic appointment if they are in the Glenwood City area. They can also be transported to shopping or recreational opportunities in the area. This service is offered Monday through Thursday from 8:00 am to 5:00 pm. Second, they also offer a service to people 60 years of age and older who need to go out of town for medical appointments. This service is performed through volunteers.

St. Croix County Disabled Transportation is a non-profit volunteer organization that offers transportation opportunities to the disabled and elderly. Most services are offered during daytime hours, but nighttime and Saturday service is sometimes available. There is no charge for their services but donations are accepted. Rides can be given almost anywhere as long as there is a volunteer willing to provide transportation. St. Croix County Disabled Transportation is funded through donations from the Anderson Foundation, United Way St. Croix County, Baldwin Area Community Foundation, and the Office of the Aging, which receives funds through the Wisconsin Department of Transportation.

Rail Transportation

There are no opportunities for passenger service or freight transport within Glenwood City. The nearest freight line is located north of the City in the Town of Glenwood and is operated by the Canadian National Railroad.

Passenger service is available through Amtrak in St. Paul, Minnesota.

Possible Funding Sources

Local multi-modal transportation projects can be funded through different sources. Some of the most common sources that are or could be used are:

- State Shared Revenue
- Local General Funds
- Community Development Block Grants
- DNR Stewardship Grants
- Enhancement Grants
- Private Foundations
- Corporate Foundations

GOALS, OBJECTIVES AND POLICIES

Goal 1: Provide for safe pedestrian and bicycle movement within Glenwood City.

Objectives: To create a safe and planned multi-modal transportation system that can be used by all residents regardless of age or physical needs; create opportunities for residents to travel within the City by means other than automobile or truck.

Policies:

- Require new developments to add trails or sidewalks that connect to existing sidewalks or bike trails or will lead to our proposed trails and sidewalks.
- Provide safe road crossings for pedestrians and bicyclists by utilizing signs, lights, striping and eliminating view obstructions.
- Develop biking/walking trails to main traffic generators.
- Consider amending Subdivision Ordinance to require developments to provide sidewalks and/or trails to connect to existing sidewalks and/or trails.
- Contact DOT Traffic Engineer concerning crosswalk between school and subdivision.

Goal 2: Promote fiscally responsible transportation planning.

Objectives: Coordinate street, sidewalk, and trail construction and improvements with municipal utility needs.

Policies:

- Pursue available grant monies to help offset the cost of infrastructure upgrades.
- Identify all future transportation projects that coincide with future utility needs so they can be prioritized and done at the same time to minimize costs.

Goal 3: Encourage a road system that promotes connectivity.

Objectives: To create a street system that allows smooth and safe passage of vehicles, bicycles, and pedestrians within and through Glenwood City.

Policies:

- Glenwood City will review subdivision plats to ensure that right-of-way is reserved for future through streets where possible connections to existing streets may be likely.

7 PUBLIC UTILITIES AND FACILITIES

The capacity and quality of public utilities and facilities are two of the most important factors affecting a community's growth. As Glenwood City continues to grow, there will be additional pressure put on the current community-wide services and facilities. A steadily rising standard of living and continuing population growth, create new demands for cities such as Glenwood City. Local officials must provide and finance these facilities and services in the most practical manner possible.

City Administration

City Hall is located at 132 Pine Street in a former church. The municipal offices housed at City Hall include the offices of the City Clerk and Deputy Clerk. The building is also home to the Glenwood City Police Department and the City Council chambers. There are currently no plans for expansion.

The Public Works Building is located at 210 South Madison Street. The City may require expansion of this facility within the next 10 years.

Police Department

Glenwood City employs one full-time Chief of Police, two full-time officers and two part-time deputies. At present, the Department is equipped with one squad car. The Police Department is located in the City Hall Building. For non-emergency calls, the Police Department can be reached at 265-4227. In the event of an emergency, they can be reached at "911."

Fire Protection

The Glenwood City Fire Hall is currently located at 10 Misty Lane. The Fire Hall was built in 1999 and provides adequate space for the Department's needs. The Fire Department staff consists of a Fire Chief and 28 volunteer firemen who are paid on an hourly and per fire basis. The Department is funded through fees paid by municipalities within its service area. The Glenwood City Fire Department serves the City of Glenwood City, Village of Downing, Town of Glenwood and portions of the Towns of Stanton, Tiffany, Springfield, Emerald and Forest.

The vehicles and equipment used by the Glenwood City Fire Department include the following:

- Two pumper trucks - 1996 Freightliner 1500 GPM and a 1982 GMC 1000 GPM
- Three tank trucks - 1998 Freightliner 2000 GPM, 1985 Chev. 2000 GPM, 1974 GMC 3000 GPM
- Two brush trucks – 1985 Chevy and a 1966 Jeep

The following is a list of common task performed by the Fire Department response teams:

- Fire fighting structural
- Fire fighting – forest
- Extrication
- Haz/Mat
- Confined space rescue
- Search and rescue summer/winter

The department has received a grant through FEMA to help fund the purchase Self Contained Breathing Apparatus equipment (SCBA).

Ambulance Service

The Glenwood City Ambulance Service operates out of the Glenwood City Fire Hall. The Ambulance Service has 13 EMT trained volunteers. All staff is paid on a per run basis, and if on call over the weekend, are paid at an hourly rate. The Service has one ambulance and is currently looking to purchase a second depending on funding. Glenwood City offers EMT basic service that is provided 24-hours a day. All emergency calls are dispatched through the St. Croix County Sheriff's Department.

The Glenwood City Ambulance Service is funded through the municipal taxes and its fees charged for services provided.

Library Services

The Glenwood City Public Library is located at 127 Pine Street. The library provides a wide range of services to Glenwood City residents and surrounding communities. With the recent implementation of the MORE shared online catalog, the library can provide innovative, efficient and cost-effective access to the holdings of more than 20 libraries. The library's own collection features best-selling and classic books, 45 periodicals, and a wide selection of books on tape and video recordings, all available at no charge. Area residents who have difficulty visiting the library may use the Library Books-By-Mail service offered through the Indianhead Federated Library System.

Resources and services offered are intended to meet the informational needs as well as develop and sustain the intellectual vitality of all members of the Glenwood City community and surrounding communities, and include the following:

- After-school workshops for children in grades K-6.
- Summer reading programs featuring fun-filled activities and reading contests to help motivate children to read beyond the school year.
- Adult educational offerings during the fall and winter months.
- Story time outreach program serving area daycare providers.
- Public access computer workstations with printers and high-speed, direct Internet connections.
- Electronic database access, including Badgerlink and WISCAT.
- Large-print books.
- Tax forms.
- Reference assistance and reader's advisory.
- Teen advisory board.

Post Office

The Glenwood City Post Office is located at 222 Oak Street. It currently serves approximately 1,500 households and has about 1,900 square feet of space, which includes a lobby area and a mailroom sorting area.

Educational Services

Public School

The Glenwood City School District encompasses the City of Glenwood City, the Village of Downing, Town of Glenwood, and portions of the Towns of Forest, Emerald, Springfield, New Haven, Tiffany and Stanton. The funds to run the school district come from state aid, local taxes, and other sources.

The Glenwood City School District is currently operating one school. The school is located at 850 State Highway 170. The facility is broken up into three sections which house the High School (grades 9-12), Middle School (grades 7-8), and Elementary School (grades preK-6). The original portion of the facility was constructed in 1940 and serves Grades 7-12. In 1989, Glenwood City voters approved a referendum authorizing the School District to expand the building to the west, which now serves grades preK-6.

The current enrollment for the school system is approximately 810 students. The projected enrollment for 2004-2005 is 790 students. There are currently no plans for expansion as the existing facility is projected to meet the school systems needs into the foreseeable future. In terms of long range planning, the District should have adequate space to expand at their current location.

Cemetery

There is one cemetery in Glenwood City. The cemetery is located in the center part of the City on Glenview Drive. The cemetery is managed by the Cemetery Association, which is made up of a Board. The cemetery is funded through the sale of lots, donations and Glenwood City.

Child Care Facilities

There are no buildings used exclusively for child care services in Glenwood City. Current needs are addressed by local residents who will provide child care out of their homes.

Health Services

The Red Cedar Clinic is located in Glenwood City at 219 East Oak Street. The Clinic is part of the Red Cedar Medical Center in Menomonie, and through that facility, is part of the Mayo Health System. The facility was constructed in 2001 and is approximately 6,400 square feet in size. The Clinic features three physician offices, employee lounge and conference room, reception/medical records area, eight exam rooms, two procedure rooms, blood draw area, laboratory and imaging/x-ray suite.

Nursing Home

Glenwood City has one nursing home facility for its residents in need of care. Glenhaven Nursing Home is located at 612 East Oak Street. Glenhaven is a private, not-for-profit facility that is funded through Medicare, Medicaid and private pay.

Glenhaven is a skilled nursing facility that is licensed for 44 beds and serves the general public. Services provided by Glenhaven include full time care, adult daycare and respite care. Although the facility has no set plans, they are currently looking at possible expansion that would give them the space to provide for assisted living services. If Glenhaven decides to expand, they will have sufficient property at their existing site to meet their needs.

Power Plants/Transmission Lines

Power is provided to Glenwood City by Xcel Energy. Xcel Energy has recently upgraded Glenwood City from a 4,160 volt system to a 23,900 volt system. During this process, Xcel removed an older substation located in Glenwood City and then linked the City to two newer substations. The two substations are located in Wheeler and Clayton, with the Wheeler substation providing Glenwood City's energy needs and the Clayton substation acting as a backup. The feeder line extending out of Wheeler supplies power to Glenwood City, Wheeler, Downing and Boyceville.

Solid Waste and Recycling Facilities

The Glenwood City solid waste disposal facility and recycling center are operated by the City and funded through local taxes and drop off fees. The service provided to residents of the City and the Town of Forrest allows for drop off of solid waste and recyclable items at specified hours set by the City. Residents also have the option to contract out with private waste haulers for curb side pick up at their expense. There are currently no plans to expand the facility.

Recycling

Per Glenwood City code, owners and occupants of single family and multi-family residents and non-residential facilities located in Glenwood City are required to separate and recycle items identified in the code from their municipal solid waste.

Items Accepted at the Recycling Center

For Free: Waste oil, aluminum, bi-metal containers, foam polystyrene packaging, lead acid batteries, tin cans, steel, glass bottles and jars, plastic containers, newspapers, steel containers, magazines/catalogs, corrugated cardboard and yard waste.

For a Fee: Refrigerators, freezers, air conditioners, dehumidifiers, microwaves, televisions, computers, stoves, washers, dryers, recliners, couches, love seats, water heaters, toilets, carpet, mattresses, humidifiers, bikes, gas grills, printers, typewriters, sinks, tables, VCR's, and tires.

PUBLIC UTILITIES

Existing Wastewater Treatment Plant (WWTP)

Glenwood City's Wastewater Treatment Plant is located north of 130th Avenue, just outside of the southeast corner of the corporate limits. The City currently has an agreement with the Village of Downing to provide wastewater treatment services.

The WWTP has a design capacity of 262,000 gallons per day (gpd). Currently, it is averaging 185,000 gpd. That is 71% of its design capacity. The population of the Glenwood City was 1,183 in 2000. This equates to the use of 156 gpd per person. This usage is somewhat high and may be attributed to infiltration and inflow. The reduction of this would greatly increase the capacity of the WWTP.

We will calculate the number of new homes the WWTP can handle two ways. First, we will use the current average usage of 156 gpd per person. If we take 90% capacity of the WWTP, which is 236,000 gpd (the point at which we have to start planning for WWTP expansion) and subtract the current average usage of 185,000 gpd, we get a remaining capacity of 51,000 gpd. Dividing 51,000 gpd by the current personal usage of 156 gpd, we have the ability of providing water treatment to 327 people. With the current average number of persons per household at 2.48, the City would have a capacity to provide service to 131 new homes.

Second, we will assume that gpd usage per person at a more typical rate of 100 gpd. This would give the City the ability to provide treatment for 510 new residents or 206 new homes.

Design Capacity: 262,000 gallons per day (gpd)
Current Capacity: 185,000 gpd (71% of design capacity)

90% of Design Capacity is 236,000 gpd. At this point, we must start planning for WWTP improvements.

$236,000 - 185,000 = 51,000$ gpd remaining before reaching 90% capacity.

$185,000 \text{ gpd} / 1183 \text{ residents} = 156$ gpd per resident.

$51,000 / 156$ gpd per resident = 327 additional residents @ 2.48 persons per household =

At the current individual gpd usage, and if the population projections prove to be accurate, the WWTP will reach capacity by 2015.

Glenwood City collects impact fees to do a Facility Plan. A Facility Plan will address capacity and future needs for the City.

Existing Watermain System

Glenwood City has two active public wells. Well #2 was built in 1928 and is 545 feet deep. It is located on Water Street north of Oak Street. It has an approved pumping capacity of 250 gallons per minute (gpm), with a maximum pumpage of 360,000 gallons per day (gpd). Normal pumpage is 180,000 gpd.

Well #3 is located at the corner of Maple and 6th Street and was completed in 1987. This well is 507 feet deep and has an approved pumping capacity of 1,100 gpm. It has a maximum pumpage capacity of 1,584,000 gpd, with normal pumpage being 792,000 gpd. This well meets all of the City's water needs at this time.

Glenwood City's groundwater storage facility is located on 3rd Street, just north of Walnut Ridge Drive and was built in 1983. It is constructed of glass lined standpipe and is 40 feet tall. It has a storage capacity of 240,000 gallons.

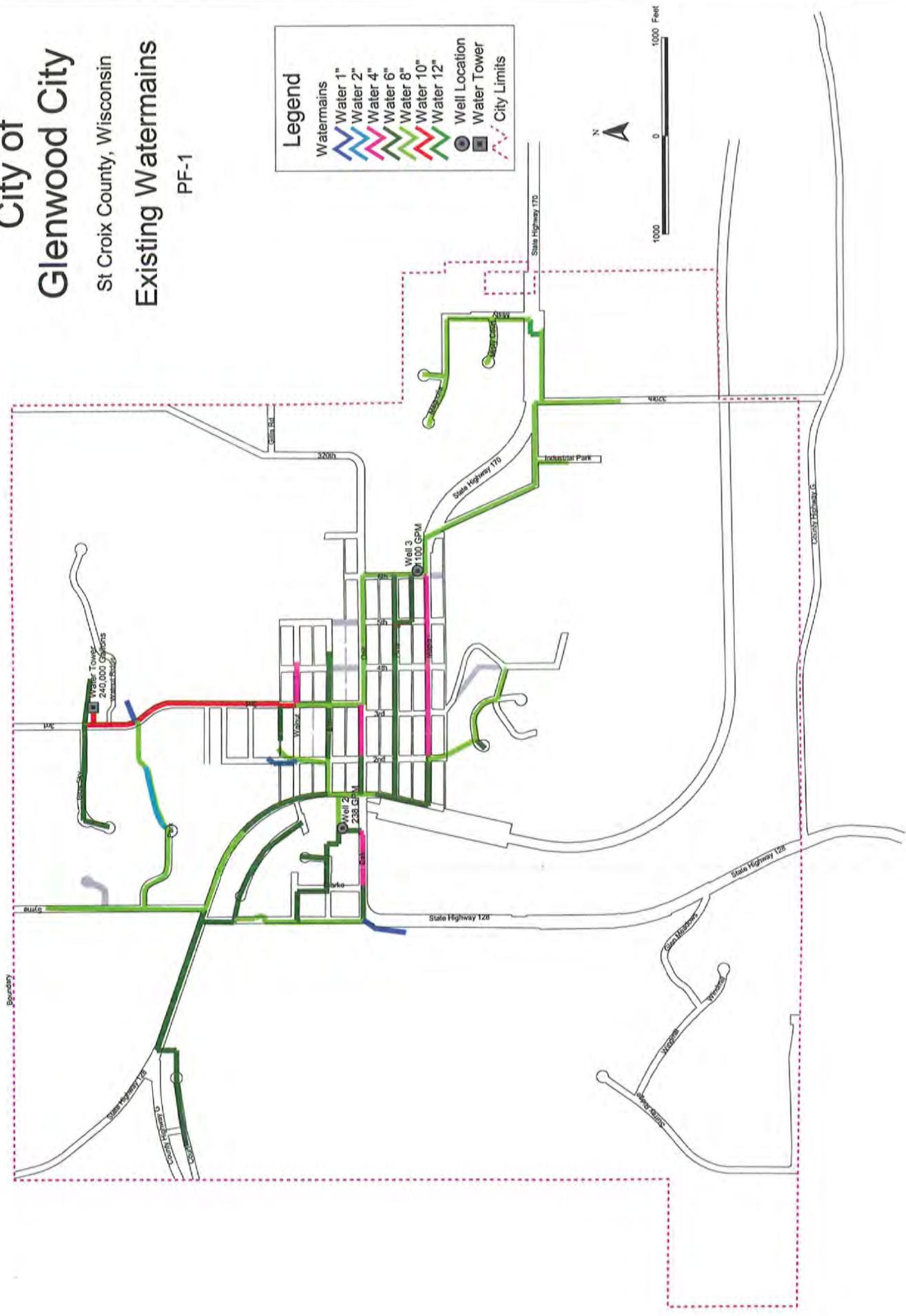
Water pressure in Glenwood City is within the DNR recommended limits of 35-100 pounds per square inch (psi). There are several low pressure zones located within the City. Glenwood City may want to consider adopting a Low PSI Zone Ordinance that requires builders of homes in low psi areas to include a pressure booster in each home (*See PF-1*).

City of Glenwood City

St Croix County, Wisconsin

Existing Watermains

PF-1



Legend

Watermains

- Water 1"
- Water 2"
- Water 4"
- Water 6"
- Water 8"
- Water 10"
- Water 12"

Well Location

Water Tower

City Limits



In the 2003 Glenwood City Community Development Survey, 50% of residents responding indicated a smell or odor in their drinking water. In 1998, Cedar Corporation tested all City wells and several homes to determine the origin of the problem.

The main complaint was of a “rotten egg” smell, which is caused by hydrogen sulfide gas. This is a naturally occurring gas in the aquifer. The only way hydrogen sulfide gas can be removed is through aeration, which requires a water treatment plant.

Another complaint was of fixture staining due to iron and manganese in the water supply. The City started to feed chlorine and a polyphosphate to minimize the staining problem. The City also went to a comprehensive water system flushing program to help minimize both the deposits of iron and manganese and the hydrogen sulfide gas. Residents that were having problems were encouraged to flush water out of their water heaters and laterals on a routing basis.

The progress was tracked and most of the residents that were worked with showed significant improvement in the water quality. It was recommended that everyone should flush their water heaters routinely to keep mineral deposits and hydrogen sulfide gas from building up and to lengthen the life of the water heater.

In the future, the City may want to consider a water treatment plant to reduce the higher amounts of hydrogen sulfide, iron, and manganese.

Existing Sanitary Sewer System

The existing sanitary sewer system is in good condition. There is one lift station in the Tiffany Creek Addition. The sewer interceptor is an 8” concrete pipe that runs along railroad right-of-way to the WWTP.

As mentioned before, the main concern with the sanitary sewer system is a high infiltration rate of stormwater. This is reducing the capacity of the WWTP. Currently, residents and businesses are contributing 156 gpd. A normal average would be closer to 100 gpd. It is recommended that Glenwood City conduct an Infiltration and Inflow Study to determine the causes of the high amount of gpd usage (*See PF-2*).

Existing Storm Sewer System

The existing storm water collection is in good condition. The main issue related to stormwater is the steep slopes in the City. The topography requires larger diameter stormwater pipes because the runoff comes faster and in larger quantities compared to systems on land with less vertical relief.

The City has a drainage system ordinance that addresses the control of runoff. New development will be required to meet the stricter requirements.

See Map PF-3 for future watermain projects and Map PF-4 for future sanitary projects.

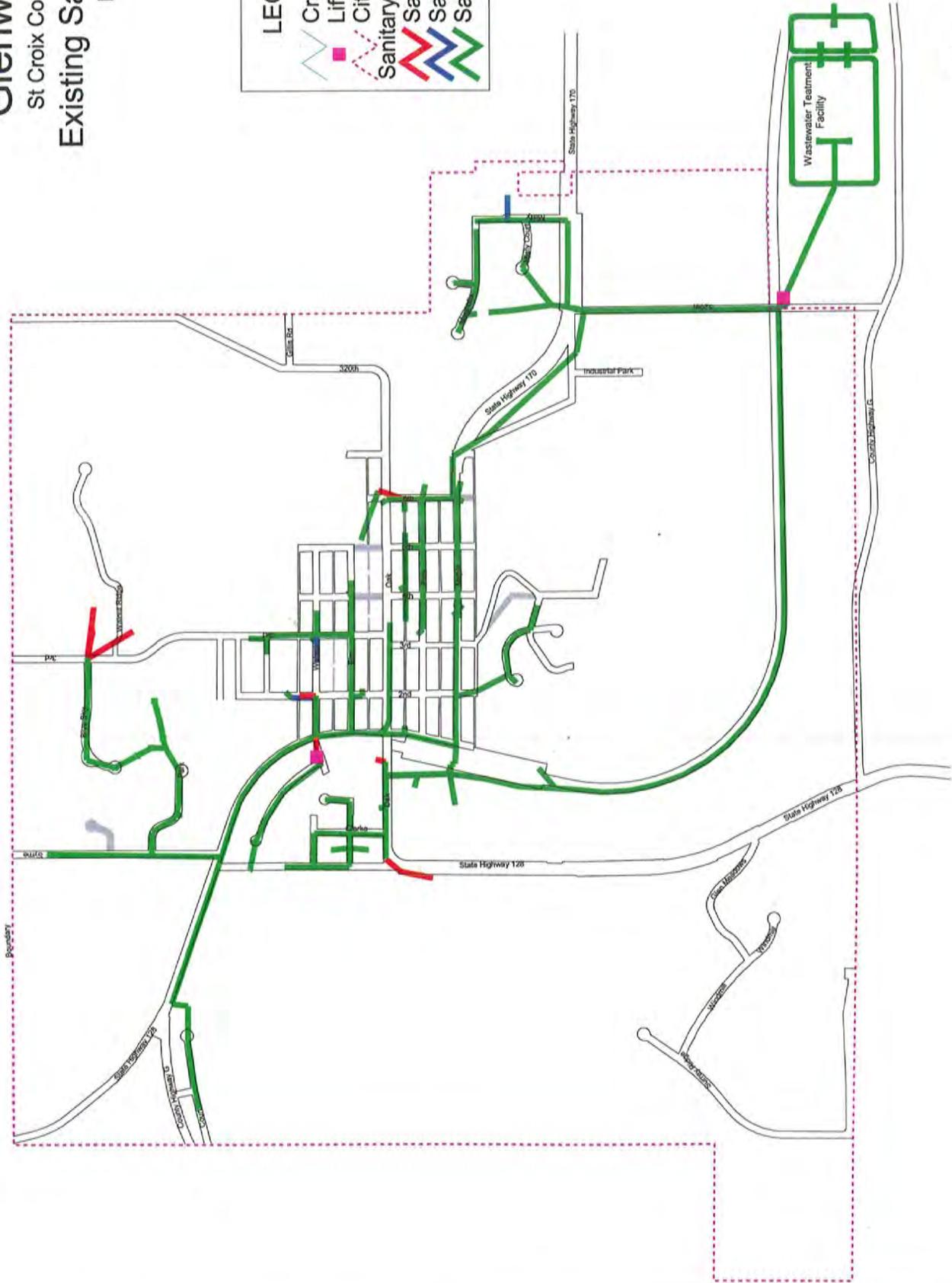
City of Glenwood City

St Croix County, Wisconsin

Existing Sanitary Sewer PF-2

LEGEND

-  Creeks
-  Lift Station
-  City Limits
-  Sanitary Sewer Mains
-  Sanitary 4"
-  Sanitary 6"
-  Sanitary 8"



City of Glenwood City

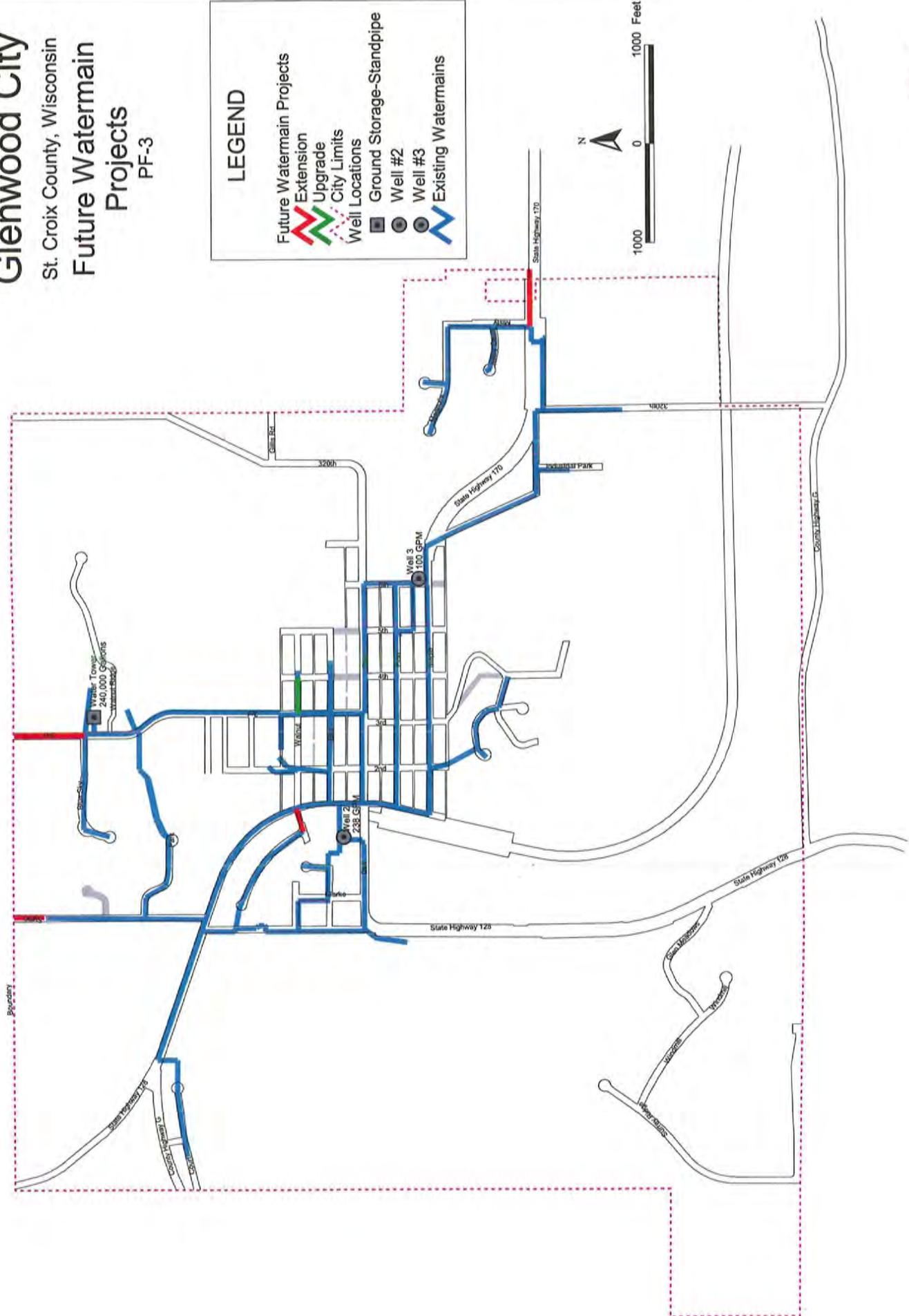
St. Croix County, Wisconsin

Future Watermain Projects

PF-3

LEGEND

-  Future Watermain Projects
-  Extension
-  Upgrade
-  City Limits
-  Well Locations
-  Ground Storage-Standpipe
-  Well #2
-  Well #3
-  Existing Watermains



GOALS, OBJECTIVES AND POLICIES

Goal 1: To ensure adequate community facilities.

Objectives: Plan for sufficient space for current and future City facilities including, but not limited to, City government, police, fire, library, maintenance facilities, etc.

Policies:

- All public facilities will be designed to meet aesthetic standards set forth by the City Council and Plan Commission.
- Follow a Capital Improvements Program when making public expenditures.
- Identify future locations for new community facilities.

Goal 2: To ensure adequate community utilities.

Objectives: Provide utilities that meet the needs of residents.

Policies:

- Conduct study for Facility Plan to determine future Wastewater Treatment Plant needs.
- Conduct Infiltration and Inflow study to increase capacity of Wastewater Treatment Plant.
- Obtain cost estimate for Water Treatment Plant to reduce mineral deposits and hydrogen sulfide gas.

8 INTERGOVERNMENTAL COOPERATION

Introduction

The Intergovernmental Cooperation Element allows Glenwood City to examine existing relationships with neighboring communities and government agencies. Informing and coordinating planning efforts with these groups can lead to many benefits such as cost savings, mutual trust and respect, identification of issues important to everyone, and consistency in planning efforts. But most importantly, it gets communities to reflect on the impact of their actions.

Existing Agreements

Intergovernmental cooperation can be as simple as sharing information to more involved ventures such as joint planning, sharing public services, and extraterritorial zoning.

Glenwood City recognizes the benefits of intergovernmental cooperation and is currently engaged in the following agreements.

1. *Utilities:* Glenwood City and the Village of Downing entered into an agreement for the City to provide sanitary sewage treatment in 1975. The Village is required to provide proportionate funds for upgrades and a fee based on the number of gallons of sewage pumped into lagoons. The original agreement has been amended several times, most recently on July 6, 2004.
2. *Recycling:* The City currently provides recycling services for the Town of Forest.
3. *Fire/Ambulance:* The Glenwood City Fire/Ambulance volunteer services cover the City of Glenwood City, Village of Downing, Town of Glenwood, Town of Tiffany, Town of Springfield, Town of Emerald, and Town of Forest. They also offer mutual aid to United and Boyceville Fire Departments.
4. *Police Protection:* The Glenwood City Police Department assists the St. Croix County Sheriff's Department and other communities upon request. The St. Croix County Sheriff's Department assists the Glenwood City Police Department when needed.
5. *Emergency Communications Center 911.*
6. *St. Croix County Emergency Management.*

Potential Intergovernmental Opportunities

As Glenwood City grows, opportunities may arise for cooperation that may currently not exist at this time. Below are opportunities that may present themselves in the future.

Agricultural, Cultural, and Natural Resources

- Identification and protection of environmental corridors
- Protection of historical resources
- Farmland preservation

Housing

- Annexation issues (existing)

Land Use

- Conflicting land uses at borders
- Opposing visions of acceptable land use practices

Economic Development

- Location of future industrial or commercial areas

Community Utilities and Facilities

- Wellhead protection
- Stormwater management
- Parks and amenities
- Location of future schools
- Public works
- Police Protection

Transportation

- Location of ride share lot
- Bike and walking paths
- Regional transit systems
- Upgrading pavement of highway

Resolving Disputes

In time, the City may find that its ideas and visions may not be shared by neighboring communities or individuals. This does not have to be a bad thing. A successful ending to a disagreement creates respect and a better understanding of each other. It is recommended that any dispute first be brought before the Plan Commission to gather information and determine the best way to proceed.

Contacts

Listed below are neighboring community and governmental agency contacts. These may be used as starting points when a possible action by the City may affect neighboring communities and agencies.

WisDOT-Eau Claire

District Planning Projects Engineer
Transportation District 6
718 Clairemont Ave.
Eau Claire, WI 54701
O: 800 991-5285

WDNR-West Central Region Headquarters

1300 W Clairemont Box 4001
Eau Claire, WI 54702-4001
O: 715 839-3700

St. Croix Highway Department

Commissioner
1150 Davis Street
Hammond, WI 54015
O: 715 796-2227
O: 715 425-3725

St. Croix County Land and Water Conservation

County Conservationist
1960 8th Ave. Suite 141
Baldwin, WI 54002
O: 715 684-2874 Ext. 3

West Central Wisconsin Regional Planning Commission

Director.
800 Wisconsin Street
Mail Box 9
Eau Claire, WI 54703
O: 715 836-2918

School District of Glenwood

Superintendent
859 320th Street
Glenwood City, WI 54013
O: 715 265-4757

Town of Glenwood

Chair
3099 160th Avenue
Glenwood City, WI 54013
O: 715 265-7782

Town of Forest

Chair
1895 C.T.H. D
Emerald, WI 54013
O: 715 265-4135

Village of Downing

Village President
360 Main Street
Downing, WI 54734
O: 715 265-7749

Town of Springfield

Chair
856 310th Street
Glenwood City, Wisconsin 54013
O: 715 772-4528

Town of Tiffany

Chair
E2717 1130th Avenue
Boyceville, WI 54725
H: 715-643-3406

Town of Stanton

Chair
E1897 890th Avenue
Knapp, WI 54749
O: 715 643-3302

GOALS, OBJECTIVES AND POLICIES

Goals: Continue current intergovernmental cooperation and explore new opportunities.

Objectives: Reduce costs for services and equipment; Create goodwill and understanding with neighboring communities.

Policies:

- Evaluate existing and future projects to determine which, if any, communities or governmental agencies may need to be involved. Respective representatives will be informed of the issue and provided a chance to listen and give input on the matter.
- Explore opportunities to reduce duplication of services in the area.

9 PLAN IMPLEMENTATION

Introduction

Glenwood City's Comprehensive Plan is designed to guide the current and future government and residents in land use decisions. It is the accumulation of the goals, objectives, policies, and hopes of the citizens in their common goal of creating a better community. After the Comprehensive Plan is formally adopted, tools have to be in place that detail how the plan will be carried out. The planning process is continuous and will require reviews and adjustments along the way accompanied with a long-term commitment to the vision by City officials who will oversee the implementation and eventually recommend updates.

Plan implementation can be accomplished through what are often referred to as "tools." Tools can be ordinances, volunteer groups, financial incentives, or anything else we can use to achieve our goals. Glenwood City already has several implementation and financial tools that it can and does use.

Existing Implementation Tools

Zoning Ordinances: Zoning Ordinances control the use of the land. They are used to ensure that land uses are compatible with one another with regard to type and spatial layout. Zoning can also direct growth in appropriate areas and protect existing property against zoning conflicts.

Within the Zoning Ordinance is a section that pertains to signage within the City.

Subdivision Regulations: Subdivision Regulations control the development of land. They enable a community to control the subdivision of land by a developer. A community can specify lot sizes, density, design features, infrastructure, sidewalks and green space.

Building Codes: Building codes control the construction of buildings. The codes are put in place so that newly constructed and remodeled buildings conform to state building, plumbing, and electrical codes. Housing codes are passed to discourage housing from becoming dilapidated and blighted.

Flood Plain Ordinances: Flood Plain Ordinances control the use of land within a flood plain. This type of ordinance is used to minimize expenditures for flood control projects, business interruptions, and damage to public facilities. The Flood Plain Ordinance can also be used as a tool to discourage the victimization of unwary land and homebuyers.

Financial Tools

Capital Improvements Program (CIP): A CIP allows you to prioritize and budget monies for future improvements to public buildings, roads, parks, and utilities. It examines available tax dollars and future revenues to predict expenditures for the future.

Tax Increment Financing (TIF): A TIF program allows the City to use the taxes collected on the increase in the value of taxable property for financing additional property improvements. Often used in industrial parks, the taxes collected from new business go towards the improvements needed to draw them there. When the improvements are paid for, a new area can be developed. A TIF District can be used as an incentive tool to draw new business into the area. A blighted TIF allows for redevelopment within a community.

Community Development Block Grants (CDBG): CDBGs are used to improve local housing and public buildings. Several state and federal programs are available for various housing needs.

Impact Fees: Impact Fees can be used to offset the cost of infrastructure needs in a community. New developments will be charged impact fees per dwelling. In turn, that money is used to upgrade wastewater treatment plants, libraries, parks, police departments, utilities, and roads. This shifts much of the financial burden of these upgrades to the people that initiate them.

Potential Implementation Tools

- Extraterritorial Zoning
- Sidewalk Ordinance
- Official Map
- Historic Preservation Ordinance
- Stormwater Management Master Plans
- Volunteer Groups

Local Action

Local Citizens: Glenwood City encourages continuous input from its citizens. Throughout the planning process, public participation has been encouraged through a Community Development Survey and monthly Planning Committee meetings. This process does not end with the adoption of the Comprehensive Plan. Attitudes change and new ideas evolve and with this, the Comprehensive Plan will need to be updated. Therefore, public participation will always be needed and encouraged.

Planning Commission: Glenwood City's Plan Commission role in the planning process is to review all pertinent information, give input, and act as advisory to the City Council. The recommendations of the Plan Commission that are presented in this Comprehensive Plan will guide the future direction of growth and development in Glenwood City in a manner which benefits its citizens.

City Council: In order for the Comprehensive Plan to be implemented, the City Council must formally adopt the Plan. Upon this happening, the Comprehensive Plan becomes the official guide for decision-making by City officials. As chief policy makers, the Council is also responsible for establishing and actively supporting a continuing planning program.

Plan Updates

On-going evaluation and monitoring is important to maintain the integrity of the Comprehensive Plan. The needs of the community today may not match the needs 20 years from now. Therefore, the Plan Commission will need to monitor the progress of the Plan implementation. Revisions or amendments to the Plan can be addressed at any time by following the procedures for adopting a Comprehensive Plan under Wisconsin Statutes and the adapted public participation procedures. It is recommended that the Comprehensive Plan be reviewed yearly. A potentially large update may be needed after reviewing 2010 census data. The state statute requires updates no less than every 10 years.

Prioritization and Evaluation

It is recommended that every year, the Plan Commission and City Council prioritizes issues within the Comprehensive Plan that they feel are achievable. This priority list will be reviewed at the end of the year to determine the success of implementing the Plan as well discuss any changes or updates that could be made.