

CHAPTER 1 – COMMUNITY DESCRIPTION

Regional Location

The City of Grayling is a small scenic city in Crawford County which is in the Northern Lower Peninsula of Michigan. The city is 2.2 square miles in area. Located approximately 200 miles North of Detroit; 85 miles south of the Mackinaw Bridge; 54 miles east of Traverse City and approximately 90 miles west of Harrisville and Lake Huron, see **Figure 1.1**. Commercial and industrial development is concentrated along M-72; M-93; Old US 27 and the Four Mile Road exit off I-75 (an interstate highway). Residential development is concentrated in the north half of the City. The City is surrounded by Grayling Township with land uses consisting of forests, residential and commercial. The Au Sable River is a focal point in the community, see **Figure 1.2**.

Figure 1.1: Location Map of Grayling

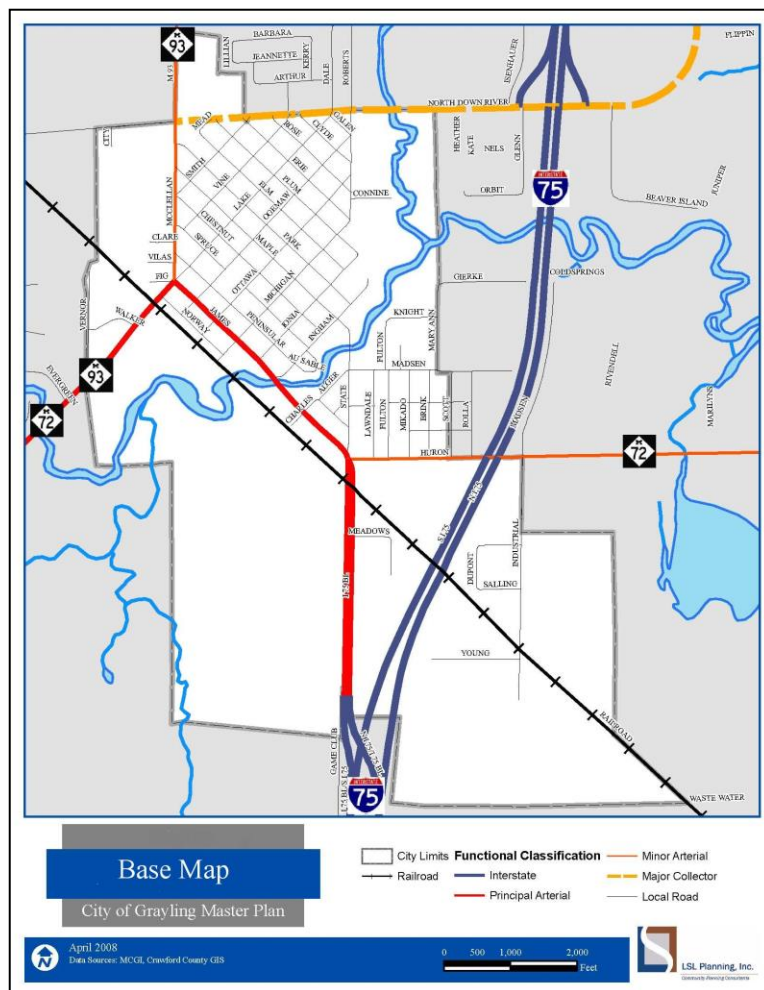
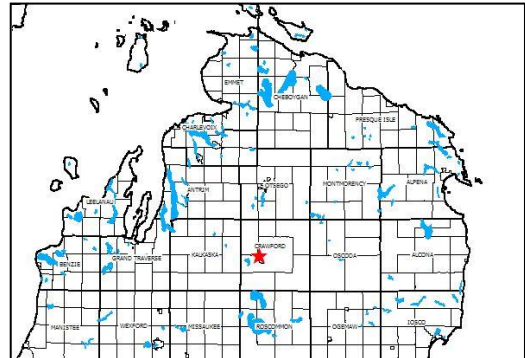


Figure 1.2: Base Map of City of Grayling

Social Characteristics

Population

According to the 2010 Census, the City of Grayling had a population of 1,884. **Table 1.1** compares the City of Grayling’s population to that of surrounding and similar communities in the area. In July of 2011, the U.S. Census Bureau estimated the City’s population at 1,876 residents. If this estimate is accurate, it would mean that the population has declined over the past eleven-year period.

While some of the surrounding areas have experienced growth, many of the City and Villages in northern Michigan have experienced similar population stagnation or even decline. Overall, Crawford County saw an estimated population decrease of < 1% since 2010.

	2000	2010	% Change	2011 Estimate	% Change
City of Grayling	1,952	1,884	-3.6%	1,876	-0.47%
City of Boyne	3,503	3,735	6.6%	3,746	0.28%
City of Gaylord	3,681	3,645	-1%	3,632	-0.35%
Village of Kalkaska	2,226	2,020	-10%	2,022	0.1%
Beaver Creek Twp.	1,486	1,736	16.8%	N/A	N/A
Grayling Twp.	6,516	5,827	-11.8%	N/A	N/A
Crawford County	14,273	14,074	-1.4%	14,014	-0.44%

Source: U.S. Census Bureau

Age

Age characteristics of the City assist in indicating economic, transportation, recreational, education, and other community needs. By examining the demographic mix of residents both now and in the future, Grayling can better plan for the future demand for community services and amenities. Study of the median age can provide a general gauge of residents’ ages, while a breakdown of ages is most useful when broken into three main categories: school age, labor force, and senior citizens, to gain a better sense of the needs and desires of the population. The median age in Grayling was 38.6

in 2010, which is lower than the County average of 47.7, but consistent with the state average of 38.9.

Table 1.2
Age Characteristics
City of Grayling, 2000-2010

Age Cohort	2000	2010	Age Group
Age 0 to 4	6.8%	6.6%	School Age
Age 5 to 19	22.3%	20.4%	
Age 20 to 34	15.0%	19.6%	Labor Force
Age 35 to 64	33.4%	32.7%	
Age 65 and older	22.5%	20.7%	Senior Citizens

Source: U.S. Census Bureau

As shown in **Table 1.2**, the largest population segment is comprised of those age 35 to 64, which suggests there are a significant number of residents and families with active needs such as improved recreation programming and increased community activities matched to their age.

Table 1.2 also reveals that the senior population is expected to grow as the baby-boomer generation ages and people are living longer due to improved health care. The share of the

retirement-age population is typically growing in relation to the other age groups. The City should consider additional services, targeted toward the emerging seniors, as this segment continues grow.

Sex, Race Ancestry

The racial composition of the City has remained fairly constant since 1990 with about 97% being white. Crawford County has a very small minority population and that statistic has changed relatively little over the last several decades.

Disability Status

Approximately 217 persons or 28% of the City population five years of age or older (1,884) were classified as disabled in 2009-2013 (Estimate from US Census Bureau). Of these, 130 people aged 21 to 64 were prevented from working by their disability. More than 65% of those aged 65 and over had a disability in 2000. If park and recreation facilities are not barrier free, many of these residents will be prevented from participating in recreational activities. The relatively high percentage of the civilian population that is disabled may also suggest recreational improvements that satisfy the specialized needs of people with less dexterity and mobility.

Households

Population change is only one of the factors that affects whether development will occur in a community and to what extent. The makeup of households in Grayling is changing. Although, families now have fewer children than those in the past, the average size of a household is slightly larger than in previous years. **Table 1.3** shows that the average household size increased between 2000 and

Table 1.3 Household Trends City of Grayling, 1990-2000			
	2000	2010	Percent Change
Number of Households	828	764	-7.7%
Average Household Size	2.24	2.27	1.2%

Source: U.S. Census Bureau

2010, while the number of households has decreased. The average household size in 2010 for the City of Grayling was still lower than State and County averages, 2.49 and 2.31 respectively. In the future, as average household sizes continue to decrease, the number of households is expected to increase at a faster rate than the population, resulting in greater consumption of land as populations grow into smaller, and more numerous households. This trend may not be as significant in Grayling, where most of the residential land is developed. However, it may affect demographics in the future if residential redevelopment begins to combine the existing smaller lots into larger building sites.

Housing Occupancy

As of 2010, there were 890 housing units in the City of Grayling, a decrease of .6% since 2000. **Table 1.4** shows that housing vacancy rates in the City increased from 7.5% in 2000 to 14.2% in 2010, which is one of the lowest rates reported for all communities studied. This is partly due to the fact that many homes in the City, County and the region are seasonal vacation homes and possibly an increase in foreclosures. The City has a higher percentage of renter-occupied homes than most other areas studied, however the percentage of owner-occupied homes within the City of Grayling has decreased from 53.1% in 2000 to 47% in 2010.

Table 1.4 Housing Characteristics City of Grayling, 2010				
	Total Housing Units			Median Value
	Occupied Units		Vacant Units	
	Owner-Occupied	Renter-Occupied		
City of Grayling	47.0%	53.0%	14.2%	\$76,200
City of Boyne	67.2%	32.8%	28.7%	\$134,200
City of Gaylord	45.3%	54.7	12.8%	\$86,800
Village of Kalkaska	50.1%	49.9%	14.2%	\$81,600
Beaver Creek Twp.	89.6%	10.4%	44.3%	\$115,100
Grayling Twp.	85.2%	14.8%	42.6%	\$108,700
Crawford County	82.1%	17.9%	45.8%	\$102,700
Source: U.S. Census Bureau; 2010 Census				

Housing Characteristics

As in many areas of northern Michigan, communities in Crawford County have a large percentage of seasonal housing units. The City of Grayling has a very low percentage of seasonal housing units (2.2%). Seasonal units are often located on rivers and lakes and can vary from excellent to substandard.

School Enrollment and Education Attainment

The City of Grayling is within the Crawford Au Sable School District located at 1135 North Old 27, Grayling, MI 49738, and Phone: (989) 344-3500. Schools within this District include:

Grayling Elementary School
306 Plum Street
Grayling, MI 49738

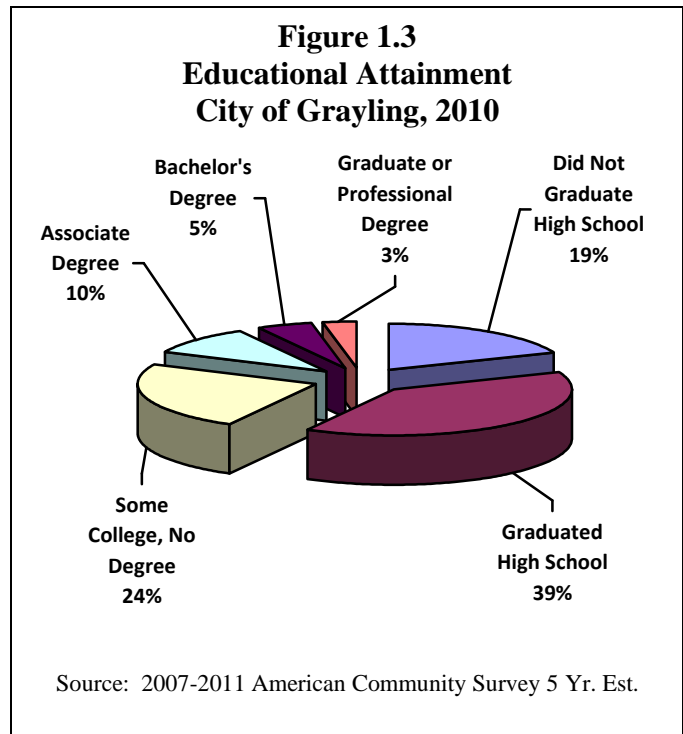
Grayling High School
1135 N. Old-27
Grayling, MI 49738

Grayling Preschool
306 Plum Street
Grayling, MI 49738

Grayling Middle School
500 Spruce Street
Grayling, MI 49738

The educational attainment for the City of Grayling residents, age 25 years and older, in 2010 was comparable to Crawford County figures; however, both are significantly lower than State figures for college degrees. Less than 20% of City residents have a college degree, and almost 60% of residents have had no college experience.

The overall education level in the City increased between 2000 and 2010. For example, the proportion of residents that have a high school diploma rose from 78% in 2000 to 81% in 2010. Furthermore, the proportion of City residents that had at least some college education slightly increased from 41% in 2000 to 42% in 2010, and the proportion that had college degrees remained the same at 18%.



Labor Force and Employment Trends

Table 1.5 provides information relative to the types of industries that employ Grayling residents. Manufacturing, Retail Trade, and Service jobs have historically been the predominant employers. In 2010, the leading job class in the City was Services, employing 58.8% of residents. This typifies the nationwide trend over the last twenty years as the United States evolves into a more service-oriented economy and, more specifically, supports the tourist economy prevalent in Grayling.

In 2010, unemployment rates for the City were consistent with the County average of 13%, which was slightly higher than the State average of 12.7%. Since that time, the job market in Michigan has been on the rise and unemployment rates within the City, surrounding communities and the State overall, continue to slowly decline. The State Department of Labor and Economic Growth reports Unemployment rates for the County on a monthly basis. **Table 1.6** provides the monthly reports from March 2017 to March 2018. It shows the trend common for tourist-based communities, with the lowest unemployment during the late summer months and the highest rates during the winter months. Overall, the County averaged an unemployment rate of 6.84% during this period.

Located in the very heart of Michigan's prime tourist and recreational wonderland, Crawford County and Grayling, in particular, have experienced relatively little growth and lag significantly behind the State of Michigan in economic prosperity and well being. One reason is the very large acreage of surrounding State-owned land and the absence of strategically located developable land. An area south of Grayling has been recently developed and is showing a positive

Industrial Class	Percent
Agriculture/Natural Resources	1.9%
Construction	6.3%
Manufacturing	1.9%
Transportation/Warehousing/Utilities	2.9%
Wholesale Trade	1.7%
Retail Trade	12.0%
Financial, Real Estate	4.0%
Services	58.8%
Public Administration	10.5%

Source: 2007-2011 American Community Survey

Month	County Rate	State Rate
March, 2017	7.7	4.7
April, 2017	6.6	3.8
May, 2017	6.3	3.8
June, 2017	6.5	4.5
July, 2017	7.3	5.4
August, 2017	6.4	5.0
September, 2017	5.6	4.5
October, 2017	5.3	4.2
November, 2017	6.0	4.0
December, 2017	7.3	4.3
January, 2018	7.9	5.1
February, 2018	8.2	4.9
March, 2018	7.9	4.5

Source: State of Michigan

impact on the economy in Grayling and surrounding areas. The new development has also brought more people to the area to live and recreate.

Little new growth, low median income, a high incidence of poverty, relatively high unemployment, and higher percentages of people with disabilities all contribute to a perpetually depressed economy that make it difficult to satisfy both tourist and resident recreational needs.

Tourism is considered by many to be the centerpiece of the Crawford County economy with such industries as retail trade, the arts, entertainment, recreation, accommodations, and food services accounting for 26% of all jobs in the County. About one-third of City residents are employed in these same tourist related industries. Recreation improvements are needed to strengthen the tourist attraction and, therefore, the economy of the region while satisfying the needs of the resident population.

Physical Characteristics

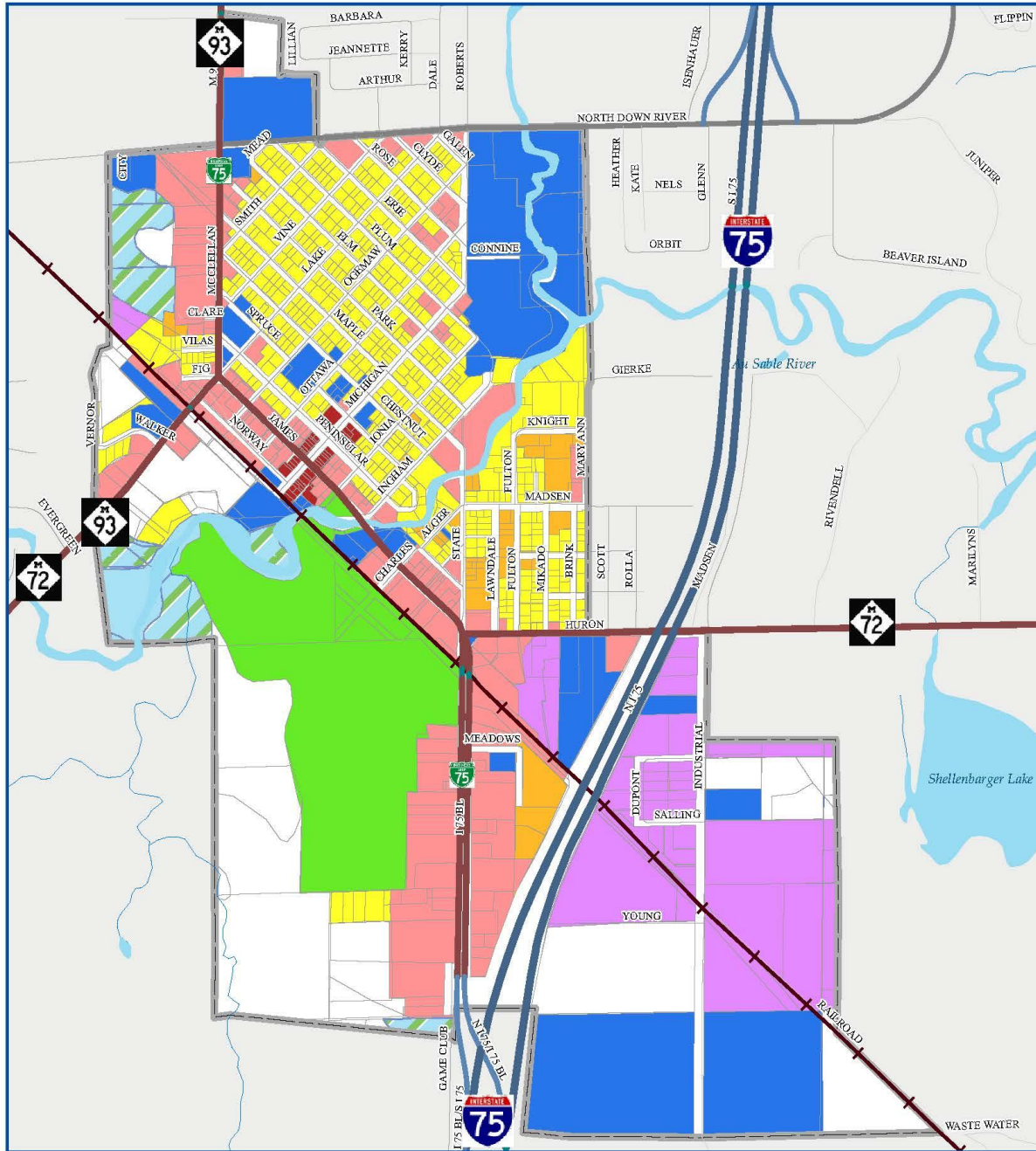
The City of Grayling is primarily residential with a concentrated older downtown that has recently gone through a revitalization of its sidewalks, sewer system, potable water system, street lighting, and landscaping. One unique attribute of the City is the presence of the Au Sable River, a world class trout fishing stream and popular canoeing river. The City has a rich history as a small lumbering and resort town and as a tourist destination for recreation enthusiasts. Fishing, hunting, canoeing, camping, biking, snowmobiling and hiking are all popular activities. The area is also known for the Hartwick Pines State Forest, with its old growth pine forests, and Camp Grayling, a training camp for National Guard and other state and national defense personnel.

Land Use and Zoning

This section discusses the types of land uses that currently occupy the City of Grayling. The existing land uses in the City were developed during the City's 2014 Master Plan, see **Figure 1.4**. The map shows residential land uses are concentrated in the northern half of the community. Commercial uses are found along major highway corridors and within the downtown business district. Industrial land uses are primarily located in the southeastern quadrant of the City and along its northwestern edge. Institutional and recreational lands are located throughout the community.

Zoning ordinances are established and enforced by the City within its limits. There are 11 zoning districts designed and coordinated to address the City's future needs while protecting the small-town atmosphere, see **Figure 1.5**. Land designated for recreational land use is located in the southwest quadrant and along the Au Sable River. Commercial land uses are designated along major highway corridors and within the downtown business district. Consistent with existing land uses, residential zoning districts are located in the northern portions of the City. The Industrial zoning district is located in the southeastern quadrant of the City and along its northwestern edge.

Figure 1.4: Existing Land Use



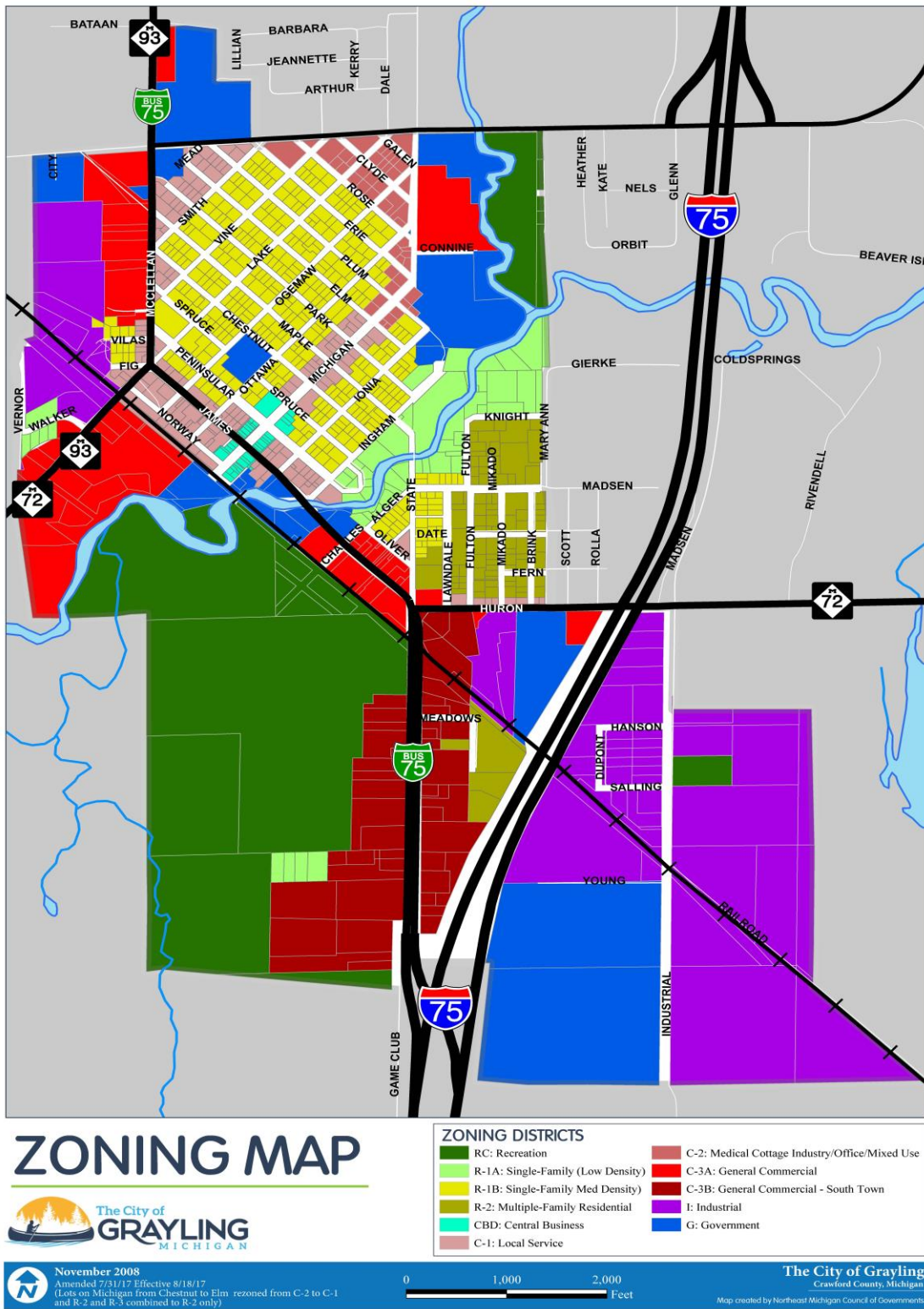
Map Two
Existing Land Use
 City of Grayling Master Plan

- Single Family Residential
- Vacant
- Multi-Family Residential
- Institutional
- Commercial
- Recreation
- Wetlands (wooded and non-wooded)
- Lakes and Rivers
- Industrial

January 2014
 Data Sources: MCGI, Crawford County GIS
 Wetland boundaries are approximate and should be verified by official survey for site-specific matters.



Figure 1.5: Zoning Map



Natural Resources

The woodlands, open spaces, wildlife, water, and rolling hills are several key resource values that draw people to both recreate and live in the area. Abundant public lands offer access to thousands of acres of recreational lands for hunting, hiking, wildlife viewing and snowmobiling. Lakes, creeks and streams, especially the Manistee River,

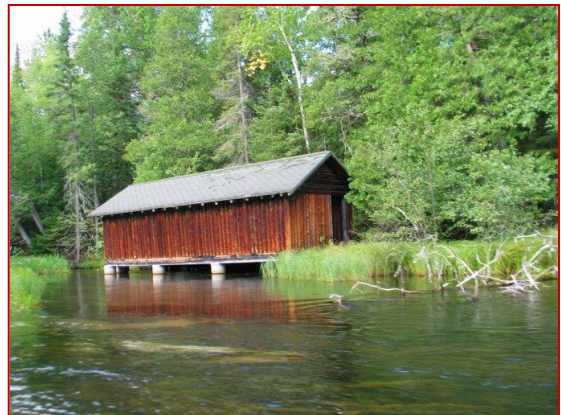


Au Sable River and Lake Margrethe provide opportunities for fishing, boating and water sports. Special recreation areas such as the Mason Tract are additional draws to the area.

A rural landscape, abounding with views of forestlands and wetlands, typifies the community character of the area. Forestlands are important to the local economy; recreational use and production of forest goods bring dollars into the Community. Many long-time visitors decide

to move to the area upon retirement. These renewable yet priceless resources warrant special considerations when planning for future growth.

The protection and wise use of these natural resources are central to maintaining a sustainable community. Along with planning for the built-up infrastructure like roads and utilities, a community needs to plan for the green infrastructure; the forests, wetlands, farmland and water. Development, without consideration of carrying capacity of the land, can have long term negative impacts on the resources. When planning for future growth, the community must identify environmental constraints, such as wetlands, steeply sloped areas, ecological corridors and ground water recharge zones. This chapter will analyze the physical environment to assist local officials in developing a desired future of the City. Natural resources addressed include topography, soils, water, vegetation and wildlife.



Topography

Most of the land is nearly level or gently rolling. Local differences in elevation are slight, in a few places exceeding 100 feet, although the hills and plateau-like ridges appear to rise above adjacent sand plains when viewed from a distance. Slopes of hilly land are both long and expansive or, where the relief is choppy, smooth and rounded. There are no steep slopes except along watercourses.

The northern part of the county consists of three broad highland plateaus, having a general north-south direction, three complementary broad sand valleys, and a wide

sandy plain on the east. The central part, from eastern to western boundaries, is a wide level sand plain through which the Au Sable River and its tributaries have cut valleys. Several detached swells or ridges, irregular in outline but having general east to west trends, characterize the southern part of the county. Here the general relief is gently rolling or moderately hilly. Level sand plain and swamps intervene between masses of higher land. The highest elevation, ranging from 1,300 to 1,480 feet above sea level, can be found on kame moraines in the southeastern parts of the county. The lowest elevation of 1,010 feet above sea level, noted on USGS quadrangle maps, is located in the eastern edge of the County where the main branch of the Au Sable River flows into Oscoda County.

Soils

The soils of the study area are generally sandy with low fertility and low moisture-holding capacity. When planning for types and intensity of land uses, soil types and slopes are two important factors that determine the carrying capacity of land. The construction of roads, buildings and septic systems on steeply sloped areas or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

The Natural Resource Conservation Service completed a detailed soil survey of Crawford County. A digital or computerized version of the soil survey maps was acquired from the Michigan Department of Natural Resources, MIRIS program. Using information contained within the published soil survey book, a series of maps are presented that depict hydric soils, steep slopes, soils with building limitations and soils with septic system limitations.

Hydric Soils and Steeply Sloped Areas

Figure 1.6 is a color thematic map that classifies hydric soils and soils on steep slopes. Lower density and less intensive development should be directed to these areas with severe building constraints. Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. Hydric soils have poor potential for building site development and sanitary facilities. Wetness and frequent ponding are severe problems that are difficult and costly to overcome. Sites with high water tables may be classified as wetlands and a wetlands permit would be required to develop these areas.

Within the study area hydric soils are mainly located adjacent to streams and lakes. The largest concentrations of hydric soils are found in Grayling Township on the eastern and western perimeters of the City of Grayling. Note the green areas or hydric soils are typically drained by creeks and streams that in turn empty in the major rivers and lakes. This connectivity of riparian wetlands and surface water features can be seen throughout the landscape.

Hills and steeply rolling terrain may provide opportunities for spectacular views of the landscape. However, steeply sloped sites have severe building constraints, are more difficult and costly to develop. Maintenance costs tend to be higher on steeply sloped terrain. Special design standards such as erosion control measures, limiting size of disturbed areas, retaining natural vegetation, revegetation, slope stabilization and on-site retention of water run-off from impervious surfaces would all serve to minimize resource impacts. According to information presented in the Crawford County Soil Survey areas with slopes 18 percent and greater are minimal within the study area. Of greatest concern are steeply sloping hillsides adjacent waterways. Steeply slopes areas are depicted in red on **Figure 1.6**.

Forestry

Figure 1.8 shows forest types in the County. Note the predominance of pine and oak depicted on the 1978 MIRIS forest cover map in Crawford County. The abundance of Jack Pine and Oak forests dramatically increase the wildfire hazard for Crawford County. In addition, note the prevalence of northern hardwoods in Maple Forest Township and northern Frederic Township.

The majority of forestland in the county is in public ownership - 52 percent state owned and 16 percent federally owned (**Figure 1.8**). Most of these lands are managed under a multi-use concept, which is directed toward recreation. The use of military forestland is not geared toward commercial forest production. Some areas have been determined as refuge areas for the endangered Kirtland's Warbler. The next largest ownership class is in individual ownership 32 percent.

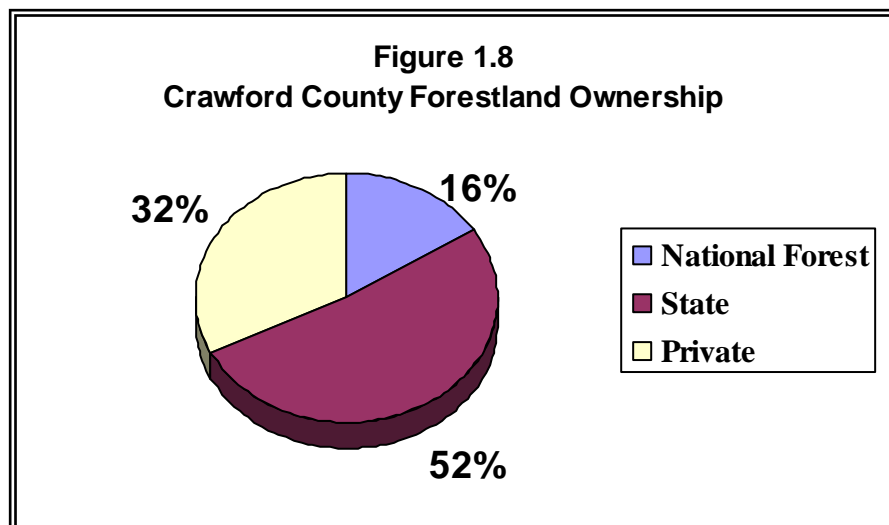


Figure 1.6

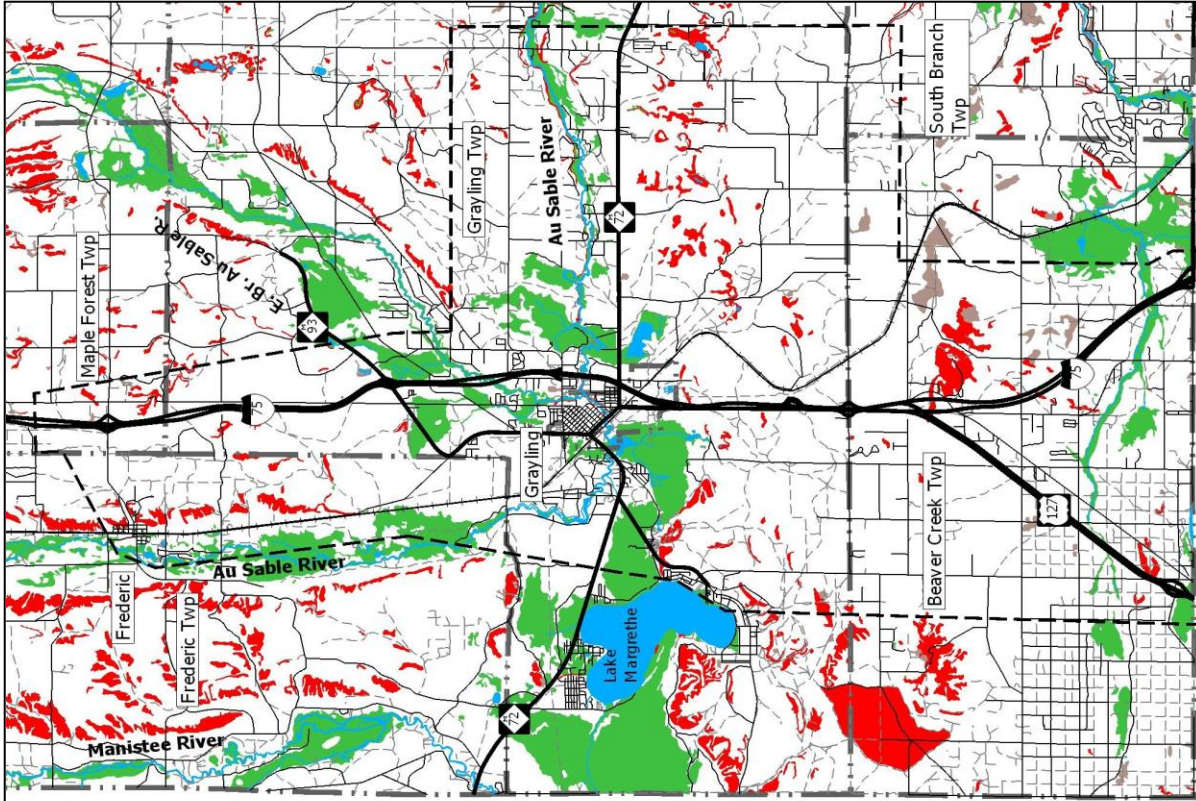
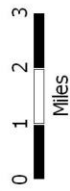
GRAYLING AREA TRANSPORTATION STUDY

SOILS CONSTRAINTS MAP

- UNIMPROVED ROADS
- CO. ROADS
- RAILROADS
- HIGHWAYS
- - - Study Area

HYDRIC SOILS & STEEP SLOPES

- SLOPES 18% & GREATER
- HYDRIC SOILS
- HYDRIC SOILS IN MAPPING UNIT
- WATER
- Other



DATA SOURCE:
NATURAL RESOURCE CONSERVATION SERVICE
MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

MAP BY:
NORTHEAST MICHIGAN COUNCIL OF GOVERNMENTS

Fish and Wildlife Resources

The predominance of forested land and availability of surface water makes Crawford County the home to many species of fish and wildlife. White-tailed deer are abundant and popular for hunting. Raccoon, fox, gray and black squirrels are also abundant and an important game source for hunters. Coyote, red fox, porcupine, badgers, skunks, red squirrels and woodchuck are also found in the area, as are beaver, muskrat, mink and otter. Black bear and bobcat are still found in the area in limited numbers. The wild turkey, once a native Michigan species, have been re-introduced in the area and are thriving so well that hunting of these birds is allowed.

Crawford County is home to several endangered bird species. The rarest of these is the songbird known as the Kirtland Warbler. The only-summer nesting area of this bird is found in the immediate vicinity of Crawford and Roscommon Counties. This warbler winters in the Bahamas Islands. Bird watchers from all over the world come to the area to view and study this rare bird. Other endangered species found in Crawford County include the bald eagle, osprey and pileated woodpecker.

Several species of fish are found in the lakes and rivers of Crawford County. Brook, rainbow and brown trout are found in the county's rivers, either singly or in combination. The lakes in the county contain walleye, blue gill, perch, bass and pike.

Climate

Crawford County's climate is humid continental and is not strongly influenced by the climate moderation typical of areas nearer the great lakes. The most noticeable lake influence is the increased cloudiness and snowfall during the fall and winter months.

Temperature data shows the county to have had the following extremes: the highest recorded temperature of 100 degrees F and the lowest recorded of 39 degrees F below zero. Moderately warm temperatures with an average of 8 days exceeding 90 degrees F dominate summers. The average high daily temperature in July is 81 degrees F, with



Figure 1.7

**GRAYLING AREA
TRANSPORTATION STUDY**

FOREST COVER MAP

--- UNIMPROVED ROADS

— CO. ROADS

--- RAILROADS

— HIGHWAYS

□ Study Area

COVER TYPES

Aspen, Birch

Central Hardwood

Lowland Conifer

Lowland Hardwood

Northern Hardwood

Other Upland Conifer

Pine

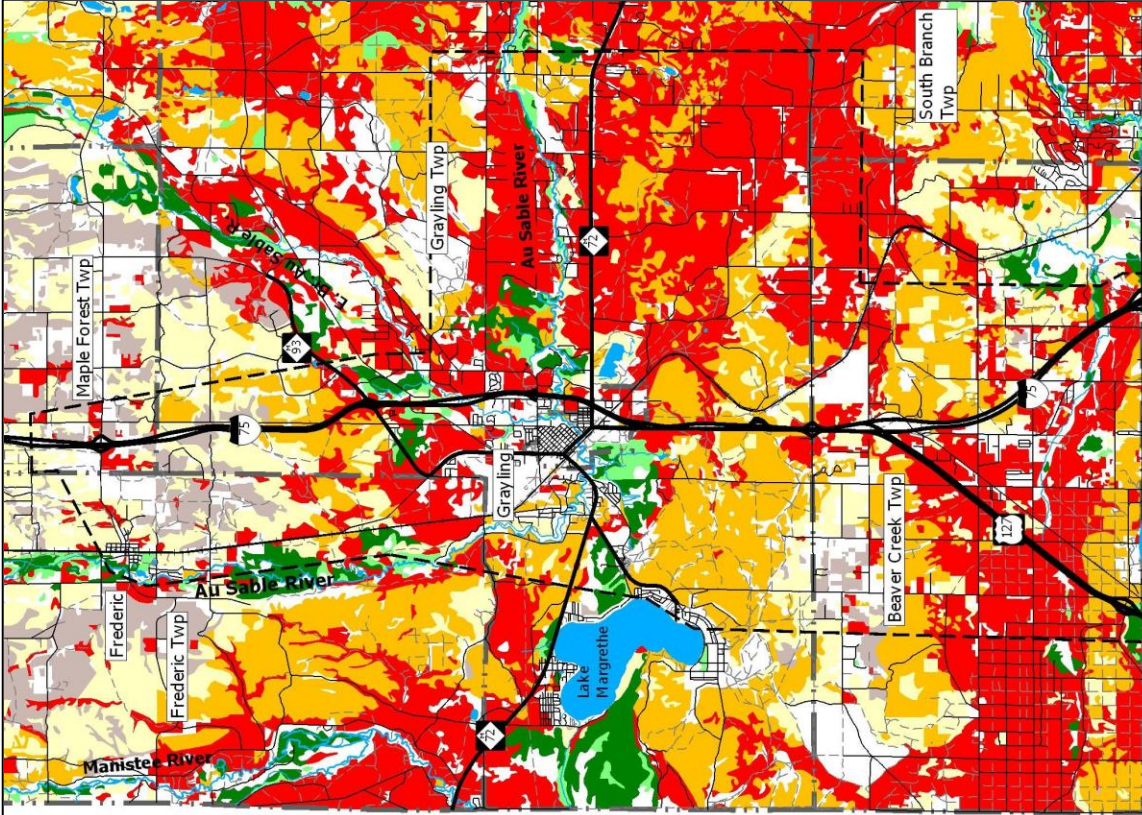
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DATA SOURCE:
MICHIGAN CENTER FOR GEOGRAPHIC INFORMATION

MAP BY:
NORTHEAST MICHIGAN COUNCIL OF GOVERNMENTS



An average daily low temperature of 54 degrees F. An average, 26 days a year are below zero degrees F. The county's daily average high temperature in January is 26 degrees F, and the average daily low temperature is 9 degrees F. The county's average growing season is 110 days. Precipitation is well distributed throughout the year with an average of 32 inches of rain per year and an average annual snowfall of 93 inches.

Transportation

Lumbering was responsible for the City of Grayling's early growth and development. Grayling during and after the lumbering boom, was an important railroad center and was at the junction of the Michigan Central, Manistee and Northwestern Railways. The Grayling area and points north and south continue to be served today by Lake States Railroad. The I-75 expressway gives the City accessibility via motor vehicles from the north and south. Grayling is just 5 miles north of the northern termination of I-127 that joins into I-75. The primary east-west artery is M-72 which connects the City of Grayling with Traverse City and Lake Michigan to the west and Harrisville and Lake Huron to the east. In addition, Grayling is served by a military airport facility.

Local transportation is assisted by the Crawford County Transportation Authority bus system. Crawford County Transportation Authority, also know as Dial-a-Ride, supports all of Crawford County including the City. Biking is being encouraged as a mode of transportation within the City. A planning grant was obtained to design bike paths throughout the city. Over the past 15 years a group called the "Crawford County Non-Motorized Path Committee" has obtained funds through donations and grants to build several non-motorized paths from the City to the High school and Hartwick Pines to the north and to Hanson Hills Recreational Facility to the west.

Groundwater Resources

Groundwater can be found in the deep glacial deposits of sand and gravel throughout the county. The availability of groundwater appears consistently good, ranging from 400 to 500 gallons per minute from wells ten inches in diameter. Ground water provides the only source of potable water for the county. Because of the deep sand and gravel underlying the county, the aquifer is quite vulnerable to contamination from surface and subsurface discharges.

Surface Water Resources

Lakes and streams in the county are popular tourist attractions and are heavily used in the summer and winter months. Canoeing and fishing are very popular on the Au Sable River, with swimming and boating being popular on the larger lakes (**Figure1.9**). The county has a total of 53 lakes that are one acre or larger. The largest body of water in the Crawford County is Lake Margrethe, with a surface area of 1,928 acres. Except for the western and southern parts of Crawford County, the study area is located in the Au Sable River watershed. The Au Sable River is the primary water resource, with the main branch and east branch traversing the area. The Au Sable is rated as a "Blue-Ribbon" trout stream and is designated as a Michigan Natural River. The gentle slope of the

terrain and the porous glacial outwash plains, consisting mostly of the sandy porous soils type that encourages infiltration of the precipitation delivered to the basin, assures the river system a steady contribution of cold groundwater throughout the year. The generous flow of cold, clear water offers some of the most productive and fishable trout waters in the country.



CRAWFORD COUNTY

WATER RESOURCE MAP

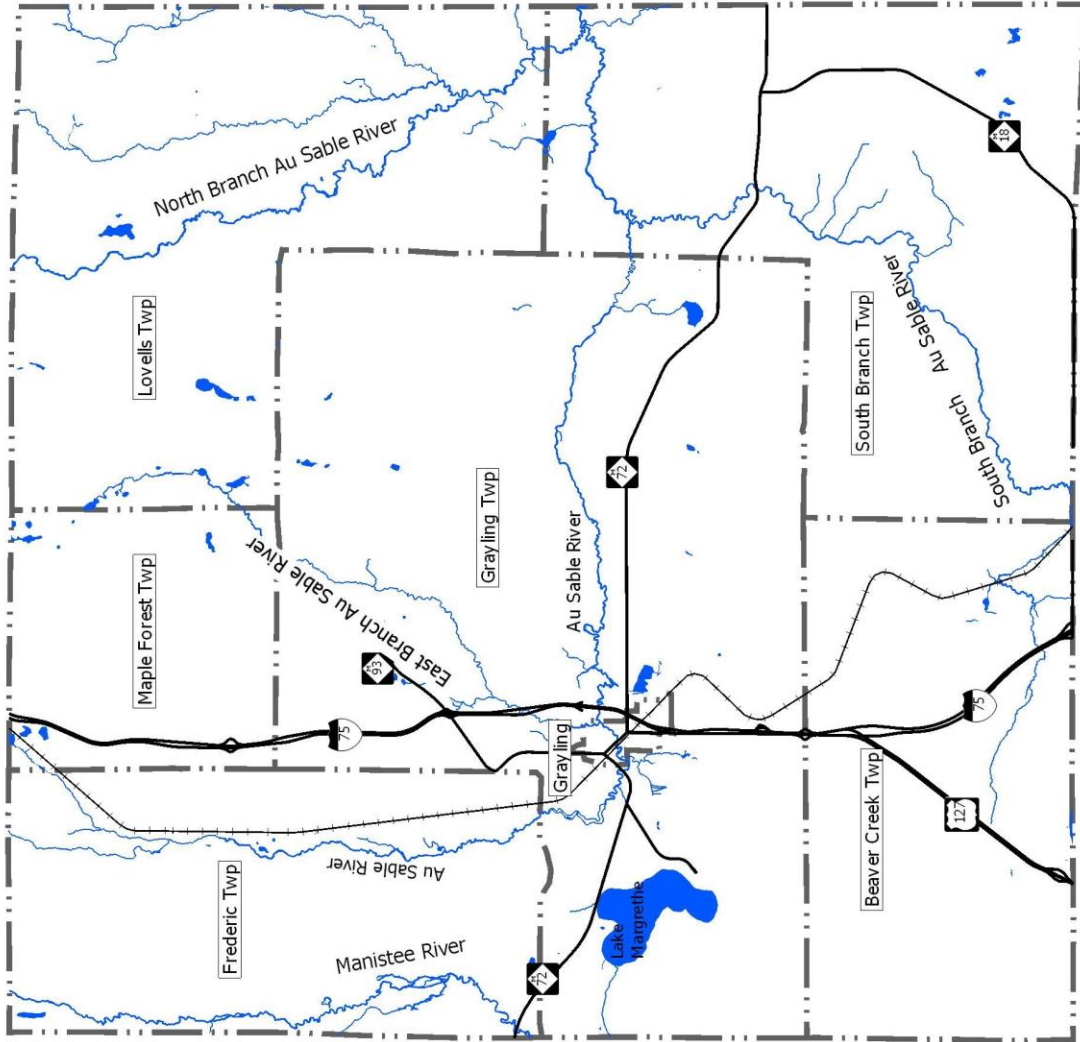
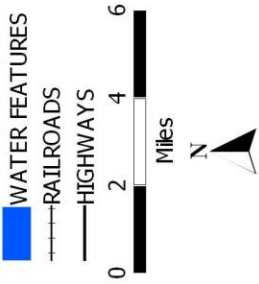


Figure 1.9



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