

CRYSTAL FALLS TOWNSHIP MASTER PLAN



January 2003

Updated 2010

Updated January 2017

Updated October 2023

TOWNSHIP OF CRYSTAL FALLS
COUNTY OF IRON, MICHIGAN

**PLANNING COMMISSION RESOLUTION TO APPROVE (or AMEND) MASTER PLAN AND RECOMMEND ADOPTION TO
TOWNSHIP BOARD**

(Where Township Board has Final Approval)

WHEREAS, the Michigan Planning Enabling Act (MPEA) authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the Township; and

WHEREAS, the Planning Commission prepared a proposed new (OR *updated*) Master Plan and submitted the plan to the Township Board for review and comment; and

WHEREAS, on March 14th, 2023 the Township Board received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan to the Notice Group entities identified in the MPEA; and

WHEREAS, notice was provided to the Notice Group entities as provided in the Michigan Planning Enabling Act; and

WHEREAS, the Planning Commission held a public hearing on October 26th, 2023 to consider public comment on the proposed new (OR *updated*) Master Plan, and to further review and comment on the proposed new (OR *updated*) Master Plan; and

WHEREAS, the Planning Commission finds that the proposed new (OR *updated*) Master Plan is desirable and proper and furthers the use, preservation, and development goals and strategies of the Township; and

WHEREAS, pursuant to MCL 125.3843 the Township Board has asserted by resolution its right to have final approval or rejection of the proposed new (OR updated) Master Plan.

THEREFORE, BE IT HEREBY RESOLVED AS FOLLOWS:

1. **Approved of Master Plan.** The Planning Commission hereby approves and recommends for adoption the proposed new (OR updated) 2023 Master Plan, including all of the chapters, figures, maps and tables contained therein.
2. **Distribution to Township Board.** Said new (OR updated) approved Master Plan shall be forwarded to the Township Board for approval or rejection.
3. **Findings of Fact.** The Planning Commission has made the foregoing determination based on a review of existing land uses in the Township, a review of the existing Master Plan provisions and maps, input received from the Township Board and public hearing, and with the assistance of a professional planning group, and finds that the new (OR *updated*) Master Plan will accurately reflect and implement the Township's goals and strategies for the use, preservation, and development of lands in Crystal Falls Township.
4. **Effective Date.** This resolution shall take immediate effect.

The foregoing resolution offered by Planning Commissioner Dan Lato.
Second offered by Planning Commissioner Craig Nelson.

Upon roll call vote the following voted:

"Aye": Curt Stebic, Dan Lato, Craig Nelson, Diane Kut

"Nay": None

Absent: Patrick Quinn

The Chair declared the resolution adopted.

(Curt Stebic Signature)

Township Officials Master Plan 2023

**Crystal Falls Township
Iron County, Michigan**

Planning Commission

Curtis Stebic, Chair and Secretary

Diane Kut

Dan Lato

Craig Nelson

Patrick Quinn

Board of Trustees

Scott Kenney, Supervisor

Nancy Niemi, Clerk

Jen Ketola, Treasurer

Joanne Seppala, Trustee

Diane Kut, Trustee

Zoning Administrator

Bill Santilli

With Assistance From:

GEI Consultants of Michigan, P.C.

990 Lalley Road

Iron River, MI 49935

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CHAPTER 1 INTRODUCTION

The image of a cold, snowy climate; a distant, northern, isolated location; and a dwindling economy are part of the folklore for Crystal Falls Township. In fact, that image is partially accurate and bears acknowledgment in the planning process. But there is more to Crystal Falls Township than that image.

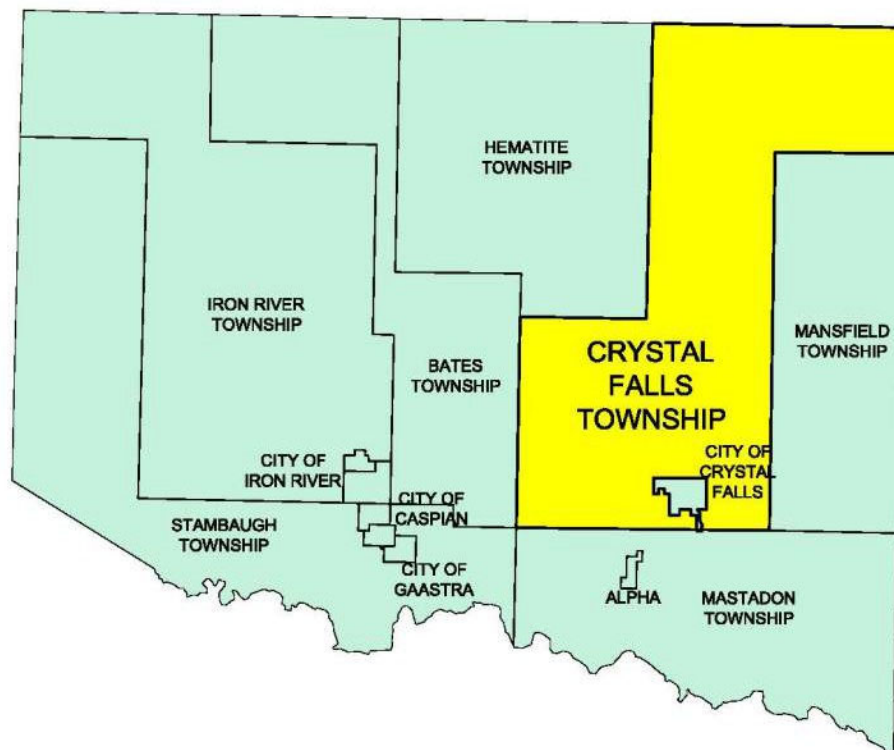
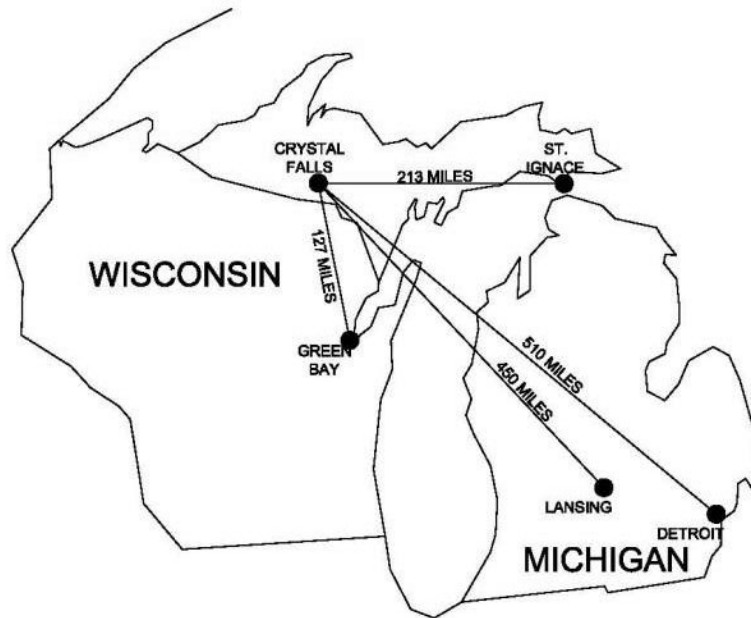
Part of the advantages the Township has are really some of the things it doesn't have: there is no busy traffic, no bustling crowds, no high pressure jobs, no detours for continuous construction and no complex social structures. This simplicity is an asset for many citizens.

The Crystal Falls area may have simplicity, but it also has abundant outdoor recreation opportunities. There is camping, swimming, golfing, hiking, hunting, fishing, boating, canoeing, color appreciation, cross-country skiing, ORV, and snowmobiling. It is a true four season's environment with the recreation opportunities changing as the year moves through its cycle of seasons. These recreation opportunities are underscored by the large and beautiful Copper Country State Forest, Bewabic State Park, and the other numerous areas open to the public. There are numerous snowmobile and ORV trails that intersect the area as well as various existing and proposed non-motorized trails.



As a passive experience, Crystal Falls Township has a pristine and beautiful environment of hills, trees, lakes, rivers, waterfalls, wetlands, wildlife, wild flowers, and stark snow in the winter. With its excellent physical recreation opportunities, attractive and pleasing environment, and fine infrastructure, Crystal Falls Township is a fortunate community.

Change is slowly occurring in the Township. Crystal Falls has endured changes from iron mining to forestry, and now to a growing tourist industry. Employment and population in the County peaked in the 1920's due to mining and forestry. As mining jobs fell off, population of the county fell from a high of about 22,107 to its current level of 11,580. The Township has invested significant time and money into the development of new and improved parks and recreation including the addition of Donahue Park, improvements at Gibson Lake Park, and new walking trails. There is also a strong desire to provide more jobs in the community and to provide additional goods and services. Accordingly, the Township prepared this Master Plan through its planning commission to adjust to unfolding change and to control the character of change so it can maintain the vision of its residents and seasonal visitors.



Regional Location – Crystal Falls Township



REGIONAL LOCATION AND CONTEXT

The City of Crystal Falls is the County Seat for Iron County and is surrounded by the Township on the eastern side of Iron County. The Township is very large at nearly seven times the size of a “normal” township of 36 square miles. Much of the approximately 240 square miles in the Township is sparsely inhabited, with the bulk of the population residing closer to the City limits near Highways US-2 and US-141. Iron County is one of only two counties in the Upper Peninsula without any Great Lakes shoreline (the other is Dickinson County to the east). The Township land is primarily owned by the State of Michigan for the Copper Country State Forest and paper companies or timber management groups that manage forests for timber harvests.

Crystal Falls Township is part of or near the small urban areas of the cities of Crystal Falls and Iron River in Michigan’s western Upper Peninsula. The Crystal Falls/Iron River urban area has some functions similar to a single urban area over 6,000 residents because the communities are only about 16 miles distance. The County’s overall population is 11,580 persons. The nearest other concentrations of urban population are Iron Mountain, 30 miles southeast; Escanaba, 72 miles southeast; Houghton-Hancock, 85 miles north; Ironwood, 98 miles west; and Marquette, 70 miles northeast. The Township is located just a few miles north of the Wisconsin boundary formed by the Brule River.

The Township land has a base elevation at about 1,300 feet above sea level with a southeasterly tilt. Hills are the dominant landform and cover much of the Township rising to an elevation of nearly 1,800 feet. As part of the Gogebic Hilly Upland, much of the Township is made up with Northern Hardwoods and Spruce-Fir coniferous forests.

There are three major roads serving Crystal Falls Township. One is US-2 which is an east-west highway, and another is north-south highway US-141. The only state highway is M-69 which terminates in the City after traversing from the east near Escanaba. There are only two all-seasons, primary, paved county roads in the Township. There are two general aviation airports near the Township, the Iron County Airport is in nearby Mastodon Township and the Stambaugh Airport in the City of Iron River.

The regional location leaves Crystal Falls Township relatively isolated. But the growth of telecommunications, computers, broad-band technology, satellite service and electronics mitigates that isolation and brings new challenges and opportunities to Crystal Falls Township.



BRIEF HISTORY

As the original inhabitants, Native American Indians are thought to have been sparsely populated in Iron County. The few Indians were mainly itinerant along the Brule River between Michigan and Wisconsin. However, there is an Ojibwa Band Indian Burial Grounds with wooden burial structures still intact located in the County. This was also a permanent settlement and area headquarters for the Ojibwas. It is now a tourist destination and preserved site on the south end of Chicagon Lake just west of Crystal Falls Township on County Road 424 at Pentoga Park. The Indians are also known to have hunted and traveled along the Paint River in Crystal Falls Township and City.

The Brule River was named after the French explorer Etienne Brule. The then unnamed Iron County became part of a European economic system when fur-trading started in the 1600's. The Paint River along with most of rivers is the area were populated with beaver, muskrat, and other fur bearing animals that helped sustain the fur-trade in the area. Crystal Falls was the name of falls that now are part of an electrical generating dam across the Paint River in the City.

Reportedly, a logger in the area awoke next to the falls and noted the falls had changed the shrubs and trees to "crystal" ice one evening. Thus, the name Crystal Falls stuck even though the falls are now encapsulated into a dam.



The mining of iron ore, which became the county name, was first noted in 1846. Shortly after 1850, numerous small mines began to operate in the area. In 1880, the Crystal Falls Iron Company was organized and became the most important mining operation in the County. The first frame building for a permanent residence in the area was by Dr. H.C. Kimball in 1881. By 1882, the Chicago and Northwestern Railroad was extended from Stager, near Wisconsin, north to Crystal Falls and the area became a dominant shipping point for iron ore.

The mines developed throughout Iron County, including Crystal Falls Township. In most cases, the mines resulted in concentrations of homes within walking distance to the mine shaft. Some of the houses that were located near the mines have since been relocated, became dilapidated or disappeared after the mines closed, but many still remain.

An impressive Court House was built in 1890 as the center of County government. Mining shrunk dramatically after an 1894 depression but limped on until the last mine closed in 1978. Population peaked in 1910 and 1930, but declined dramatically after that.



George Runkle from Florence, Wisconsin became the first Supervisor of the Township (there was no village or city at that time) and his friend from Florence, S.D. Holister, became a significant factor in the area's early growth. Later, as mining shrunk, logging started to become a more significant venture. First trees were made into structural lumber and then paper. Iron County, including Crystal Falls Township, is now a center of commercial logging in the area.

Farming is very limited in Crystal Falls Township due to a combination of a short growing season due to its northern location and because much of the land is hilly and wooded and the soils are not well suited for agriculture. But the lakes, rivers, woods and hills are now providing an attractive environment for seasonal



dwellers and tourists. The population declined in the early 1900's as mining began to leave the area and has only recovered in the last 20 years as the shift to tourism began. Consistent with lifestyles, more retail activity has moved from the City to the Township.

Crystal Falls Township is currently an important part of the local economic structure with timber operations and tourism growing in importance.



CHAPTER II

EXISTING CONDITIONS

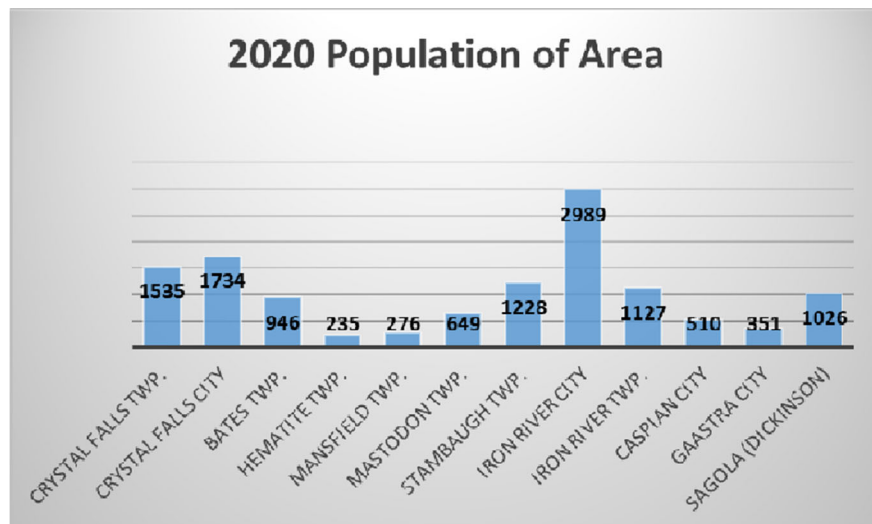
This chapter reviews the current conditions in Crystal Falls Township including demographic, economic, land use patterns and natural features. It also examines the trends in those areas so that future opportunities and limits can be analyzed.

DEMOGRAPHICS

Demographic data describes the character of the population. The data for Crystal Falls Township and surrounding communities are shown in the following charts and has been assembled from information from the United States Census Bureau. Comparison is made with adjacent townships, nearby cities, the county, and the State of Michigan to underline the distinctive characteristics of Crystal Falls Township.

POPULATION

This chart shows the general population characteristics for the year 2020. Crystal Falls Township is a large component of the population in the area. In fact, Crystal Falls Township is 13% of the total Iron County population of 11,580 in 2020. The other larger municipalities are the City of Iron River and Crystal Falls City.

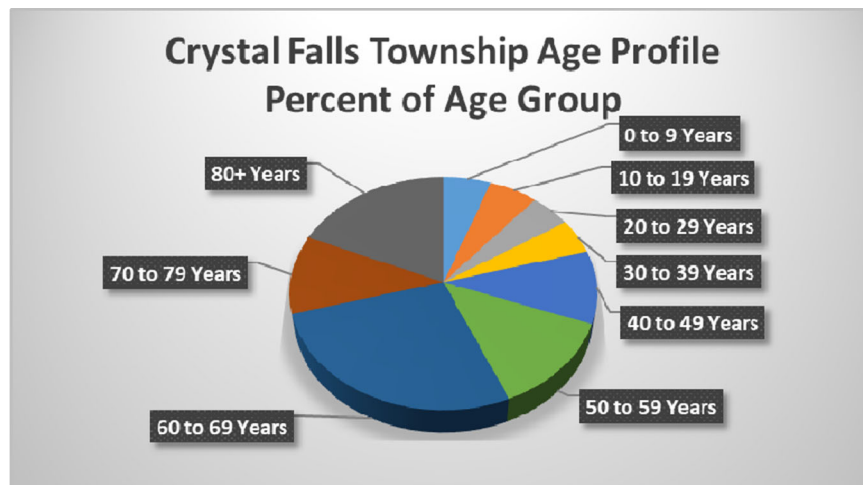


Data shows that Crystal Falls Township has had a population decline since 2010 along with most communities listed. Crystal Falls Township, Hematite Township, and Caspian City were the three local areas to account for most of the population decline from 2000 to 2010 while the remainder of the communities noticed small increases in population. Overall, Iron County had a 2% population loss from 2010 to 2020 while Crystal Falls Township experienced a 12% decrease.

Race is not shown on any detailed population chart because the area is racially homogeneous with primarily Caucasians. For example, the 2020 census data listed 42 Hispanics, 10 American Indians, and 11 African Americans in Crystal Falls Township. Crystal Falls Township, and in fact all of Iron County has a strong Norwegian and Swedish ancestry. Finnish ancestry is not shown by the U.S. Census Bureau but is also prevalent.



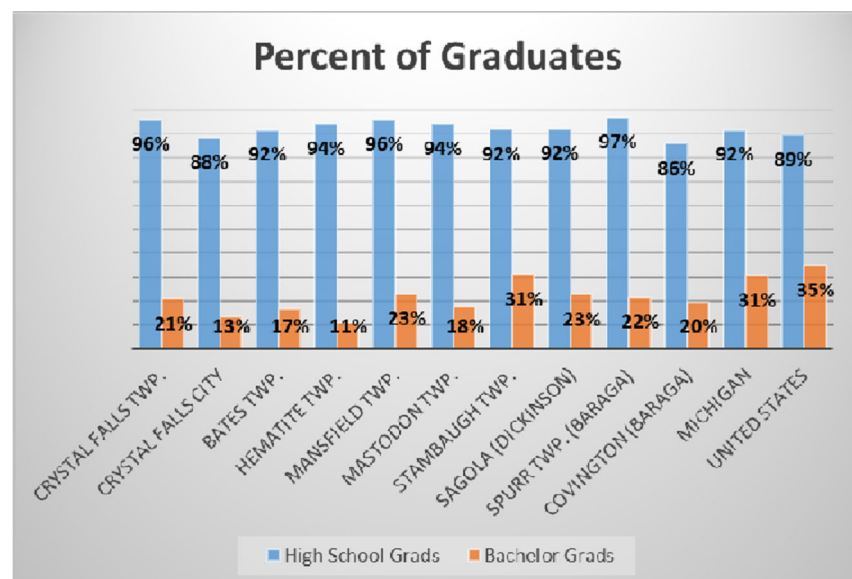
Although not shown here, the Crystal Falls Township population is close to the median age for area Townships, but at 62.9 years it is above Iron County's 53.2 years and well above the Michigan median of 40.2 years. Generally, the age reflects the lack of higher education institutions, insufficient jobs for young workers and more retirees in the area.



Age is a major predictor of school-age needs, working-age people and senior citizen needs as detailed in the adjacent chart. It can be seen from the chart that people over the age of 50 make up over 70% of the Township's population. This would seem to indicate an aging population with a majority of residents at or near retirement age.

The data also shows the 50-64 and 65+ year age groups saw the largest increase from the 2010 Census. The large number of people over 65 seem to confirm the thought that there is a large number of people who retire and then move back to the Upper Peninsula after a career of working in Lower Michigan or out-of-state. The population decline from 35 to 49 age group, most likely caused by people moving out of the area to find work, likely also is the reason for the decrease in the 18 and under age group.

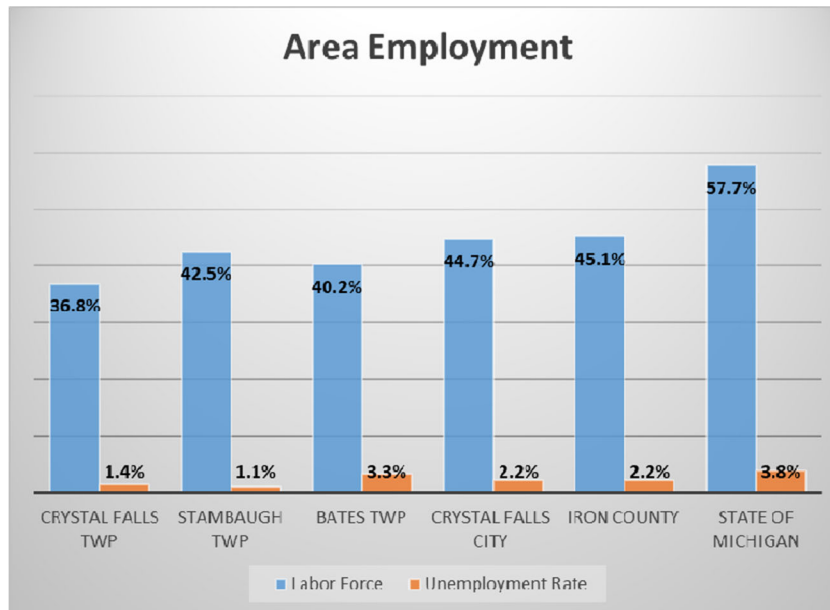
The percent of high school graduates in Crystal Falls Township is higher than the State average and the National average, while college graduate rates are lower than both the State and National averages. Generally, it can be seen that residents of the Township have an education level consistent with most of its neighboring Townships Cities. The lower college graduation rates may be linked to the larger percentage of the Township's population that is 65 years and older.



College degrees are generally less common among this age group as many people of this age group went straight to the work force after high school.



The average commute time for the Township is around 22.8 minutes, which is about average for rest of the surrounding areas and less than the state average commute time of 23.8 minutes. The commute times are primarily because of the large distance's residents travel to work destinations rather than slow traffic as with some other areas of Michigan, particularly the larger cities.



Employment and unemployment are relatively typical of other local cities and townships and Iron County in general. Unemployment in Crystal Falls Township is lower than the State average, however, the total percentage of people in the labor force in the State is much higher than the Township.

HOUSING

The characteristics of housing, like demographics, are a gauge of where the Township is at a point in time rather than defining the alternatives as to where it can go, but we cannot effectively change, if the community chooses to do so, until we know where we are now. The chart on the next page outlines the current status of housing in Crystal Falls Township and compares it to surrounding communities, Iron County and the State.

The table details the type of occupancy for structures in all communities surrounding Crystal Falls Township. The most significant finding is that basically the surrounding communities (except the City of Crystal Falls and four very rural townships) have a similar mix of rural, seasonal and slightly suburban areas. Overall, the occupied housing for owner-occupied is 20.8% higher than the State average and about 10% higher than the Iron County average (which includes additional urban areas). Generally, nearly 94% of all occupied housing is owner-occupied. Another factor for the high percentage of seasonal housing is the lack of other major employment such as manufacturing and some service industries for Township residents.



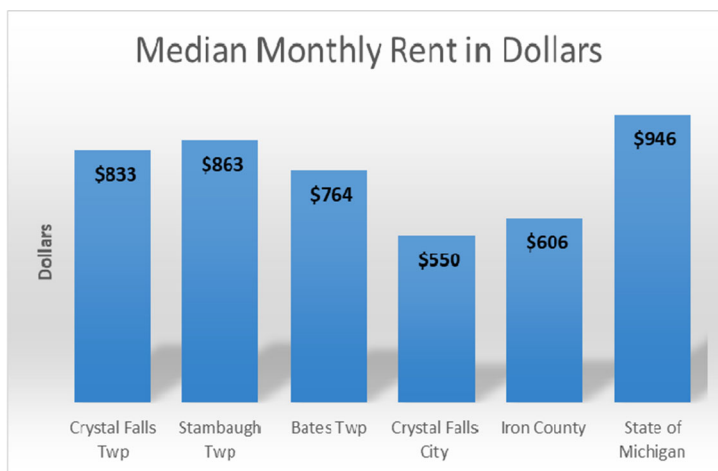
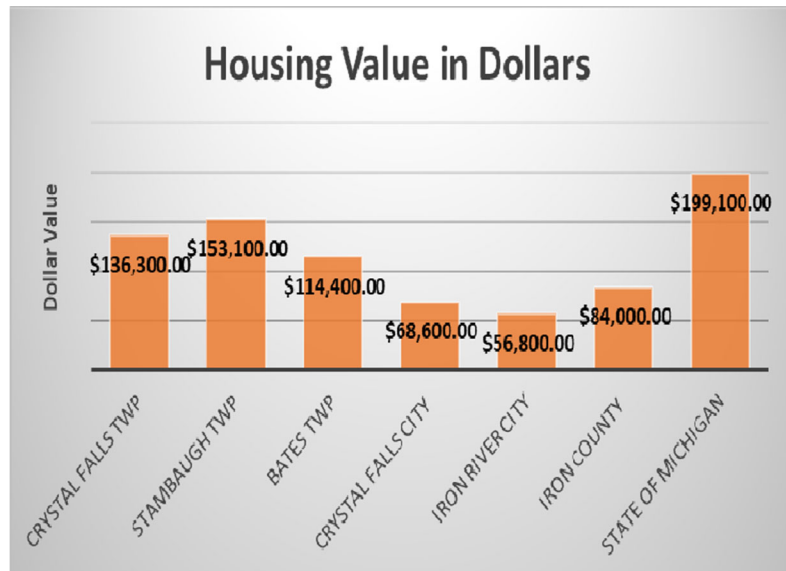
Table 2.1 – Occupied and Vacant Housing in the Crystal Falls Area

Community	Total	Occupied				Vacant			
	Housing Units	Owner-Occupied		Renter-Occupied		Total		Other Vacant	
		#	%	#	%	#	%	#	%
Crystal Falls Township	1,354	695	94.0	44	6.0	739	54.6	615	45
Bates Twp.	848	384	93.2	28	6.8	412	43.1	543	57
Hematite Twp.	377	142	93.4	10	6.6	152	39.3	235	61
Mastodon Twp.	779	307	92.2	26	7.8	333	43.4	434	57
Stambaugh Twp.	1323	474	96.7	16	3.3	490	40.0	736	60
Mansfield Twp.	267	116	99.1	1	0.9	117	44.8	144	55
Spurr Twp. (Baraga)	368	113	96.6	4	3.4	117	34.0	227	66
Covington Twp. (Baraga)	410	51	85.0	9	15.0	60	61.2	38	39
Sagola Twp. (Dickinson)	962	371	86.5	58	13.5	429	46.4	496	54
Republic Twp. (Marquette Co.)	1,116	476	87.3	69	12.7	545	51.5	513	48
Crystal Falls City	893	558	82.4	119	17.6	677	81.0	159	19
Iron County	9,197	4,277	84.1	810	15.9	5,087	57.0	3845	43
State of Michigan	4,532,233	2,966,347	73.2	1,085,451	26.8	4,051,798	88.3	538,586	11.7



Of the 45% Vacant Housing in Crystal Falls Township, 95% of those are seasonal housing with the last 5% are on the market for sale. Due to several urban towns, Iron County has 34% seasonal housing. These dramatic numbers for seasonal housing are, of course, because of lakes and rivers for fishing and water sports, hunting in fall, winter snowmobiling and cross-country-skiing, and many other recreational opportunities. The woods, water and hills make the Upper Peninsula a strong draw for summer homes. This housing profile is indicative of tourist income as well. The seasonal income may be fairly good for the tourist season, but the income is not likely to sustain itself at strong levels more than six months a year.

The adjacent chart shows the owner-occupied housing value. As the chart demonstrates, Crystal Falls Township is generally in the middle of the pack for local Townships which are generally higher than the area cities. Although the value for seasonal homes is not reported separately by the census bureau, anecdotal observation indicates that many seasonal housing units have a higher dollar value than year-round occupied structures and this may be part of the reason for the higher housing values in the Townships compared to local cities.



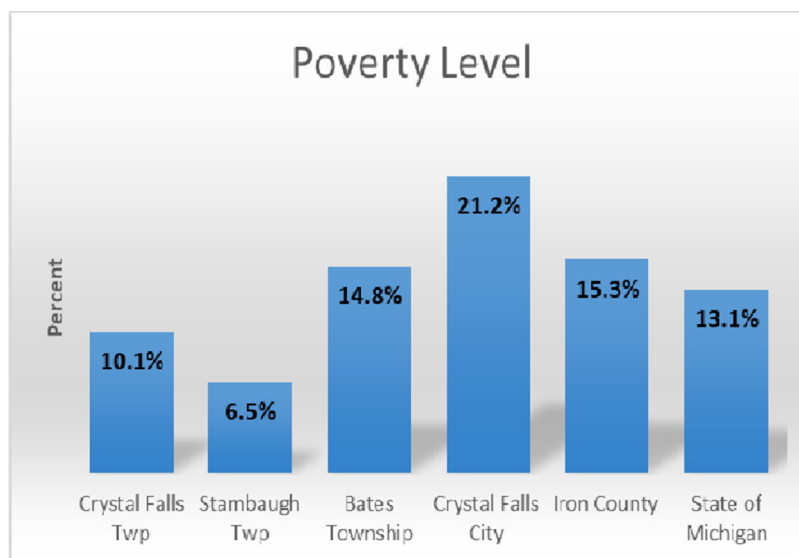
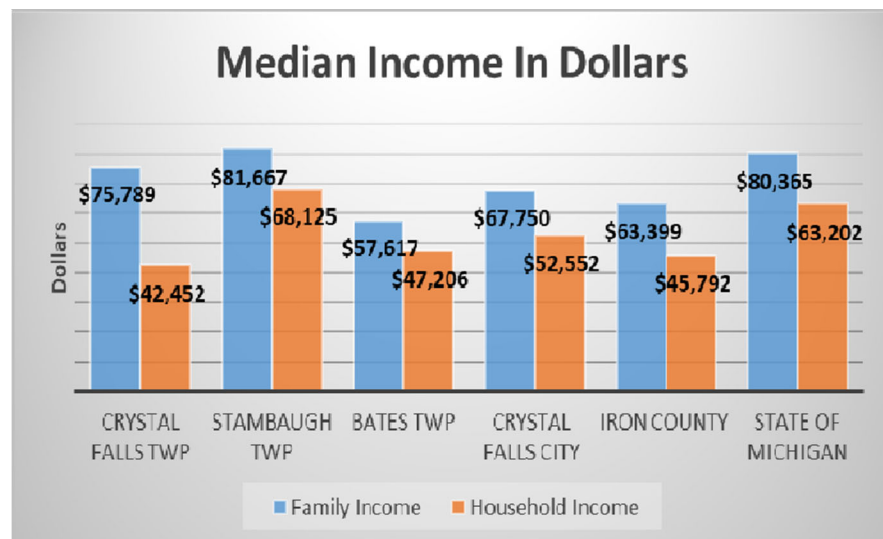
The median rental rate for Crystal Falls Township is 88% of the State of Michigan median rental rate, a 28% decrease from 2010. Rental housing availability has also declined to make up 6% of the total occupied housing units in the Township. Thus, current market rates make it unattractive to develop new rental units. In addition, the existing seasonal homes may become attractive as permanent dwellings if the housing market improves with the economy.



INCOME

The median Family and Household Incomes for Crystal Falls Township, surrounding areas, Iron County and the State are shown on the adjacent chart. Family income is for traditional families of parents usually with children. Households include the families, single residents and unrelated people living together. The incomes further demonstrate conclusions shown by

population and housing statistics: this area of the Upper Peninsula is less prosperous than the state-wide level. For example, the Township is a comparable 94% of the state median family income. Crystal Falls Township is 67% to the median family and household incomes for other selected townships in Iron County.



Poverty is shown on the chart below. In this case Crystal Falls Township has a relatively low rate of individuals in poverty. In fact, nearly all the other townships in the area have a higher poverty rate. As the previous charts show, the community is one of the most prosperous in Iron County, probably because it is suburban to three municipalities (Iron River, Caspian and Gastra) and its abundance of lakes, rivers, and larger tracts of land typically lead to higher dollar development.

Mansfield Township, just east of

Crystal Falls, is not shown in most data, because its smaller population is even more prosperous, and that small community would skew the comparison.



ECONOMIC PROFILE

Several significant businesses in Crystal Falls Township have strong national reputations, such as Conner Sports Flooring and Magiglide, Inc. (commercial closet doors). Other strong employers in the Township are the Iron County Medical Care Facility and Victorian Heights assisted living, Great Lakes Gas Transmission, the State of Michigan Departments of Transportation (MDOT), Department of Natural Resources (MDNR), and Department of Environment, Great Lakes, and Energy (EGLE).

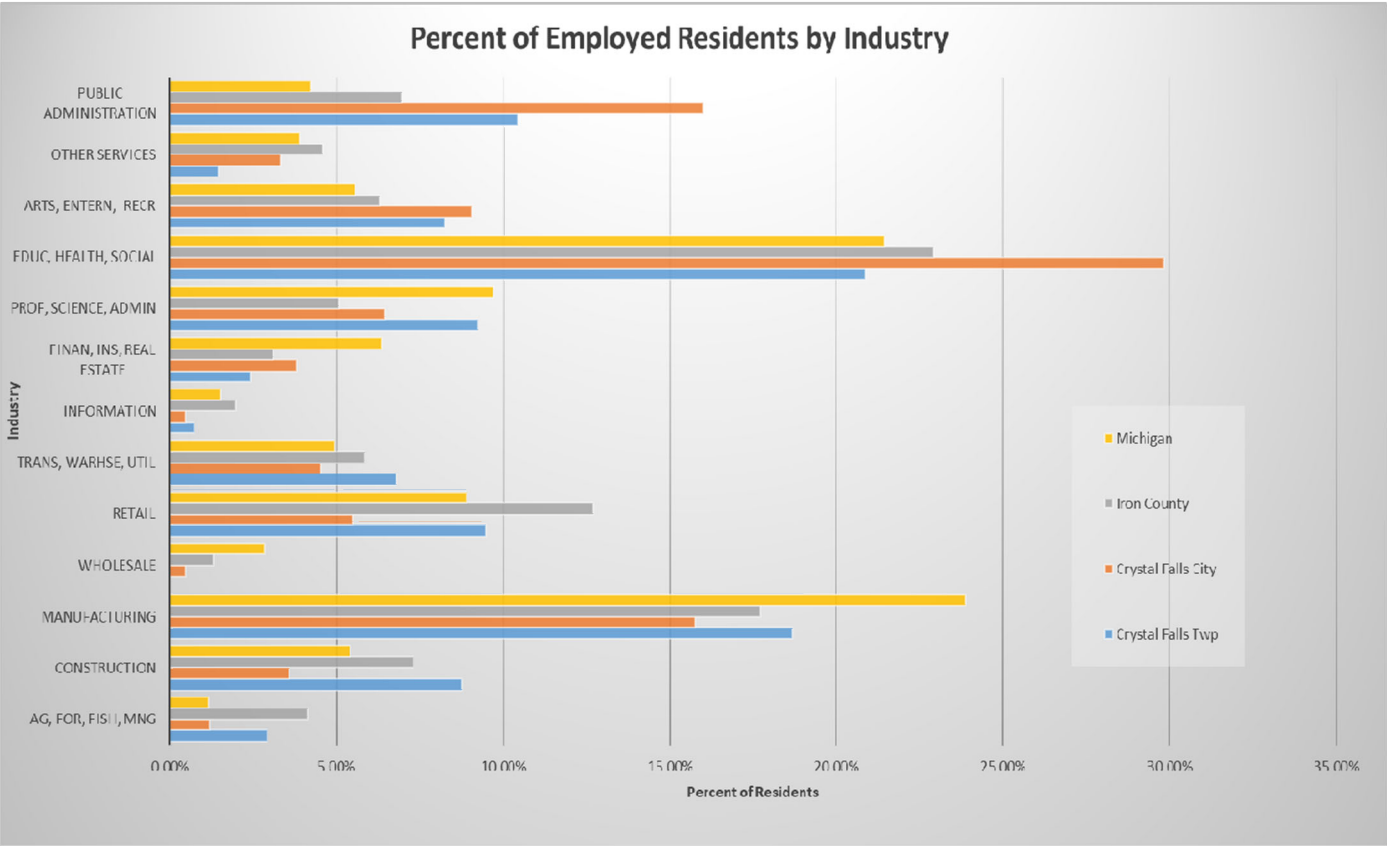
The Michigan Department of Technology, Management and Budget reported that the overall unemployment rate in Iron County was 6.1% for the year 2021. During the same period, the United States unemployment rate was 5.3%, and the State of Michigan rate was 5.9%. Data from this report was unavailable for local communities including the Township. The Iron County rate from the same time period during the previous year was 10% mostly due to fluctuations from the COVID-19 Pandemic restrictions.

The present economic status of residents of the county is shown by employment on a chart on the following page. The chart shows the types of employment positions held by the residents of the Township according to the year 2020 census by the U.S. Census Bureau. This demonstrates potential gaps in employment that may warrant consideration for future economic growth.

The chart does show that a large majority of Township residents are employed in the sectors of Manufacturing and Education, Health & Social Services. Connor Sports Flooring and the Iron County Medical Care Facility are large employers in these sectors that are located in the Crystal Falls Township. The Forest Park School District located in Crystal Falls City provides a number of education related jobs in the area. Additionally, there are some large manufacturing employers in the Dickinson County that provide employment for a large number of residents.

Other notable sectors of employment include Construction, Retail, Financial, Insurance and Real Estate, Public Administration, and Arts, Entertainment, and Recreation (tourism related).

Considering that Crystal Falls Township is far north of the economic mainstream of the state and its primary link is a small passenger airport over 30 miles southeast, it has to look for a different set of advantages to promote economic growth. These will be discussed later with implementation of the Master Plan.





CURRENT LAND USE

Current land use can be discerned from the Zoning Map shown on the next page and is summarized in the table below. Parcel and Zoning Maps area available for public viewing at crystalfallstownship.org.

Table 2.2 – Crystal Falls Township Land Uses

	<u>Acres</u>	<u>Percent of Township</u> <u>Land</u>
Single Family/Duplex/Seasonal	1,913	1.25
Mobile Home/Manufactured Home Park		
Commercial	84	0.05
Industrial	227	0.15
Public/Quasi-Public	114	0.07
Transportation/Utilities/Waste Disposal	71	0.05
SUB-TOTAL DEVELOPED LAND	2,408	1.57
Agricultural	3,225	2.11
Coniferous Forest	22,620	14.77
Deciduous Forest	102,218	65.75
Wetlands	13,242	8.65
Open Fields/Fallow Land	5,003	3.27
Lakes	3,655	2.38
Water	463	0.3
Outdoor Recreation	302	0.2
SUB-TOTAL UNDEVELOPED LAND USES	150,728	98.44
TOTAL LAND	153,136	100%
(Total Land Area is 239.28 square miles)		

The developed portion of Crystal Falls Township is proportionately very small as it amounts to only 1.56% of the land area leaving 98.44% having limited development or is undeveloped. That is because it is such a large Township; it is nearly 7 times the size of a “normal” 36 square mile township with an area of 239 square miles.

The Copper Country State Forest includes approximately 71 ½ square miles (about 30%) of the Township’s land area. Within those boundaries, the State of Michigan owns much, but not all of the land. The balance of the land in the Copper Country State Forest is private land owned by either the paper or lumber companies or individuals.

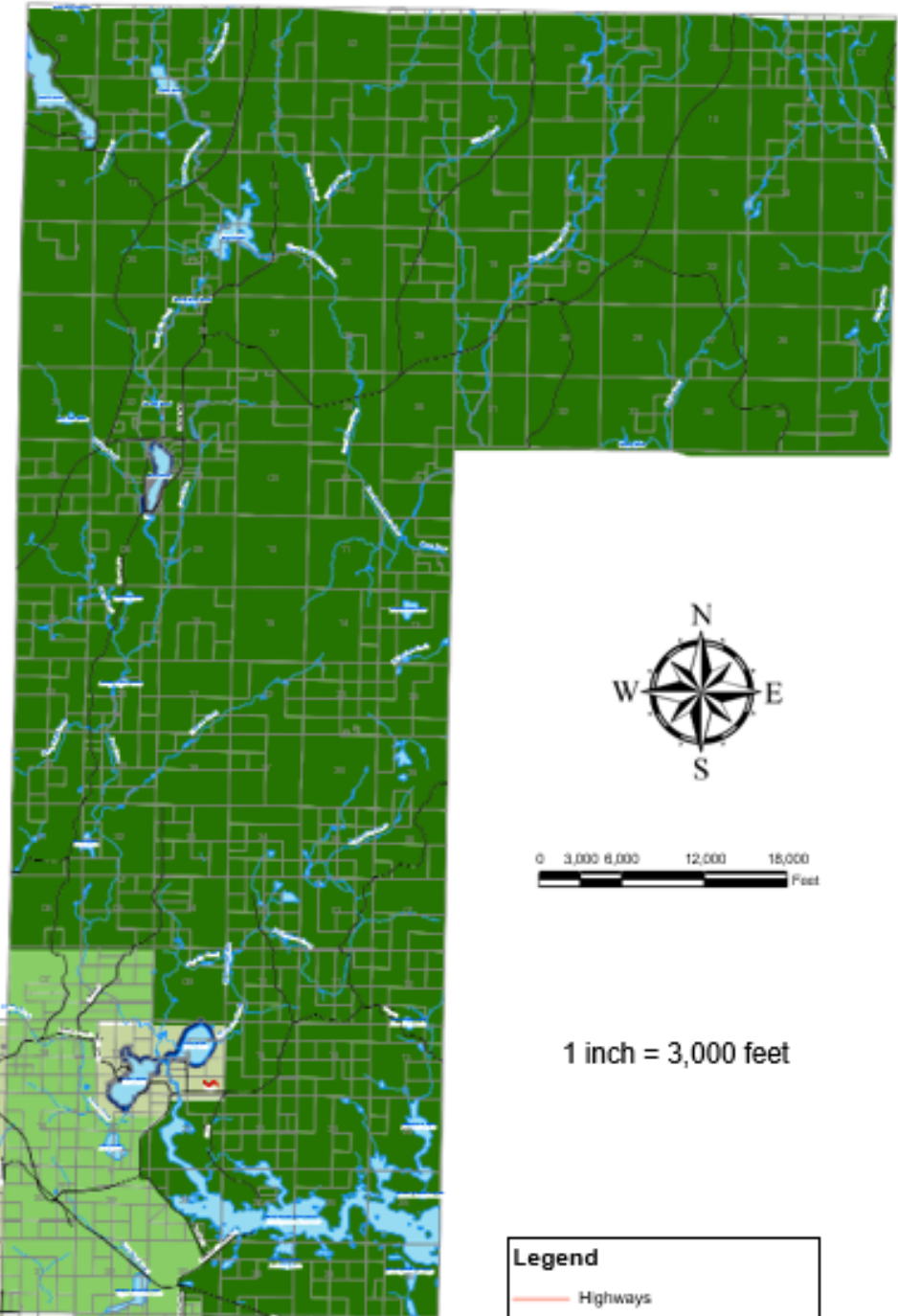
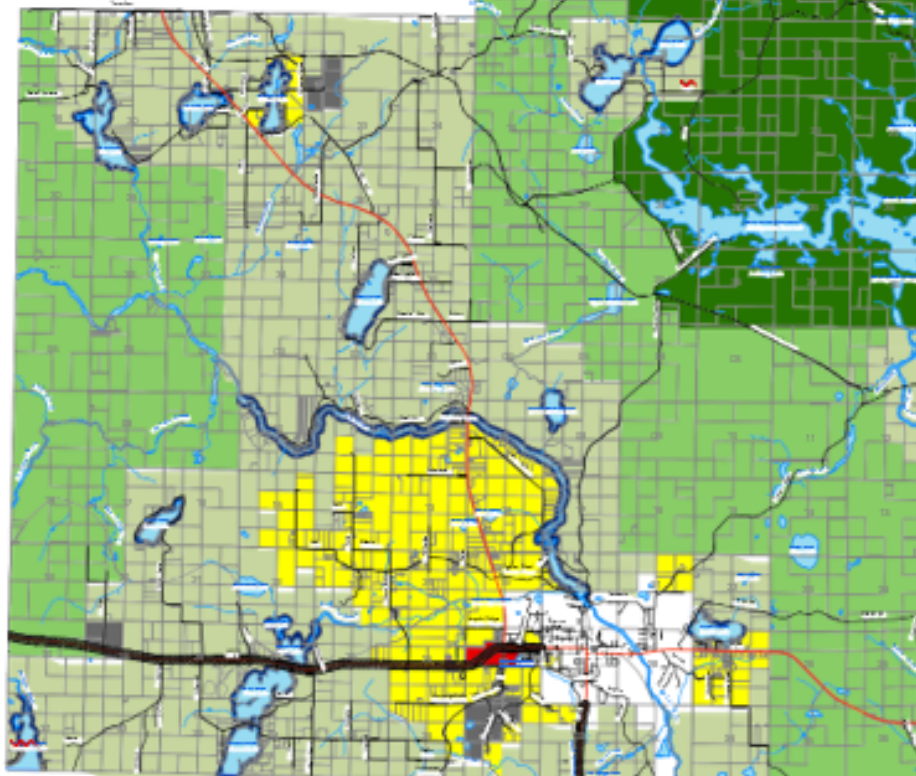
Crystal Falls Township

Official Zoning Map

Iron County
Michigan

Zoning Districts

-  Agricultural Residential
-  Commercial Forest
-  City of Crystal Falls
-  Light Industrial
-  Rural Residential
-  Medium Density Residential
-  Commercial
-  Waterfront Residential
-  US-2 Overlay



0 3,000 6,000 12,000 18,000 Feet

1 inch = 3,000 feet

Legend

-  Highways
-  Primary Roads
-  Secondary Roads
-  Unpaved - Unclassified Roads
-  Railroad
-  Parcels
-  Rivers
-  Lakes
-  Sections

Amended and Updated: June 2023

Nancy Niemi, Crystal Falls Township Clerk



From the Existing Land Use, we can see the following basic conditions:

- **Residential:** Most of the developed land is residential within several miles of the City of Crystal Falls. Some additional development, primarily residential, also extends further out on US-2 and US-141. Seasonal housing dominates the lakes such as Fortune Lakes, Long Lake, Deer Lake, a small portion of Chicagon Lake and other lakes. There are private hunting camps in the forests to the north.
- **Commercial:** Commercial development is limited to the two US highways. The largest commercial strip is on the joint US-2/US-141 Highway west of the City of Crystal Falls to Tobin-Alpha Road and US-141. There are a few scattered sites west towards Iron River on US-2. Even though commercial development is relatively modest, by sales volume the Township is the retail center of the Crystal Falls area.
- **Industry:** The most significant industry in Crystal Falls Township is Conner Sports Flooring Company, a world-renowned floor company and Magiglide, Inc., which is a well-regarded door company; both located on Industrial Road and old US-141 in the Township's Cross Cut Spur Industrial Park. Those roads are also the only all-season county roads in the Township. The Great Lakes Gas Transmission Company has a large facility for maintenance and offices on Oss Road just north of US-2 on the western side of the Township.
- **Recreation:** Public and private recreation land in Crystal Falls Township consists primarily of the Bewabic State Park on US-2 and First and Second Fortune Lakes, Fortune Pond, two campgrounds on public lands (Deer Lake and Glidden Lake), Gibson Lake Township Park with camp sites, private Chicagon Falls in Copper Country State Forest near Long Lake, 3 ½ miles north of US-2, and five public boat-launching sites. We Energies (WE) also has several recreation sites on its property fronting on the Michigamme Reservoir. There is a trail on the former rail bed crossing the Township east-west. Some additional recreation opportunities are available for hiking trails, cross-country skiing and snowmobiling in the Copper Country State Forest. Large tracts of timber company, State-owned land, and national forest lands provide thousands of acres of public land accessible for hunting, fishing, and other outdoor activities.
- **Agriculture:** Because soils are generally unproductive and the growing season is relatively short, there remain only a few farms in the Township. Much of the current farmlands consist of hayfields while many others are no longer used.
- **Open and Undeveloped Land:** Most open and undeveloped land is north of US-2 in the US-141 corridor. It consists primarily of former farms or former woodlots.



- **Natural Features:** The balance of the Township is covered by natural resource areas including deciduous and coniferous forests, wetlands, lakes and ponds, rivers, steep hills and fields. This is by far the largest land use category in Crystal Falls Township.

Except for tree harvesting, developed land use amounts to less than 1.56% of the township. There is no problem of sufficient undeveloped land per se, but the public road access is limited in some areas of the northern part of the Township, mostly due to privately-owned parcels occupying much of the northern part of the Township.

TRANSPORTATION

The transportation system is shown on the previous Zoning Map of the community. Transportation in Crystal Falls Township can almost be considered as seasonal activity in some limited respects because bicycles, motorcycles and boating are not used in the winter. However, the year-round use of trucks, SUV's and cars is supplemented by use of snowmobiles in winter. The basic transportation system can be summarized with the following transportation modes:

Highways

Both US-2 and US-141 highways serve the Crystal Falls area. They are two-lane highways with US-2 as the east-west connection to Escanaba and Ironwood and US-141 a north-south connection with Menominee and Hancock-Houghton. US-2 and US-141 are combined highways south of the City of Crystal Falls. M-69 is a two-lane, east-west highway traversing east from Crystal Falls for sixty miles to US-2 and US-41. The connection then travels the additional 8 miles east to Escanaba on US-2/41. Pentoga Trail enters Crystal Falls Township in the extreme southwest on the east side of Chicagon Lake terminating at US-2 after about two miles. It connects to County Road 424 on the south. None of these roads are near capacity or have dangerous alignments. There are no other major connecting roads in the Township.

Crystal Falls Township has one small network of "Class A" all-season roads maintained by the Iron County Road Commission. That area is north of US-2 and east of current US-141 by Gilbert Lake on Old US-141 and Industrial Road. All of the other roads have seasonal load restrictions.

During the winter, some of the road rights-of-way are also paralleled by snowmobile trails for routine use. The private logging roads and trails that go to the far north of the Township are not routinely maintained for light vehicle use even though they access some private property. Virtually all the housing in that area is accordingly seasonal. Deer Lake Road is an unpaved public road of the Iron County Road Commission that travels furthest north to Deer Lake.

Railroads

There is one surviving, active railroad track in the Township. It is operated by the Escanaba & Lake Superior Railroad (E&LS). The E&LS Railroad is a privately owned, short line railroad that operates in the Upper Peninsula of Michigan and northeastern Wisconsin. E&LS currently has over 235 miles of operating railroad in the system with offices in Wells, MI and Green Bay, WI. The mainline runs from Sidnaw, MI to



Green Bay, WI with several branches in between. In Crystal Falls Township that rail line runs through the Township's Cross Cut Spur Industrial Park, however, there is no active spur or landing there.

Airports

The Iron County Airport is south of the Township in Mastodon Township just off US-2/141 on Horserace Rapids Road. The Stambaugh Airport is located in the City of Iron River on Garfield Avenue. Both are general aviation airports with modest traffic. The Iron County Airport can accommodate single and twin planes while the Stambaugh Airport can accommodate single and light twin planes. There is no regular scheduled passenger services at either airport, however, private hangars are available at both facilities. The nearest passenger airport is Ford Airport located in southeast Dickinson County in the City of Kingsford just southeast of Iron Mountain. It is about 30 miles distance on US-2/141. Ford Airport is a Delta Airlines hub that provides regular connecting flights to Minneapolis-St. Paul International Airport among others.

Transit

Transit needs are met by specialized elderly and handicapped service and are provided by U P Community Service in Iron Mountain and the Crystal Falls Community Center. Interstate bus transportation is provided by a commercial bus line stopping at Crystal Falls City near the Post Office.

Non-Motorized Trails/Walkways

The use and development of non-motorized biking and walking trails has significantly expanded over the last several years. The Township has been a part of the development of a bike/walkway along Highway US-2 from the Township border with the City of Crystal Falls to Donahue Park located on Fortune Lake. This trail is part of larger planned trail that will eventually extend from the City of Crystal Falls through the Township to the City of Iron River. The Township has explored funding opportunities for the future phases of the trail which would extend the trail along Highway US-2, west to Bewabic State Park, and eventually continue west and connect with the Iron County Non-Motorized Heritage Trail at Pentoga Park. A map showing the existing and proposed sections of the trail is shown on the next page.

Snowmobile/ORV Trails

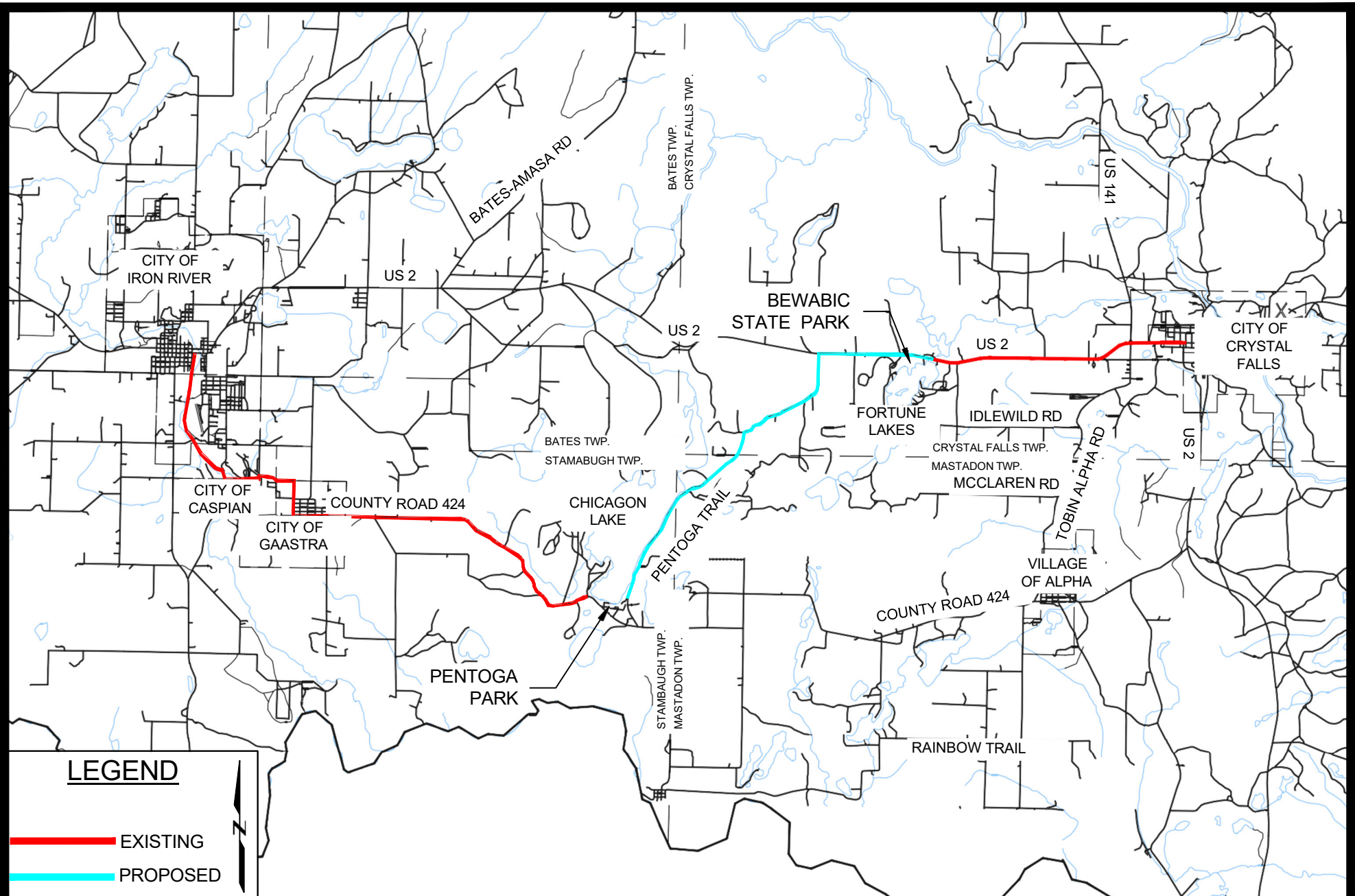
Snowmobiling and four-wheeling have become a popular activity in the area. The Township has a large network of trails that riders can use to explore the Township. Many of the trails are former railroad lines that have since been abandoned. Additionally, a number of snowmobile trails have been developed to connect to a larger trail network with Iron County and the Upper Peninsula. Bewabic State Park which is located near one of the Township's existing recreation trails has recently become one of the first and only ORV-Friendly State Parks. Access to the Park from Kaski Road will provide riders with access to hundreds of miles of trails including various trails in the Copper Country State Forest in the Township. There is a need in the Township to develop additional trail sections or spurs off existing trails to provide better access to the business districts to promote access to restaurants, bars, gas stations, and other commercial facilities.

The transportation infrastructure in Crystal Falls Township appears to have sufficient capacity for both the short- and long-term needs. Even with many Township residences located near the Crystal Falls City



limits, the total market of about 5,000 people can be served by current transportation facilities. There may become a demand for turning lanes, passing lanes or other small improvements to accommodate traffic needs and safety in selected locations, but they will be small improvements and most likely on US-2 and/or US-141. Although not required by current or expected volumes, a road parallel to US-2/141 on the north side and behind commercial uses may be desirable from the City west to US-141.

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LEGEND

- EXISTING
- PROPOSED



CRYSTAL FALLS TOWNSHIP
MASTER PLAN
JANUARY 2023

FIGURE 2.2
NON-MOTORIZED TRAILS



COMMUNITY FACILITIES AND UTILITIES

Community Facilities

The Crystal Falls Township has a limited number of community facilities within its boundaries at this time. The major facilities are the following:

- Crystal Falls Township Hall located on the northwest corner of US-2 and US-141/Tobin Alpha Road, which can be used for community events by coordinating with the Township Office.
- The Iron County Medical Care facility is located on US-2 near Fire Tower Road. The campus is on a total of 40 acres and includes a skilled care facility and Victorian Heights assisted living facility.
- The State of Michigan also has District Offices of the MDNR, EGLE, and MDOT near the US-2 and US-141 intersection.
- The Dickinson-Iron Health Department has an office in the Crystal Falls Industrial Park located near the intersection of Highway US-2 and 141 off Zavada Drive.

Parks

Local parks include:

- Bewabic State Park occupies about 325 acres of land at First Lake of Fortune Lakes and US-2. It has 144 campsites, a swimming beach, fishing, hiking and boating, including public access.
- The Nature Center Fortune Pond operated by the Michigan Department of Natural Resources (MDNR) is located on the west side of New Bristol Road about 1,300 feet north of US-2. It was originally a surface mine at the Briar Hill Creek but now is known for exceptionally clear water surrounded by woods. The fishing pier is handicap accessible.
- Gibson Lake Park is located just off US-141 on Gibson Lake Road. The facility is used by local residents and some tourists. The Park provides seasonal camping and includes a restroom/changing facility, swimming access, playground equipment, fishing pier, boat access, and picnic areas. Recent improvements at the Park have updated the site features to meet ADA Accessibility standards.
- Donahue Park is located on the northeast corner of First Fortune Lake between Resort Drive and Highway US-2. Named Donahue Park after the previous owners who passed the property on to the





Township, the park area is a small non-motorized boat launch for canoes and kayaks and includes picnic areas.

In addition, there is one private campground, five public access slips for boats, and trails in the Copper Country State Forest.

Public Utilities

Public utilities in the Township are limited to a sanitary sewer collection system that is connected to the City of Crystal Falls' sewer system and two separate Township Water Distribution Systems, the Lind and North Systems. The Township's sanitary system is located along the Highway US-2 corridor adjacent to the City of Crystal Falls. The collection system extends west to serve the Iron County Medical Care Facility. The system consists of three sewer pump stations, and mainly 8-inch and 10-inch collection piping. The wastewater is then treated by the City of Crystal Falls in a lagoon system south of the City. A map showing the location of the public water and sewer systems along with some other available utilities is shown on the next page.

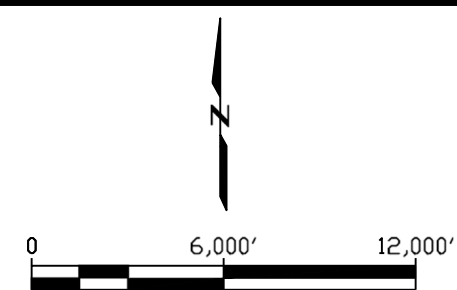
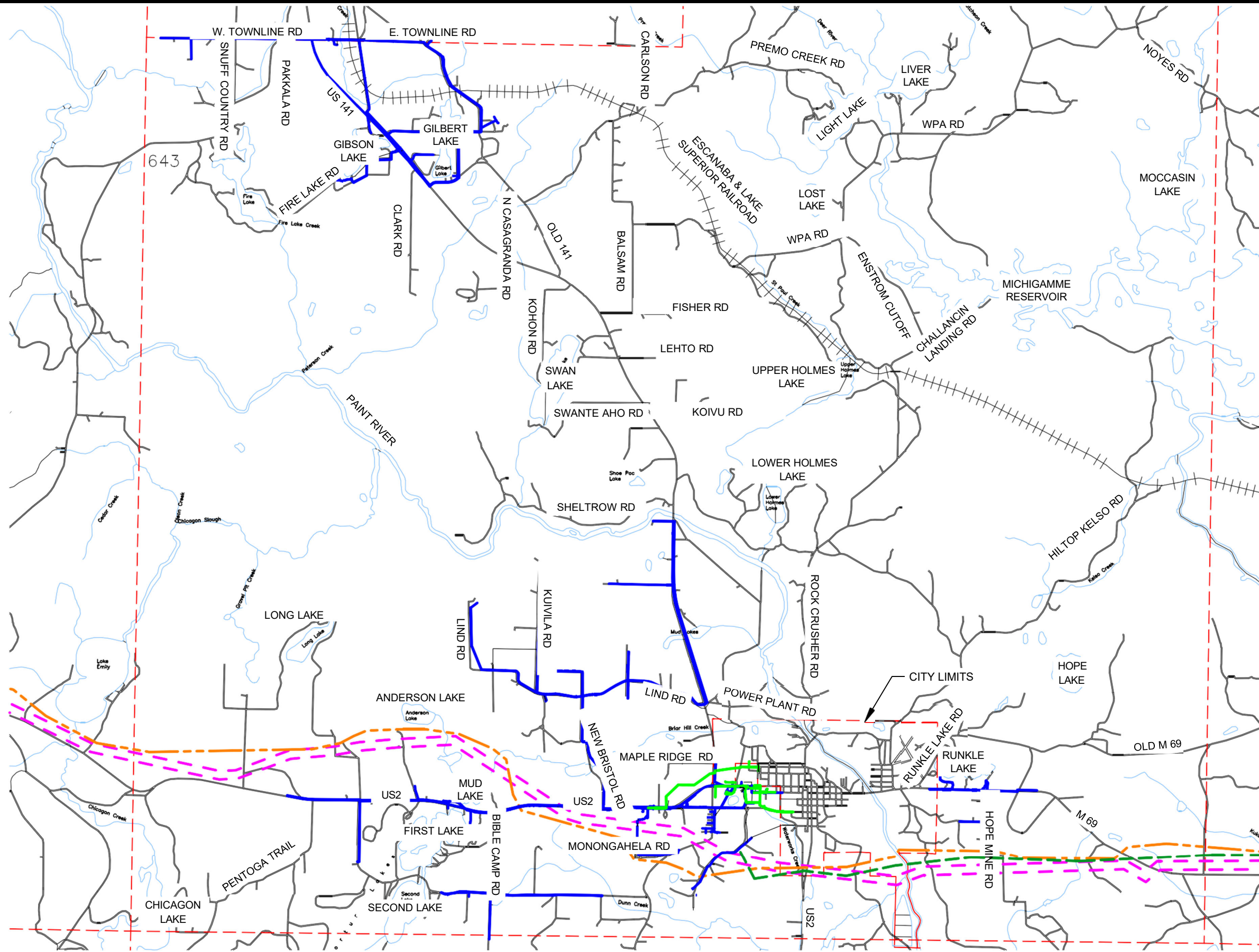
The larger of the two Township Water Distribution Systems is the Lind System which serves the southern portion of the Township near Highway US-2. The Lind System consists of a 500,000-gallon ground storage tank, a 150,000-gallon elevated storage tank, three production wells with capacities of 300 gallons per minute (GPM), 400 GPM, and 260 GPM, a booster pump station, and 28 miles of watermain. The Township also provides water to the adjacent City of Crystal Falls. The Townline or North System is located on the northern portion of the Township near Townline Road and serves the areas along US-141, near Gibson and Gilbert Lakes and the Cross Cut Industrial Park including Conner Sports Flooring and Magiglide. The North System consists of a 75,000-gallon elevated storage tank, two (2) production wells that are equipped with vertical turbine lineshaft pumps rated to pump 250 GPM and 400 GPM, and approximately 9 ½ miles of watermain. Hematite Township, located just north of Crystal Falls Township, purchases water from the Township's North System.

Other utilities are available in the Township but are provided from different public or private enterprises including natural gas, power, phone and internet, storm sewer. The table below summarizes these utilities that are present in varying forms of availability throughout the Township.

Table 2.3 – Public Utilities

Utility	Provided by:	Location Available
Natural Gas	DTE Energy	Select Areas
Power/Electricity	City of Crystal Falls and WE Energies	Most Areas of Township
Storm Sewer	State of Michigan	Along US-2 & M-69
Phone and Internet	AT&T, Baraga Telephone Co., Fast Air Internet	Select Areas
Cellular	Verizon, AT&T, and Others	Township Wide

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LEGEND	
	WATER LINES
	SEWER LINES
	ENBRIDGE PIPELINE
	LAKELAND PIPELINE
	DTE PIPELINE
	TOWNSHIP BOUNDARY



CRYSTAL FALLS TOWNSHIP
MASTER PLAN
JANUARY 2023

FIGURE 2.3
UTILITIES MAP



Public Services

Fire protection services are provided by the Crystal Falls Fire Department who provide structural and wildland fire suppression services to a large portion of eastern Iron County including Crystal Falls Township, Mansfield Township, and the City of Crystal Falls. The volunteer fire department consists of one part-time Fire Chief and 21 additional volunteers. The Department currently has a 1993 International / Peirce pumper truck with a total of 750 gallons of water, a 2005 International / Pierce 2,000-gallon pumper / tanker truck, a 1999 Chevrolet one-ton 4x4 dual purpose pickup truck for light rescue and wildland incidents, a 1996 International – E One Rescue command truck, and jaws of life. The current Fire Hall is located in the rear of the Crystal Falls City Hall building located on S. Fourth Street just south of Superior Avenue. The current Fire Hall holds (3) trucks with the command truck stationed at the Crystal Falls Township Garage located near the northwest quadrant of the US-2 Highway and US-141 Highway intersection, however, plans are in the works for construction of a new fire station. The Township has purchased a parcel of property near the intersection of Firetower Road and Highway US-2 for construction of the new facility. Funding has been obtained through the United States Department of Agriculture Rural Development Community Facilities program. Design work on the facility has been completed and construction on the facility is planned to start in 2023.

The department and township are entered into mutual aid agreements with the area departments from both Iron and Dickinson Counties as well with Florence Fire Department in Wisconsin. The department and the township have also entered into a Statewide mutual aid agreement with Michigan Mutual Aid Box Alarm System (MIMABAS). This agreement makes possible support from not only the local area but on a state level as well as being able to get support from Wisconsin. This support is important in getting the specialized equipment and personnel to the area if needed.

The Township does provide a weekly garbage collection for its residents. Curbside pickup generally occurs once a week and garbage stickers are available from local merchants and at the Township Hall to be placed on garbage bags. In addition to weekly garbage collection, the Township also periodically offers a spring and fall cleanup. The spring and fall cleanups are generally for larger household items that are not disposed of in the weekly trash. It is a drop-off service that is held at the Township Hall and supervised by Township employees. Recycling services are available to Township residents on a monthly basis. This is also a drop-off service that is supervised by Township employees. Items that are accepted for recycling include plastic, glass, cans, paper, and cardboard. An electronic waste recycling program is also available to residents the last Saturday of each month. The location of the collection rotates between the various municipalities in the County.

NATURAL RESOURCES AND ENVIRONMENTAL QUALITY

Crystal Falls is exceptionally rich in natural resources. Much of this is based on the geology of the area that resulted in strong and rapid iron mining growth in the Crystal Falls Township area in the late 1800s. As iron mining disintegrated early in the twentieth century, another natural resource, forestry, arose. Wood is used for lumber and especially most recently for paper. Despite the mining and harvesting of lumber, only a small portion of the Township land remains cleared for those purposes. The presettlement forests of

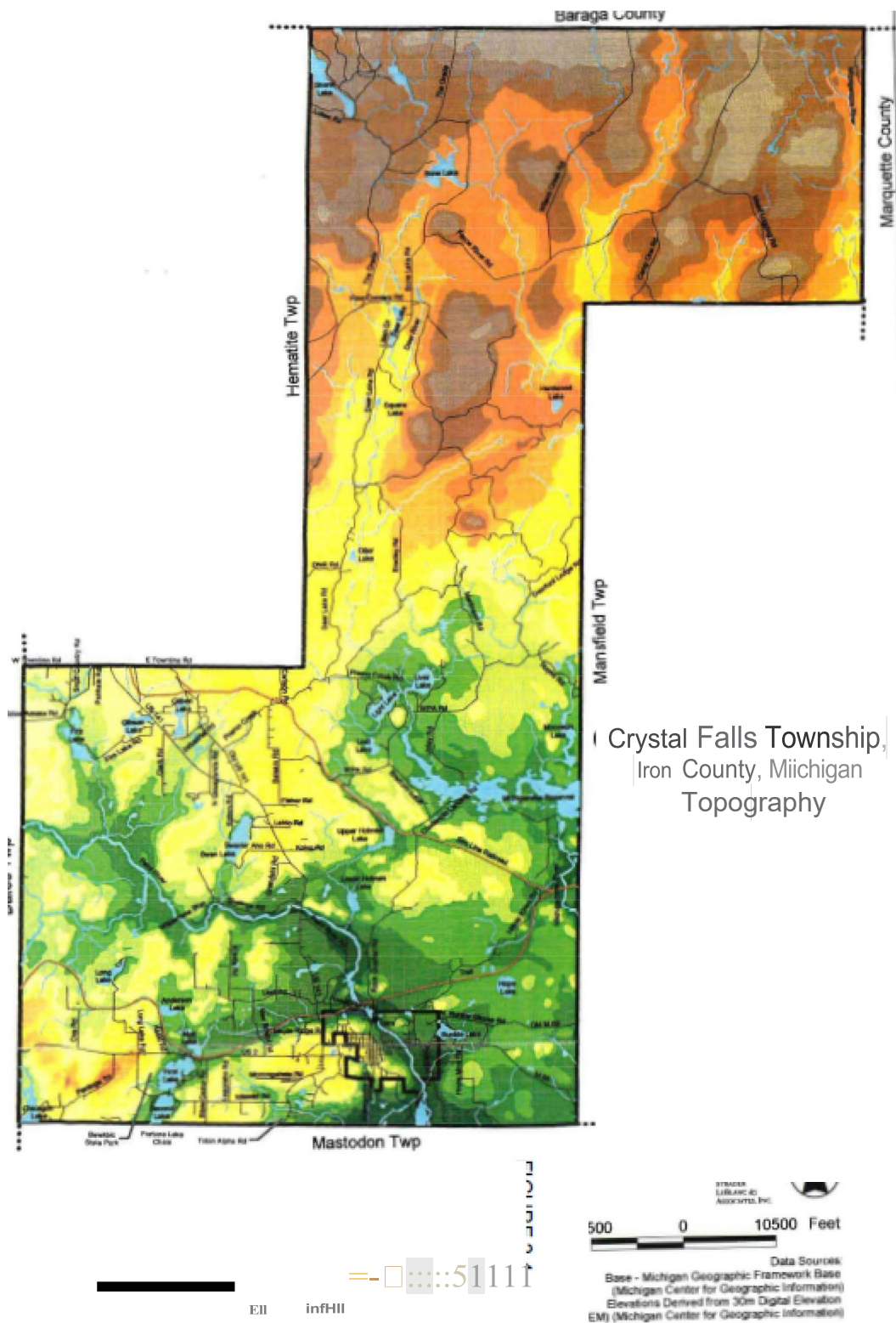


Maple-Birch, Pines and Spruce-Fir have been replaced by the predominance of Aspen-Birch, Maple-Birch-Hemlock and Spruce-Fir.

General Description of Land

Total relief ranges from 1,300 feet elevation to 1,770 feet for a total of 470 feet. Topography of the Township is shown on the map on the next page. Although hills are found throughout the Township, the highest areas are clearly in the north. However, the greatest differential between prevailing land height and highest altitude (therefore the highest hills) is in the southwest and south-central parts of the Township. The City of Crystal Falls has a height difference of about 280 feet elevation and a hill between US-2 and Pentoga Trail has about the same difference in elevation from nearby Chicagon Lake. Crystal Falls Township also has some unique land features. For example, a glacial esker (sand and gravel ridge) crosses US-2 near Oss Road. It is more prominent south of US-2.

The area is drained by the Paint River, Deer River and the Michigamme River and Reservoir that flow into the Brule River which joins the Menominee River on the Wisconsin border before it flows into Lake Michigan. Most of it is covered by deciduous and some coniferous forest. Wetlands are also quite prominent as well as lakes. The specific soil associations note the primary use of the land is woodlands. The soil ranges from moderately suited to unsuited for general farming. The major concerns for farming are usually the short growing season, stoniness and water erosion. Farming is a very small activity in Crystal Falls Township.





ENVIRONMENTAL LAND QUALITY

Crystal Falls Township does not have serious land pollution according to EGLE. There are no Superfund sites in the City or Township. There are three Part 201 (State-determined) contaminated sites located within or near the Township. Two of these sites are former landfills contaminated with domestic and community waste. They are the former City-owned landfill on Hilltop Kelso Road and the Township-owned landfill near Bjork Drive. These former landfills are not active and while it is expected there is some groundwater pollution present, the effect of this is expected to diminish over time. The third site is the Enbridge Pipeline which previously had a leak in one of its pipelines in the western portion of the Township. Additionally, there are some Leaking Underground Storage Tanks that exist in the area which are only expected to cause pollution problems in smaller areas around the leaking tank.

There are also tailings from iron mines in the Township, but these are natural materials without adverse chemical composition. The Township is also concerned about Freon, anti-freeze, oil, gasoline, and other pollutants in locations in which cars and other junk are stored haphazardly on private property throughout the Township. Unfortunately, EGLE and MDNR do not have authority for this problem, however, the Township Zoning Ordinance has regulations to monitor these conditions. Overall, land pollution in Crystal Falls Township is not serious and does not warrant any special accommodation in this Master Plan.

Safety is a concern near the major gas and oil pipelines and abandoned mines in the Township. In the past, there have been instances of natural gas and crude oil pipelines rupturing and causing major land disturbances. Similarly, several underground drifts in iron mines have already collapsed causing rapid subsidence of the surface land. Fortunately, these are rare and both of these incidents happened away from populated areas and caused no significant problems to other private owners.

WETLANDS

Wetlands are fairly common in the low elevations and along watercourses in the Township, according to the U.S. Geological Survey. They are especially significant in several large wetlands northeast and east of the City of Crystal Falls and south of the Michigamme Reservoir. Another large wetland exists east and southeast of Amasa and partly in the Township. Wetlands are found in forests, open lands, and shallow water. But, because of the heavy forestation in Crystal Falls Township, the wetlands are primarily in forested areas. Certain wetlands are subject to regulation and protection by EGLE.

WATER FEATURES AND QUALITY

Water is plentiful in Crystal Falls Township. The major watercourse in the Township is the Paint River in the south-central portion of the Township and going through the City. A dam in the City is used to generate electricity by the City at the original site of the Crystal Falls for which the City and Township are named. The Paint River eventually joins the Brule River south of the Township just before it joins with the Michigamme River and eventually forms the Menominee River. The west part of the Township is drained by the Hemlock River, which flows south to join the Paint River near Bates-Amasa Road. Central Crystal



Falls Township is drained by the Deer River and eventually flows into the Michigamme Reservoir, Michigamme River and Menominee River into Lake Michigan. In the east, the Fence River drains the northeast part of the Township until it too empties into the Michigamme Reservoir.

Despite the name, there are no falls known as Crystal Falls in the area. The Crystal Falls used to be located where the existing City of Crystal Falls Power Plant and Dam are located. Only one cited falls now exists in the Township, which is known as the Long Lake (or Chicagon) Falls on the Chicagon Creek (Slough) before it joins the Paint River. It is about seven miles northwest of the City of Crystal Falls on private land. There are half a dozen prominent waterfalls near the Township on the Michigamme River, Paint River and Margeson Creek before it flows into the Michigamme Reservoir.

Lakes are also common in the Township. Small parts of the huge Michigamme Reservoir (owned by the Wisconsin Electric Power Company) and Chicagon Lake are on opposite sides of the Township. In addition, numerous other lakes are found including the Fortune Lakes (First & Second), Runkle Lake, Deer Lake, Swan Lake, Otter Lake, Long Lake, Fire Lake, Gilbert Lake, Gibson Lake, Bone Lake, and Shank Lake to name just a few.

Water quality is important to seasonal vacation destinations such as the Township. Invasive species is a common concern for water bodies not only in the Township but nationwide. Common invasive species found in area lakes and rivers include Eurasian Water Milfoil, Curly Leaf Pondweed, Rusty Crayfish, and Zebra Mussels and have been identified in Chicagon Lake, Fortune Pond, Runkle Lake, Fortune Lakes, Swan Lake, and the Paint River. It is likely that other lakes and rivers could also be included on this list and expected that the list will continue to grow. Water contamination is not expected to be common because there are few point sources or even non-point sources that affect water quality in the Township.

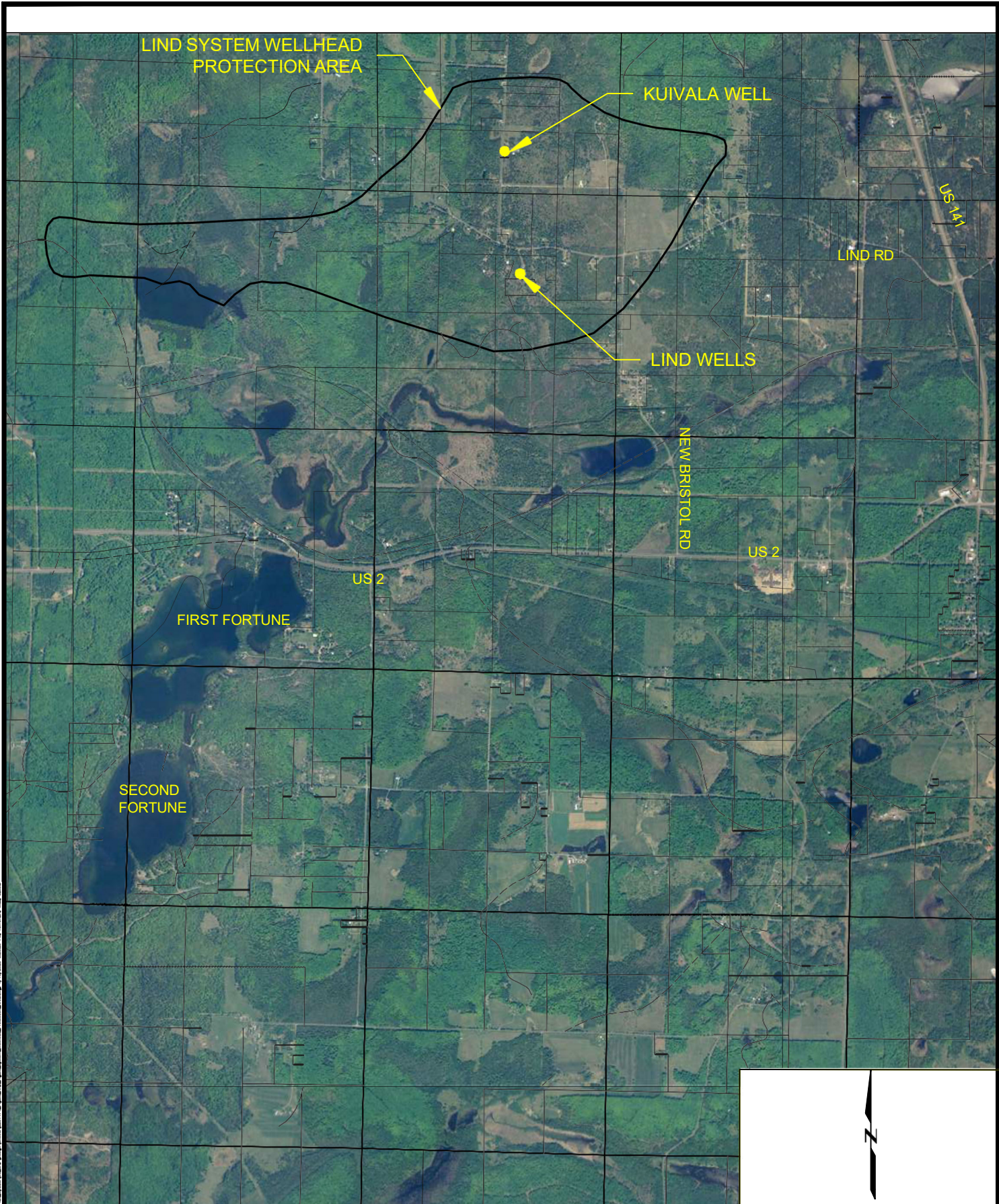
Deposition of mercury from atmosphere through rain is a factor but such air emissions can come from a variety of countries, making control very difficult. A number of lakes in the Township have been identified as being polluted with varying degrees of mercury and have a Fish Contaminated Advisory because of the mercury. Mercury contamination of surface waters is a common problem in Michigan and throughout the nation. A minor increase results from mining and some air deposition of mercury from coal-fired electrical generating plants, especially in foreign countries. Still, much of the mercury in water is natural. The State of Michigan Department of Health does have appropriate fish advisories listed in a public brochure.

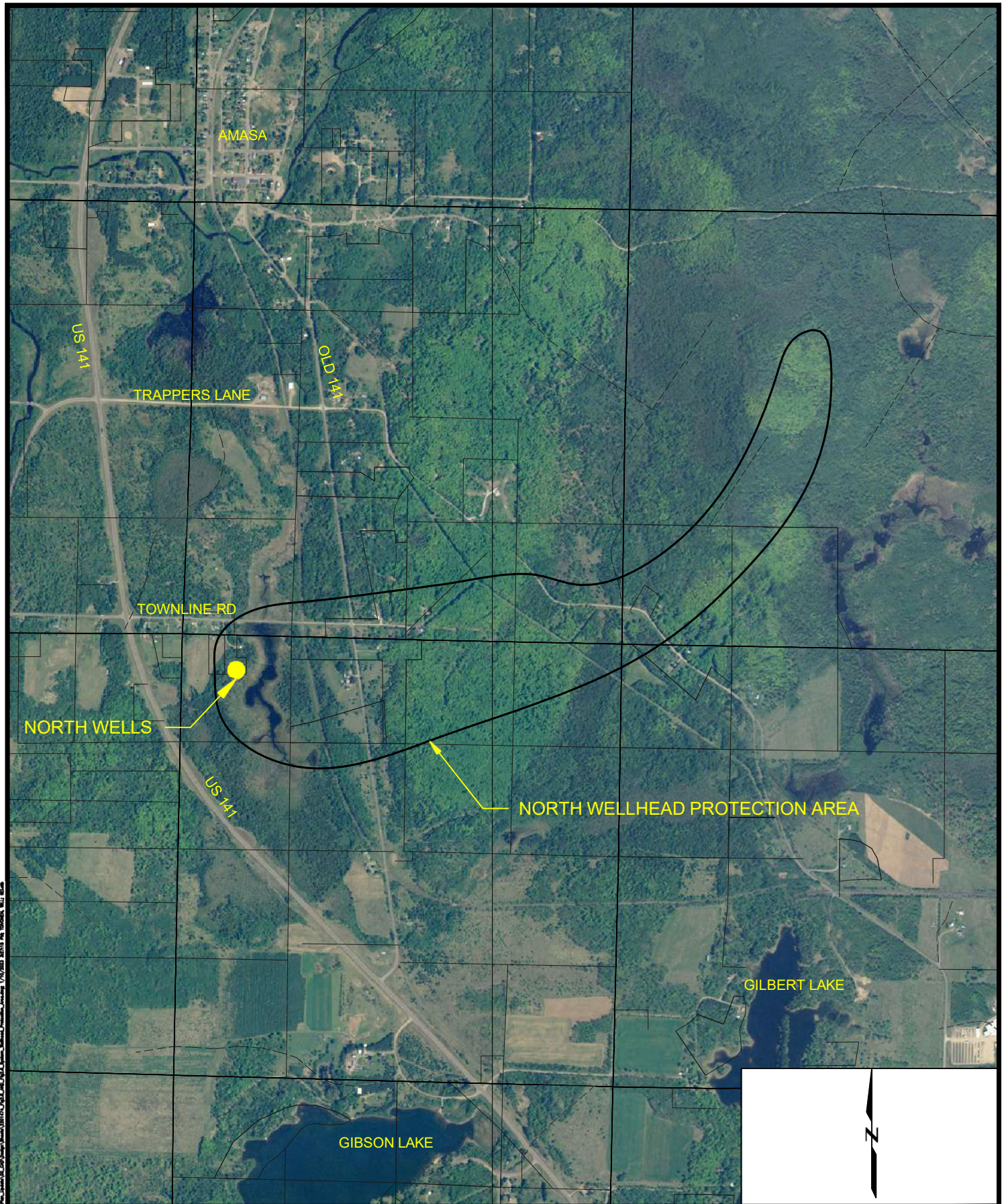
Aquatic invasive species has become a major concern across the State affecting many of the States waterbodies. The Township recognizes the value in the numerous waterbodies within the Township and the value they bring economically and recreationally. Some of the common aquatic invasive species in the area include Zebra Mussels, Eurasian Watermilfoil, European Frog-Bit, Spiny Water Flea, Columbian Watermeal, Banded Mystery Snail, and Starry Stonewort. In order to assist with the prevention and removal of these invasive species the Township has implemented a policy for management of invasive species in which the Township will participate financially with local lake or homeowners' associations in the management of invasive species. Additionally, the Township supports efforts from the organizations that operate local boat launches to install boat washing facilities and information at the sites informing boaters of the presence of invasive species and the best practices for preventing their spread.



Crystal Falls Township recognized the importance of protecting its drinking water supply several years ago while in the process of a large water system improvements project. This water system improvements project increased the reliability of the water system by eliminating large portions of leaking and deteriorated watermain, adding additional production wells to increase mechanical reliability, and upgrading outdated pumps and storage tanks. While this project greatly enhanced the Township's Water System it also demonstrated the vulnerability of the Township's aquifers. The shallow depth of the Township's aquifers created some concern over the potential of the groundwater becoming contaminated. This concern was increased due to the fact that the Township was now supplying water to the City of Crystal Falls and Hematite Township. As a part of the above-mentioned project, the Township entered into an agreement with the City to provide them with water. Crystal Falls Township has been supplying Hematite Township with water since the late 1990's.

The overall goal of the Township's Wellhead Protection plan was to identify the Wellhead Protection Area. This area is the area in which groundwater is located that will provide drinking water to the Township over a 10-year period. Figures 2.5 and 2.6 on the following pages identify these areas for both the Lind and North Systems. Once this area was identified, the Township proactively began the work to educate the public on the importance of protecting groundwater resources and developing procedures that would help the Township identify potential sources of contamination and evaluate future potential sources of contamination before it becomes an issue. As part of this program, the Township developed a Wellhead Protection Area Ordinance that was put in place to help regulate development in these areas with the goal of protecting the Township's groundwater resources.







AIR QUALITY

There are no significant air emissions emanating from major sources in Crystal Falls Township or even from the general surrounding area. The nearest air monitor station is at Seney, east of the Township in the middle of the Upper Peninsula. Monitoring at that site indicates good air quality. All of Michigan is considered non-attainment for ozone but any ozone in the Upper Peninsula probably originates out-of-state. Localized air quality problems sometimes do exist, particularly in the winter, because of the growing use of wood-burning furnaces.

PLANTS AND ANIMALS

This summary of plants and animals in Crystal Falls Township is limited to significant types of plants and animals as well as the Threatened and Endangered Species listed by the MDNR and selected species listed by the State of Michigan. Smaller biota such as algal clumps, many plants, insects, reptiles and others are not included among the common species even though they may be prevalent. The intent is not to be comprehensive in plants and animals but rather demonstrate the varieties.

Botanical Species

Over 90 percent of the total land area in Iron County consists of second growth forest on cut over lands. Northern hardwoods dominate the Township. The Township consists of generally rural areas with some smaller developed areas outside the main developed areas of the Township centered around the Highway US-2 and US-141 intersection. This leads to the Township being made up of mostly forested areas that are full of various plants and trees species. Before European presence, the forests that blanketed the Crystal Falls Township area were predominantly coniferous trees of fir, spruce, pine, and cedar. Regrowth has been primarily deciduous trees such as aspen and northern hardwoods, although there are some areas of coniferous forests and individual coniferous trees.

The area has seen significant logging operations over the years. Typically, commercially owned forests are managed to utilize the fast growth and character of aspen trees for producing paper. Select cut operations in pine and hardwood stands promote regrowth of the existing species and are also very common. In some instances, tree planting operations are used to generate certain types of forest or forested areas. Tree regrowth and logging is a form of agriculture, but it also creates a habitat for a variety of animal life during its regrowth. Most of the residential area is built up, sparsely vegetated, and covered with various grass species.



Table 2.4 – Habitats from Botanical Species

<u>Grain & Seed Crops</u>		<u>Grasses & Legumes</u>	<u>Wild Herbaceous Plants</u>
Buckwheat		Orchard Grass	Bunchberry Dogwood
Corn		Timothy	Goldenrod
Wheat, Oats, and Rye		Brome Grass	Wild Cicely
Sorghum		Clover	Lambs Quarters
Millet		Alfalfa	Dandelion
Canola			
<u>Hardwood Trees & Woody Understory</u>	<u>Coniferous Plants</u>	<u>Wetland Plants No Submerged/Floating</u>	<u>Shallow Water Area (Less than 5 feet deep)</u>
Oak	Pine	Swamp Milkweed	Marshes
Aspen	Spruce	Spotted Joeypyeweed	Waterfowl Feeding Areas
Cherry	Fir	Wild Rice	Ponds
Maple	Cedar	Marsh Marigold	
Apple	Juniper	Rushes	
Birch	Hemlock	Sedges	
Dogwood	Balsam	Reeds	
Raspberry			
Blackberry			
Blueberry			
<u>Fruit Producing</u>			
Russian-Olive			
Autumn-Olive			
Crabapple			
Source: Soil Survey of Iron County, Michigan, US Department of Agriculture, 1993 Great Lakes Nature Guide, Michigan United Conservation Clubs, 1990			

Diversity of plant life in Crystal Falls Township, though, is limited by the shorter growing season and the winter cold and snow. These same conditions result in a smaller amount of understory growth in the forests. Table 2.4 identified the general types of plant environments and plants existing in Iron County and various parts of the Township. This table shows only selected plant life and does not include the numerous small plants and very common species. It also includes a limited selection of the aquatic plants.

Invasive plant species have become more common and bigger concern across the State. Invasive species are a concern as they are typically aggressive and outcompete native species for resources which can dramatically change the local ecosystem. Common invasive plant species include Japanese Barberry, Japanese Knotweed, Common and Glossy Buckthorn, Garlic Mustard, Wild Parsnip, Reed Canary Grass, Spotted Knapweed, Phragmites, Purple Loosestrife, Exotic Honeysuckle, and Water Hemlock. Controlling the introduction of new invasive species and the spread of existing species can be accomplished



by educational efforts and providing restrictions or regulations on moving materials that these species may be located in. The Iron/Baraga Conservation District can provide services to landowners to help control and maintain the spread of invasive plants as well as individual lake associations within Iron County.



Zoological Species

The remoteness of northern parts of Crystal Falls Township allowed larger animals to prosper in most areas. Even after European settlement, these animals included black bear, moose, whitetail deer, and timber



wolf throughout Iron County. Since the European settlements the habitats are more diverse and some of these species are not as common in the area because they tend to be reclusive and avoid noisy, busy human habitation. The smaller mammals are more likely to be near or in the developed portions of the Township. Nocturnal animals probably have a range that comes closer to developed areas at night. Animals are categorized according to the type of habitat where they are most likely to be found. Obviously, the woodland wildlife tends to be predominating in Crystal Falls Township although there are significant areas of wetland wildlife as well. The Iron/Baraga Conservation District provide services to help control and maintain the spread of invasive species through grant monies funded to complete these tasks.



The only exceptions are fish because they are found in lakes or rivers throughout the Township regardless of the surrounding vegetation. The major impediments to fish are the waterfalls and dams that prevent or limit upstream migration.

Invasive animal species are also becoming a larger concern in the area. These invasive species can dominate ecosystems and outcompete native species for resources and habitat. Typically, these invasive species also have few or no predators to help control their populations. Common invasive species identified to being located within the Township neighboring areas include Mountain Pine Beetle, Jumping Worm, Spotted Lanternfly, Emerald Ash Borer, Nutria, and Hammerhead Worms. Controlling the introduction of new invasive species and the spread of existing species can be accomplished by educational efforts and providing restrictions or regulations on moving materials that these species may be located in.



Table 2.5 – Partial List of Wildlife in Iron County

Open Land Wildlife (Cropland, Pasture, Meadows)	Woodland Wildlife (Deciduous, Coniferous, & Related)	Wetland Wildlife (Open Water, Marshy, Swamps)
MAMMALS		
Cottontail Rabbit	Whitetail Deer	Muskrat
Snowshoe Hare	Black Bear	Mink
Red Fox	Bobcat	Beaver
	Raccoon	Otter
	Porcupine	
	Skunk	
	Gray Wolf	
	Squirrels	
BIRDS		
Sharp-Tailed Grouse	Bald Eagle	Duck
Kestrel	Osprey	Goose
Meadowlark	Wild Turkey	Heron
Field Sparrow	Ruffed Grouse	Shore Bird
	Woodcock	Loon
	Woodpecker	
	Thrush	
	Various Songbirds	
		OPEN-WATER FISH
		Perch
		Bluegill
		Sunfish
		Small-Mouth Bass
		Large-Mouth Bass
		Northern Pike
		Muskellunge
		Walleye
Source: Soil Survey of Iron County, Michigan, US Department of Agriculture, 1993 Atlas of Michigan, Ed. Lawrence M. Sommers, Michigan State University Press, 1977		

The best way to protect the existing species is to minimize environmental and natural resource change in the rural areas of the Township. In addition, where possible, some mitigation in water quality, particularly along the Paint River is appropriate. Fish ladders are also a tool to lengthen fish migration upstream. Primary protection measures should be implemented in the isolated northern areas.



THREATENED AND ENDANGERED SPECIES

Although the Township has bountiful vegetation and diversified large animals, as of 2017, it has three Threatened and Endangered Species listed by the U.S. Fish and Wildlife Service. The status of these and other animals may change over the life of this plan. The three (3) species identified are:

- **Canadian Lynx** – The Canadian Lynx is protected under the Endangered Species Act as a threatened species. It can likely be found in the transition zones between boreal coniferous forests and deciduous forests and Iron County has been identified as being one of the most likely areas in the State of Michigan in which lynx can be found.
- **Gray Wolf** – The Gray Wolf is listed as “Endangered species” and is found in the Upper Peninsula habitat of northern forest areas. Its status as endangered has changed multiple times over the past several years and it is a highly controversial topic amongst area residents. These wolves can be found throughout the Township.
- **Northern Long-Eared Bat** – The Northern Long-Eared Bat is listed as a threatened species. These bats typically hibernate in caves and mines, swarming in surrounding wooded areas in autumn. They roost and forage in upland forests during spring and summer.



In addition, there are other plants and animals listed by the U.S. Fish and Wildlife Service as Threatened, Endangered or of Special Concern throughout other counties in the State. From a planning perspective, all of the plant and animal species are best protected by maintaining the isolation of wooded areas, lakes and rivers in Crystal Falls Township. In addition, these species tend to be shy of human habitats and sprawl should be discouraged. This maintenance of natural habitats is partly accomplished by the regulations of Commercial Forest Land District of the current Township Zoning Ordinance.



CHAPTER III

VISION, GOALS & OBJECTIVES

TOWNSHIP DEVELOPMENT VALUES

As part of the planning process for the development of the initial Master Plan developed in 2003, Crystal Falls Township conducted a survey of seasonal and year-round residents. The survey questions were derived by examining other survey instruments in various communities. After the survey, the results for year-round and seasonal residents were collated and the information provided as part of the survey was used in the development of this plan.

Although the original survey that was used to formulate the vision, goals and detailed objectives of the original Master Plan developed in 2003, the goals and objectives of the Township have remained essentially the same. A review of the Master Plan in 2009 including meetings and the request of public comments resulted in an updated version being published in 2010 with very few changes. The Township also completed a Recreation Survey in 2015 asking for input on recreational opportunities in the Township. The results of this survey indicated that there were some new or expanded opportunities wanted, but the overall feeling was that residents were happy with the available recreational opportunities. As part of the normal updating process, the Township reviewed the existing Master Plan in 2016 and completed some small updates and changes based on progress made from the previous version of the Master Plan and based on new or revised goals and objectives. The updated plan was approved in January 2017.

VISION

The Township specifically asked for the five- and ten-year vision that both seasonal and year-round residents held for the Township. In general, the vision was very similar with the importance being only a slightly stronger desire of seasonal residents for more shopping, jobs, and development. The survey showed that general growth was favored over the next ten years by 50.5% of the surveyed residents. Economic growth, however, was favored by 60% of the residents over ten years. Although less significant as a vision, about 20% of the respondents specifically wanted to maintain wilderness environment. The participation leads to a consolidated vision statement as follows:

Over the next five to ten years, Crystal Falls Township should enjoy moderate growth in commercial and industrial development on US-2 and US-141 near the City of Crystal Falls. The added jobs that would be developed from this growth should be supplemented by controlled growth of resorts and tourist activities. Residential development should primarily include expansion of existing residential areas. With limited growth, the Township needs to protect the wilderness tranquility and attractive environment of lakes, rivers, hills, and forests. Short-term rental housing has become a popular trend across the country. These types of rentals are typically used most by people on vacation and rental lengths vary from a few nights to several weeks. Online booking sites allow taking or making reservations easy to do. Many short-term rental properties are managed by individuals who are then responsible for maintenance and upkeep. This can make regulating these types of properties difficult for the Township and the Township must develop a



set of regulations and develop a way to oversee and enforce these regulations.

This vision was further broken down into separate goals and, where appropriate, to detailed objectives based on the input of year-round and seasonal residents. The citizen survey was again used as the principal element in developing Goals and Objectives, with modification and expansion by the Township Planning Commission. The public meetings of the planning commission also provided for citizen input. The terms “Goals” and “Objectives” are defined in the box below. The Goals and Objectives developed from the citizen survey, meetings, and perspectives of the Planning Commission are shown below.

LAND USE GOALS

Goal – A goal is a destination, a final purpose which a community seeks to attain. A goal should be a broad general statement.

Objective – An objective is a means to accomplish the Goal. It may be very specific or detail a future action that should be undertaken.

The Goals and Objectives discussed here focus only on long-range development of land in Crystal Falls Township. These Goals and Objectives are not intended to deal with operating aspects of routine Township responsibilities. The Goals are general perspectives that lead to more detailed community desires for land development as expressed by the Objectives.

Land Development Limitations

The large land area and smaller area of development in the Township provides some unique constraints on long-range development of the land. The limits for development focus on the extensive natural features of the area and the historical development of the Township.

To preserve these unique conditions, over 80% of year-round and seasonal residents felt the most positive attributes of Crystal Falls Township were the solitude, lakes, rivers, and forests that surround the Northwood’s atmosphere of the Township.



Residential Development

While development is not encouraged by half of the residents, approximately 80% of both seasonal and year-round residents favored growth of seasonal cottages and single-family residences in the existing developed area of the Township. The year-round residents slightly favored single family homes while seasonal residents favored seasonal homes by a small margin.

Apartments, condominiums and subdivisions were favored by a strong majority of residents. Over 75% of both seasonal and year-round residents favored those developments. Senior citizen assisted living apartments were the most favored non-single-family housing at 86%.

Although not directly addressed by the survey, most intensive development such as apartments and condominiums would require sanitary sewer service.

GOAL:	Residential development should be modestly encouraged in Crystal Falls Township.
OBJECTIVE:	Lakes, rivers and streams with good access should be looked at as a resource where appropriate and developed primarily for residential and seasonal homes.
OBJECTIVE:	Multiple-family and higher density condominium housing should be permitted only in areas where sanitary sewer service is available.
OBJECTIVE:	Future housing development should emphasize single family housing, senior citizen housing and assisted living units.
GOAL:	Encourage solar energy development in Residential development.
OBJECTIVE:	Diversify energy types and use within the Township.

The responding residents and the planning commission felt the residential development should be discouraged in the far northern portion of the Township where roads become seasonal and there are limited public utilities available. These areas are typically the areas of the Township that are zoned Commercial Forest.





Commercial and Industrial Development

Year-round and seasonal residents of the Township both want the jobs of commercial and industrial development equally, but rank it lower than residential development. Heavy industry is wanted by less than half of the residents. About 75% of the residents favored some growth, and 75% of respondents favored commercial growth along highways US-2, US-141, and M-69.

COMMERCIAL & INDUSTRIAL DEVELOPMENT GOALS

- GOAL:** Commercial development should be encouraged in the US-2, US-141, and M-69 corridors.
- GOAL:** The Township has developed an industrial park and thereby confines new industrial growth to the park and encourages existing industry to locate to that site.
- GOAL:** Expand tax base and create additional income to landowners through solar/energy systems.

As a result of years of work, an 80-acre parcel adjacent to the existing Industrial Park (S15 T44N R33W) was purchased by the Township for the development of the Cross Cut Spur Industrial Park for light industrial development within the Township. The parcel borders a railroad line; has access to Township water and three-phase power. A planning study on the industrial park identified that the existing water supply is somewhat limited especially in regard to fire protection due to the size of the underground tank and waterline feeding the tank. The study identified a number of upgrades to the system which were completed as part of a larger water system improvements project in 2018. The Township would like to encourage and promote industrial and commercial growth on this area.

Parks & Recreation Goals

The Township owns and operates Gibson Lake Park located on Gibson Lake and Donahue Park located on Fortune Lake.

The Objectives focus on strong resident support (about 60%) for a Township park with the Planning Commission's corresponding interest.

The planners also recognized parks and recreation as part of the attraction for tourism and seasonal activities. The Planning Commission anticipates such facilities would be self-supporting once established.

PARKS & RECREATION GOALS

- GOAL:** The Township should discuss and assess possible Township involvement in developing parks and multiple-use trails for tourism and local residents.
- GOAL:** Strengthen the base of parks and recreation for the community, tourism, and seasonal activities.
- OBJECTIVE:** Encourage programs with the MDNR for restocking of fish to the lakes, rivers and streams of the Township and help reduce pollutants.

Quality of Life

The quality-of-life Goals are shown on the following page. The four highest rankings by both year-round and seasonal residents for quality of life had to do with protecting the natural features of the Township.



More than 75% of the people generally favored preserving those natural features. Accordingly, a Goal strongly reflects that quality-of-life value.

In addition, the Planning Commission picked up on survey comments favoring intergovernmental cooperation and current issues to formulate another Goal. Most of the intergovernmental cooperation is anticipated to be with the City of Crystal Falls.

The Planning Commission also felt one of their Goals should be keeping the residents informed about planning issues. To meet that Goal, updated information has been included on the Township's website as a way to inform residents and solicit concerns and comments regarding planning issues.

QUALITY OF LIFE GOALS	
GOAL:	Development should maintain the intrinsic values imparted by abundant lakes, rivers, forest and abundant north woods atmosphere to strengthen the quietness, solitude, sound environmental concerns and sufficient recreational opportunities.
GOAL:	Encourage cooperation and coordination with intergovernmental activities to provide mutual community services such as sanitary sewers, electrical distribution services, fire department and ambulance service.

Roadway Goals

Transportation is a relatively minor issue in Crystal Falls Township and was not a specific part of the survey. There were, however, a number of resident comments added to the form regarding roads. Thus, the Township Planning Commission developed a specific Goal and Objectives dealing with the road network.

The Township coordinates with the Iron County Road Commission regarding the publically-owned and operated road network. Consistent with the residential Goals and Objectives, the road commission does not anticipate expanding any roads further north or east of Deer Lake Road.

Generally, there were no other transportation issues that affected long-range development of Crystal Falls Township. The Township has implemented an annual road dust control program in which calcium chloride is spread on gravel roads throughout the Township to keep dust to a minimum.

ROADWAY GOALS	
GOAL:	Future roadway improvements need to be based on improving the existing road system, protecting road investments and judiciously exploring new road corridors to serve proposed development projects.
OBJECTIVE:	Work with the Michigan Department of Transportation and the Iron County Road Commission to assist with improvements to turning lanes, road capacity and traffic signals in planned areas for higher volume traffic related to more intensive residential development and commercial growth.
OBJECTIVE:	Examine policies for unpaved roads and improvements and for roads to be developed as part of planned economic growth.



A secondary benefit of this program is that the calcium chloride when applied regularly helps keep gravel roads in better condition and reduces annual maintenance costs. An objective of this is to attempt to preserve and enhance the condition of the existing gravel roads in the Township in order to reduce maintenance and reconstruction costs going forward.



Regulatory Issues

None at this time (2023).



CHAPTER IV

MASTER PLAN

Understanding the history, demographics, natural resources and development of Crystal Falls Township and integrating with the vision, goal and objectives equips the Planning Commission to produce an effective Master Plan. In addition, though, the Planning Commission has to be prepared to lead beyond this background and move in a direction that residents may have not contemplated. The result is a Plan that has a good technical background, resident direction and flexibility combined with the ingenuity and creativity of Planning Commissioners and other community leaders.

PLAN CONCEPT

The vision of the community, the location of Crystal Falls Township and the Planning Commission's view of planning elements broadly sets the concept for the Master Plan. The result in the Township is recognition of the inter-relationships and mutual dependency with the City of Crystal Falls. Even if the policy differs, those facts remain essential. In addition, Crystal Falls Township inevitably leads many of the future development plans for the area. This is partly true because the available land for new development, particularly larger scale development, exists primarily in the Township.



Another favorable aspect is the location of Crystal Falls Township at the intersection of north-south US-141 and east-west US-2. Additionally, Highway M-69 joins US-2 just outside the Township in the City of Crystal Falls. Being located near these junctions provides access to the heart of the Township from three major roadways and routes a large amount of traffic through the area. Capitalizing on this location can allow more commercial and quasi-public development near that intersection such as the current commercial use of the MDNR and MDOT facilities and the Iron County Medical Care Facility.

Finally, the advantages of the largely unspoiled pattern of animal and plant life, woods, water, waterfalls, and hills are recognized as a positive element to focus tourism and nature appreciation. That means strong protection needs to be ensured for those natural features as well as increased access to selected examples of those features.

Accordingly, the general concept for the Township involves the following elements:

- Focusing more intensive development on Highway M-69 and US-2 west of the US-141 intersection and limited extensions to the west. This includes new retail centers, some state and regional governmental and quasi-public facilities such as a commuter-oriented higher-education, multiple family housing and related facilities.
- The existing retail area west of US-141 on US-2 can be extended to the Iron County Medical Care



Facility after leapfrogging several state-owned properties. By establishing limited development to location, most of the corridor of US-2 between Iron River and Crystal Falls can maintain its natural aesthetic appearance. This also limits the number of traffic conflicts that could otherwise develop on US-2.

- Continued development of the Township's Cross Cut Spur Industrial Park at Industrial Park Road near Gilbert Lake and old US-141.
- Improving access to some of the especially interesting and aesthetic features of the area landscape such as waterfalls, unique forest, hill vistas, and selected lakes and rivers.
- Maintaining and further strengthening of the natural features in the vast wilderness and woodlands area of the Township. These areas are to be protected from intensive development and designed to keep the north woods appeal strong and permanent.
- Consideration of a manmade landmark to identify the Township. This could be an aesthetic tower, statue, or similar highly visible and attractive feature. The Township Hall located at US-141 and US-2 may be a good location. Such a feature can be part of Township identity and promotion as well as giving residents a greater sense of community.

These concepts are designed to provide for future growth in specific and limited locations in Crystal Falls Township while still preserving the Northwood's and environmental features that are assets to the community. It is intended to meet year-round and seasonal residents' desire for protecting certain elements from growth and yet allow growth to occur where it is appropriate and reasonable. Because of past growth patterns, it is not expected that rapid growth will outstrip existing infrastructure and public facilities. Most of the existing facilities will not be affected by the modest, steady, and well-planned growth anticipated.

MASTER PLAN DETAILS

Rural Environment and Natural Feature Policies

The Master Plan for Crystal Falls Township is intended to preserve the rural environment of the Township. A goal to limit development includes an objective to preserve the wilderness areas, which should be done by controlling the location and the pace of development. A Quality-of-Life Goal also makes it a high priority to maintain the important northern, rural atmosphere. The major aspects of the rural character needing preservation include the following:

- Keeping more intensive development principally in areas next to the City of Crystal Falls where sanitary sewers are or can be made available. Specifically, commercial development should be focused west of the City along US-2 past US-141 out to the existing Iron County Medical Care Facility and industrial development at the Cross Cut Spur Industrial Park.



- Emphasize seasonal and year-round residential development in areas of the Township served by public utilities.
- Maintain trees and forests as much as practical in all development to help maintain the idyllic north woodlands atmosphere as well as keep a healthy logging environment.
- Preserve the wetlands of the Township for preservation of biota and habitat as well as keeping the northern atmosphere. The State of Michigan has jurisdiction of most wetlands.
- Large lot development in rural areas to avoid noise, traffic, light and activity of intensive activity.
- Protection of environmental conditions is possible in the planning process and related zoning. By limiting development and therefore preserving the natural habitat of plants and animals, the existing varieties are more likely to be robust. This action particularly helps Threatened or Endangered Species.

LONG-RANGE LAND USE DEVELOPMENT POLICIES

The land use policies have a significant impact on the location, scale, pace, and character of future development in the Community. Thus, it is a key development of any long-range community plan. In most cases, as in Crystal Falls Township, the principal policy is the future land use plan.

Limits for Development

The Township's development of the Wellhead Protection Area Ordinance provides some minor limits for development within the Township. The ordinance provides protection and some limitations for future development in these areas in order to protect the groundwater in these areas. This was deemed necessary to protect the valuable groundwater resources in these areas. Non-permitted uses in these areas generally consists of activities that provide a higher than average risk of creating groundwater contamination.

Development in the remote areas of the Township is limited in cases where existing utilities and year-round access are limited or do not exist and emergency vehicle access is made difficult by the road width, condition, and maintenance.

Residential Development

Intensive: New housing development for multi-family and high-density condominiums is limited by the multi-family Residential Objective in the previous Chapter. Specifically, intensive uses such as senior citizen apartments, assisted living facility or intensive condominiums and apartments are specifically planned for sanitary service areas close to the City of Crystal Falls or the Iron County Medical Care Facility. This more intensive residential development is not expected to encompass a great deal of space because of community lifestyles and the relatively low market demand.



Single Family/Low Density: Single family/low density development should be located in areas served by the public sewer collection system. Where such sewer is available, smaller lots can be used. But most development will probably be rural sites in wooded areas, along rivers and streams or on lakes. Essentially, the same pattern needs to be required for seasonal homes as well as year-round homes and larger sites are required to accommodate on-site sanitary treatment systems.

Manufactured and/or Mobile Housing: Manufactured or mobile home park development is appropriate in Crystal Falls Township as long as it is done in accordance with current zoning ordinances.

The inclusion of solar energy systems in all residential development is encouraged. The continued advancement of electric-based vehicles and devices will continue to increase the electrical demand on existing systems. Private solar energy system will help to offset this increased demand.

Commercial Development

The goal for commercial development specifically encourages retail and service development from the City of Crystal Falls to US-141 and northerly on US-141 for approximately ¼ mile and east of the City along M-69. In addition, some land use extensions and strategic nodes of retail and/or service uses are planned for the area west of the US-2/US-141 intersection where existing development currently exists. The Township would also like to encourage the development of solar energy in all future commercial development.

Industrial Development

The goal for industrial development is to develop the Township's Cross-Cut Spur Industrial Park and limit future industrial development to this area. The Cross-Cut Spur Industrial Park site is Township-owned property located in the northern portion of the Township just east of US Highway 141 in Township 44N, Range 33W, and Section 15.

There are approximately 90 acres of vacant land that are currently available for development at the site. The Township is currently marketing the site to potential developers and highlighting the advantages of a locating a business on the site, as well as what the Township can offer potential developers. Some potential types of development that the Township is seeking for the Industrial Park include:

- Light Industry
- Manufacturing
- Sawmills or wood related activities
- Service-related business
- And most other commercial development dependent upon review and approval of the Township

A study of the site was completed in 2011 that highlights the major assets and deficiencies of the site. A major selling point is that the development of the site can be tailored to potential developer's needs as the currently vacant land offers a wide range of development opportunities and can fill the needs of most any businesses. In order to maintain the most flexibility with site development, it was recommended that the Township hold off on any major site development activities until any business identifies their specific needs.



The development of solar energy systems is also encouraged in the industrial sector.

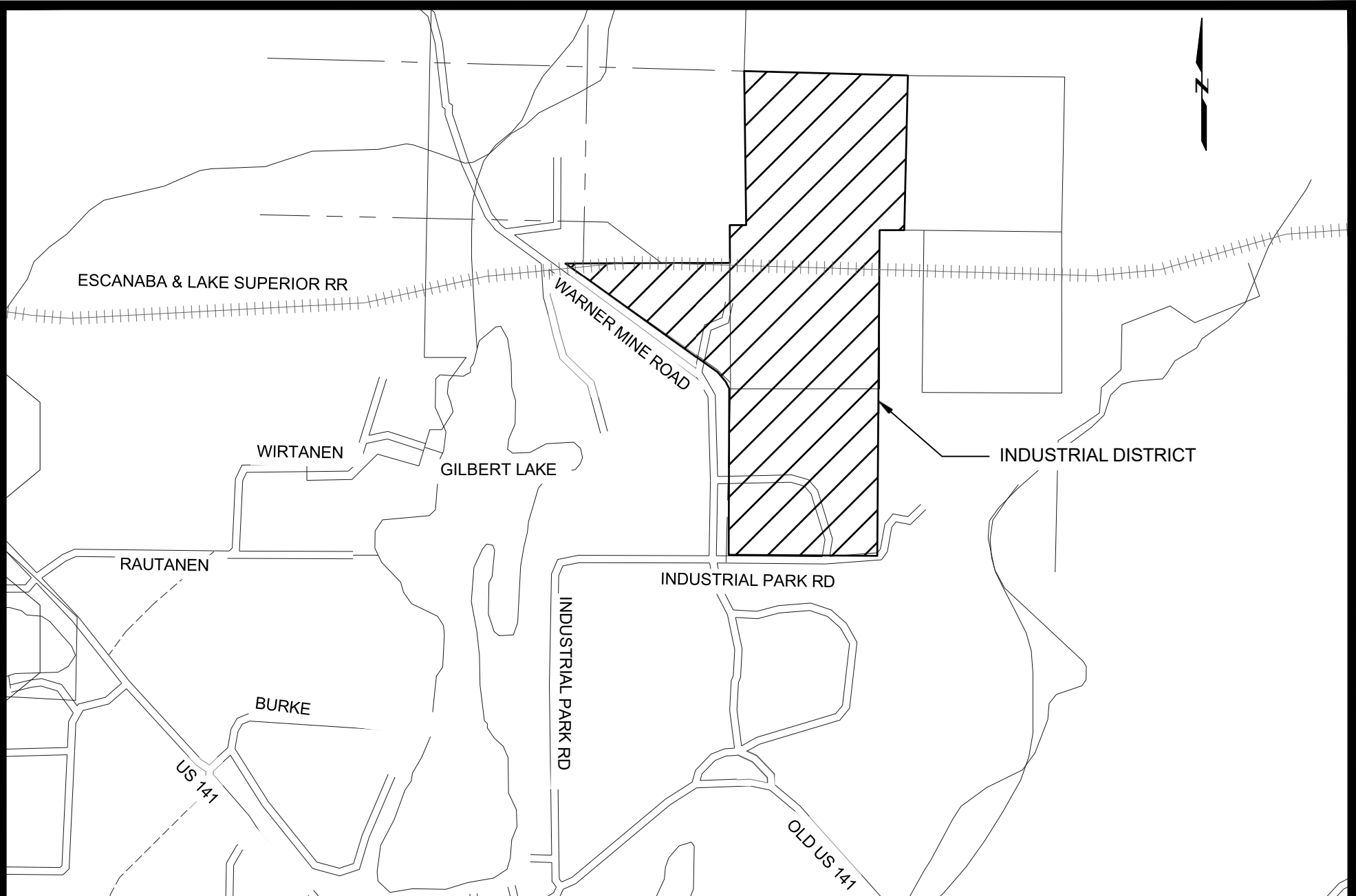
Short-Term Rentals

The popularity of short-term rentals is increasing nationwide and is expected to increase locally as well. This type of development is appropriate in Crystal Falls Township as long as it is done in accordance with current zoning ordinances.

Mining & Exploration

Modern and safe methods must be employed and mine reclamation, including addressing abandoned facilities.

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CRYSTAL FALLS TOWNSHIP
MASTER PLAN
JANUARY 2023

FIGURE 4.1
CROSS CUT SPUR
INDUSTRIAL PARK



Parks and Recreation Activities

Parks and recreation development is shown on the Master Plan map only conceptually and is subject to the Township Board of Trustees finding appropriate land and having Township or other resources to develop such land. The goal is to provide a base for community facilities, tourist attractions and seasonal activities in both parks and multiple use trails. It is possible this could include developing the Township's only waterfall as an attractive tourist site, utilizing or promoting state multiple use trails for hiking, horseback riding, cross-country skiing, snowshoeing or other possible uses. A lake parks site is also desirable along with programs with the state to restock fish and reduce pollutants.



In order to identify recreational needs within the Township, the Township development a 5-Year Recreation Plan. The development of this plan included gathering public input on what recreation opportunities are most used and needed. Public information was obtained through various public meetings and by an online survey. The Township's Recreation Plan identifies a number of recreational goals and projects that the Township would like to complete in the future including the list below:

- **Heritage Non-Motorized Trail Expansion**
 - The Township would like to extend and expand its network of non-motorized trails within the Township. There are multiple opportunities for expansion that would be completed during separate phases as described below:
 - The next phase of the trail extension would involve the construction of a non-motorized trail from Bewabic State Park to Pentoga Park located on Chicagon Lake. This trail extension may require the acquisition of some property to make it feasible and would be located along Pentoga Trail.
 - The Township would also like to provide a trail head on the existing non-motorized trail system. The addition of a parking area and other potential amenities on the trail would continue to enhance the Township's trail system. The trial head may also consist of a restroom and picnic area.
- **Donahue Park – Fortune Lake Site Improvements**
 - The Township would like to make site improvements to Donahue Park located on Fortune Lake that include the addition of a parking area, picnic tables, grills, benches, and other access improvements to enhance the usefulness of this area and provide additional access to the lake and surrounding natural resources.



- The addition of a fishing pier on the property south of US-2 connected to Donahue Park. The fishing pier would provide fishing access to Fortune Lake.

- **Nature Trail**

- Crystal Falls Township currently owns approximately 80 acres along Paint River Road just west of the Paint River. The property is currently undeveloped, wooded land with access provided by Paint River Road. The Township would like to develop a series of nature trails that would be utilized for hiking during the spring, summer, and fall and snowshoeing and cross-country skiing during the winter. Improvements to the property would include the development of a parking area and trail head along with a series of looped trails for differing abilities. The proposed trails would wind through the existing wooded property and provide a natural resource-based recreation opportunity for all four seasons. Informational signage would also be proposed to be added that would identify common species of plants and animals.

- **Gibson Lake Park**

- General park improvements such as campsite improvements, installation of electrical services to the existing site, boat launch improvements, the addition of accessible walkways throughout the park, playground surface replacement, and other general site improvements.
- The addition of a non-motorized trail system connecting the Heritage Trail near the intersection of Highways US-2 and US-141 to Gibson Lake Park. The proposed trail would be routed along US-141 approximately 9 miles to Gibson Lake Park. Similar to the Heritage Trail, this trail would provide another option for those seeking opportunities to walk, run, or bike on a safe, non-motorized designated trail.



- **Crystella Ski Hill Improvements**

- Although Crystella Ski Hill is located in the City of Crystal Falls and is operated by the non-profit Crystella Recreation Association, the Township has been an active partner in its operation providing some funding for paid employees. As one of two active ski hills in Iron County and the only one on the east side, many Township residents utilize the hill for sledding, skiing, snowboarding, ice skating and other activities. Proposed improvements to the Ski Hill include remodeling the existing site and facilities to meet ADA accessibility requirements as well as continuing improvements to the existing structures for energy



efficiency and site improvements to improve drainage, parking, and general access. Plans also include expanding the onsite cross country ski trails and mountain bike trails, adding a covered shelter over the existing ice-skating area, add infrastructure to allow for the addition of snow making equipment, and acquiring grooming equipment for the hill. Connecting the onsite hiking and biking trails to the other non-motorized trails such as the Non-Motorized Heritage Trail has also been discussed. It is likely that improvements to the ski hill will be accomplished during multiple phases as funds and the opportunity for donated material and services come available.

- **Other Recreational Based Action Items**

- Addition of a Dog Park.
- Enhancements and additions to the areas snowmobile and off-road vehicle (ORV) trail systems.

Bewabic State Park located on the northern shore of First Fortune Lake near Highway US-2 was recently one of the first State Parks to become an ORV Friendly Park. The Park now allows for ORV travel in the Park to allow campers the option of accessing the numerous miles of ORV trails that are located in the Township. Access to the trail system from the Park utilizes Kaski Road.

TRANSPORTATION LONG-RANGE PLANS

Transportation in Crystal Falls Township will continue to be automobiles and trucks on the road network. Accordingly, most plans are for limited improvements to that system.

State and Federal Highways

Minimal new development is expected on state and federal highways administered by the Michigan Department of Transportation. State route M-69 is anticipated to be adequate in the Township as relatively little additional development is expected in this eastern area. M-69 is an important corridor in Crystal Falls Township because it provides access to a large forest-related employer east of the Township in Sagola and south on M-95.

As US-2 is developed for commercial and industrial activities west of the City of Crystal Falls to just beyond US-141, it should be monitored for possible expansion. An improved intersection at US-141 junction is important on a short-term basis and an eventual five-lane roadway west of there is a long-range expectation as the area develops.

US-141 should be considered for eventual turning lanes and intersection improvements at US-2, Old US-141 and Industrial Park Roads.



County Roads

While Crystal Falls Township owns no roads, they contribute a substantial amount of money to the Iron County Road Commission to help maintain and upgrade roads in the Township. Roads needing repair in the Township are placed on a priority list that is updated annually; major factors in list placement are safety, road conditions, and traffic. The Township has been responsible for upgrading and replacing street signs throughout the Township.

The only year-round county primary roads are Old US-141 and Industrial Park Road near Gilbert Lake. These roads serve the Township's Cross-Cut Spur Industrial Park. They should be monitored with the State for possible peak hour intersection improvements on new US-141.

There are other seasonal county primary roads in the Township. These additional major roads are all paved and most have pavement markings. They are shown on the transportation and utilities map.

The Township should consider linking existing roads to make a road parallel to Highway US-2 as commercial or intensive residential development proceeds from the City to US-141 and west past the Township Hall. This would provide local access away from US-2/141 and traffic relief for US-2/141. Connecting West Harrison Avenue to Zavada Drive near the City of Crystal Falls' Industrial Park would be one example of this. These roads could be built or improved as part of the Township's Road Improvement work or could be built by developers as the area develops.

Railroad Improvements

The Township has investigated the possibility of adding a rail spur off of the E&LS rail line that runs through the Township's Cross-Cut Spur Industrial Park. The Township has been pursuing development at the Industrial Park and a rail spur would provide additional benefits to potential developers. Grants through the Michigan Department of Transportation (MDOT) Freight Economic Development Program or the MDOT Michigan Rail Loan Assistance Program could provide financial assistance to the Township in completing this project.





ECONOMIC DEVELOPMENT STRATEGIES

Economic development, and specifically additional employment, is desired by most residents as expressed in the Goals and Objectives. That employment should be concentrated in the previously discussed areas. This will allow preservation of the woodland-water-hill environment in other areas of the Township.

Targeted areas of development are best concentrated in these areas:

- Industrial development is expected to focus on maintenance and expansion of existing facilities that are in outmoded or in cramped facilities or industries needing a new site. As part of the industrial parks, a package of financial incentives should be available through tax advantages offered by the state and regional job training programs. As well as assisting local business growth, this could help attract new, moderate-sized businesses to the area.
- High-tech, computer-oriented businesses represent another small, but important, long-term prospect. By use of expected expansion of computer capability through broadband access in that area, Crystal Falls Township can provide information technology assistance such as software or processing for businesses. Due to the Township's rural landscape and large area, not all developed areas of the Township have sufficient broadband access at this time. Although work on expanding this network has occurred and is ongoing, this has been identified as a limiting factor in the pursuit of expanding the high-tech fields and providing residents with the ability to work from home offices and still connect with the larger regional markets. As seen in the recent Covid 19 pandemic, there is a large group of people from other areas that have relocated to the area to work remote or would do so if the infrastructure was in place to support that lifestyle.
- Tourism has considerable potential in the immediate area and represents a seasonal opportunity. In fact, it can be multi-seasonal with winter, fall and summer activities approximating full-time employment. Areas of interest could be the local waterfall, hilltop vistas, a smaller resort/conference center, lake access for people, boats, fishing, swimming, nature trails and winter activity for snowmobiles, cross-country skiing, snowshoeing or other recreational activities that may combine private, State, County and Township activities. Perhaps the conference center and lake access/recreational opportunities can be combined in a largely undeveloped area so that residents are not adversely affected by any intensive development.
- Additional commercial activities such as retail, personal services, restaurants and business services could be expanded as other slow but steady growth is realized. In addition, more chain retail outlets are looking at smaller communities as the major urban centers are increasingly filled with retail.

The residents of the Township are not in favor of large, rapid economic growth, but rather slower and steady growth in areas that preserve the rural character of the rest of the Township. Fortunately, Crystal Falls Township has the opportunity to blend those seemingly contradictory visions for the community. It can foster growth within six or seven miles west and north of the City of Crystal Falls but emphasize limited growth and preservation north of that area.



FACILITIES AND INFRASTRUCTURE

Crystal Falls Township will examine its public infrastructure for expansion and improvements as part of this Master Plan process. Improvements to the Township facilities and infrastructure are identified below:

- **Parks & Recreation:** Parks and recreation has two dimensions for the community. One is to provide opportunities for seasonal and year-round residents. Many current residents have enough land or an appropriate location for most of their own recreation. However, some residents need access to a community site for outdoor recreational opportunities.
- The second parks and recreation need is to **increase the area's attractiveness for tourists**. Bewabic State Park meets many of those needs, but there are some additional activities that visitors want. One is access to local waterfalls. Only one waterfall is in the Township and it is in private ownership on the Chicagon Slough near Long Lake. Good access and support facilities at that waterfall would make it attractive for tourists. Fortunately, it is relatively near US-2 and only several miles northwest of Bewabic State Park. That site deserves review of public consideration because waterfalls are an understated tourism asset of the area.
- **Public or Private Meeting Rooms:** A modest local demand for meeting rooms is probably deferred to local motels in areas distant from Crystal Falls, but there may be a modest demand for attractive conference meeting rooms for local needs in an attractive, natural setting. It may well be a private facility with food service associated with local motels.
- **Cross-Cut Spur Industrial Park:** An excellent opportunity exists to help create industrial and/or commercial development within the Township. The Township's Industrial Park has potential for many different kinds of development and currently has the space as well as a majority of the infrastructure to encourage development. However, there is a need for expansion and upgrades of some site infrastructure at the site. Upgrades to the water system, electrical power supply, data/communication networks, and rail access could significantly increase the appeal of the site.
- **Sanitary Sewer System:** The existing sanitary sewer system is in good overall condition and while it is a relatively small system that does not serve the entire Township, it does not require wholesale expansion or rehabilitation. Incremental extensions of the sanitary sewer system have been considered as part of new commercial development, particularly west of the Township's existing system limits along Highway US-2. These small-scale expansions will be reviewed individually and only added as new development projects are built. One area identified for potential residential sewer expansion is in the Tobin Location, located south of the US-2 and US-141 intersection along the Tobin-Alpha Road. There have been problems with on-site treatment systems in this area in the past due to high local groundwater, bedrock, poor soil conditions and lack of adequate space. Many of these same reasons lead to high construction costs and past studies on the feasibility of this work have indicated that construction costs will likely be very high.



- **Water Distribution:** Crystal Falls Township's Water Distribution System is in good overall condition at this time. With the assistance of the US Department of Agriculture's Rural Development, the Township has been able to replace, improve, construct and upgrade a large portion of the existing watermain and system components in the Township's System. In addition to water customers in the Township, Crystal Falls Township provides water to the City of Crystal Falls and Hematite Township. Even with the large amount of work that has been completed, there are still a number of items in the Water System that will need to be addressed. A Water System Capital Improvements Plan was completed in 2013 that outlines a number of short-term and long-term system improvements that will need to be completed such as the replacement of small diameter, aged cast and galvanized iron watermain, and the installation of water main loops to improve reliability. Some of these projects have been completed while others are still in the planning phase.
- **New Fire Station:** The Crystal Falls Township Fire Department is currently located in the Crystal Falls City Hall, however, plans are in the works for construction of a new fire station. The Township has purchased a parcel of property near the intersection of Firetower Road and Highway US-2 for construction of the new facility. Funding has been obtained through the United States Department of Agriculture Rural Development Community Facilities program. Design work on the facility has been completed and construction on the facility is planned to start in 2023.
- **ORV and Snowmobile Trails:** Four wheeling and snowmobiling is a popular activity in the Township and has the potential to bring additional tourists to the area. Currently, there are many miles of trails open to ORV's and snowmobilers. However, additional trails linking municipalities, local attractions and existing trails would provide an attractive destination for these riders.

FORESTRY MANAGEMENT

Crystal Falls Township is a rural township with many acres of manageable forest land. In order to properly manage the Township's Forest resources the Township procured the services of VanOss Forestry Services, LLC to complete a comprehensive Forestry Management Plan (FMP). The FMP reviewed and provided management recommendations on approximately 316 acres of Township owned property (generally parcels larger than 4 acres). This plan was developed utilizing generally accepted forest inventory methods (i.e. onsite sampling of approximately one variable plot per 6-10 acres utilizing a 10 BAF factor prism, property walk-through, aerial photograph review, etc.) as well as cutting-edge technology and plan development tools/software.

Generally, the existing land conditions consist of wide variety of forest ecosystems consists of several different forest and non-forest cover types, lakes, creeks, and parks. Some forested ecosystems are in need of some type of silvicultural practices, from even-aged management to all-aged management. The primary goals for the property are to manage the forest for long term sustainable values. These include, but are not limited to, recreation, timber production, forest health and vigor, maintenance of ecological diversity, and



improving wildlife attributes. There had been some forest management conducted several years ago. Most of the logging occurred over 15 years ago or more.

OTHER PLAN ELEMENTS

The residents also directed the planning effort in other ways including these elements:

- Encourage intergovernmental cooperation on such common interests as sanitary sewers, water system, electrical distribution systems, firefighting, ambulance service and other opportunities that may develop. The Upper Peninsula communities need to maximize cooperation to provide more efficient services, higher quality services and even additional services. Parochial activities can seriously limit opportunities and present a negative image to the surrounding areas.
- The Township is in the process of updating the Zoning Ordinance in 2023.
- Grants should be continually explored for economic development options, for parks and recreation, road improvements and for other grant opportunities.
- Target the use of Township funds to repair, maintain, and improve roads in cooperation with the Iron County Road Commission.
- Crystal Falls Township is now hosting a website to allow residents and visitors to keep abreast of happenings with the community. It is imperative this information be timely, accurate and up to date. The address is: crystalfallstownship.org.
- This Plan will keep Crystal Falls Township Planning Commission focused on the community's key needs and most attractive opportunities for the next five years. The State of Michigan requires, and it is a very important activity, to reexamine the Master Plan for needs five years hence. The Planning Commission must now focus its efforts to realize the intent of the Master Plan.

The Crystal Falls Township Master Plan will not happen without the commitment, fortitude and diligent work of Township leaders. But with such effort, the plan will meet the vision and goals of the residents as well as leaders of the Township.



CHAPTER V

IMPLEMENTATION

This Master Plan is only valuable as it is used for Township decision-making. It provides no money, no rules and no regulations for its implementation. It serves as a guide strongly based on community participation, planning commission creativity and technical competence. But it is only a **guide**.

IMPLEMENTATION AUTHORITY

There are several ways this plan is critical in the decisions of Crystal Falls Township and should be used for those purposes. The basic methods to use this Master Plan guide are:

- **Zoning:** This plan should be used to implement specific recommendations and for updating provisions in the zoning ordinance, making zoning districts compatible with the Master Plan and following procedures for zoning.

Second, the existing zoning map needs to be generally compatible with future land use; this also includes referring to the plan for all future rezoning so that it implements the plan. If conditions have changed, then both the Master Plan and zoning should be changed to make it compatible. Thirdly, the procedures for zoning must be scrupulously followed to be consistent with the plan and state law. Courts nearly always direct that zoning properly reflects the plan. In addition, most court cases on zoning are not lost because of substantive issues, but because of procedural problems.

- **Capital Improvements:** This plan also includes recommendations for certain capital improvements. Some capital investments are under Township control such as the water system, some sanitary sewer responsibilities, parks and recreation and others. In those cases, the capital improvements of the plan to acquire, for example, a park or land purchase can be evaluated for feasibility, cost/benefit and then scheduled when appropriate for financing and construction. In the case of county or other facilities the Township is subject to decision-making by another legislative body and will have to work with them.



In fact, according to Section 10 of the Township Planning Act, says that “No street, square, park or other public way, ground, or open space, or public building or structure, shall be constructed or



authorized in the Township ... until the location, character, and extent thereof shall have been submitted to and approved by the Planning Commission ...” That is the most direct authority the Township and its Planning Commission have for implementing the plan and it should be followed for capital actions of the State, County, other local governments or other agencies. It is an important authority the Planning Commission and its Township Board of Trustees have in assuring conformance to the plan.

- **Special Boards, Authorities and Commissions:** The Crystal Falls Township Board of Trustees can also appoint Township Boards, authorities, and commissions to undertake certain improvements in the community. These include a possible Park and Recreation Commission, a Downtown Development Authority and many others. It is important that the planning commission work with any agency to ensure that capital improvements for both agencies are compatible.

KEEPING THE PLAN CURRENT

The plan must be kept current to assure its relevancy. The State of Michigan recognized the need to keep master plans current in 2002 by requiring an update to any Township Master Plan every five years. Any plan changes must also go through notifications to adjacent governments and the county.

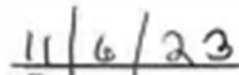
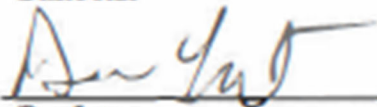
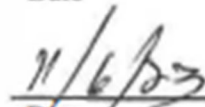
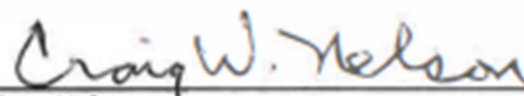
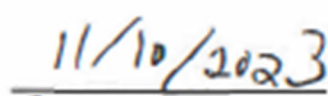
Plans often become less relevant after 5, 10 or 20 years; they must be examined and updated with changes in state laws, court decisions and case law, lifestyle changes and community development changes. It is appropriate to examine the plan once each year to assure its relevancy prior to a major update every five years. If changes are needed, they should be done at that time. Routinely following such a program keeps the plan relevant and active as a partner in community development.

The plan is as useful as a community makes it. Its value is directly related to its use as a major tool for guiding all major development in a community. A plan should not have value because it is a plan, but rather because it is based on sound empirical history about development and because it represents the vision and goals of the residents of the community. It is with that understanding that this plan is prepared and presented by the Crystal Falls Township Planning Commission and the Township Board of Trustees.

PLANNING COMMISSION
CERTIFICATION OF INTENT TO REVIEW THE MASTER PLAN EVERY FIVE YEARS

The undersigned members of the Planning Commission of the Township of Crystal Falls certify that this Master Plan reflects the structure and resources of the community, the vision, goals and objectives of its residents and the careful consideration of the Planning Commission. Furthermore, it is the intent and desire of the Planning Commission and its members to formally review and update this Master Plan every five years consistent with professional planning and state statutes.

Planning Commission Members

 Curtis Stebic, Chair	 Date
 Diane Kut	 Date
 Dan Lato	 Date
 Craig Nelson	 Date
 Patrick Quinn	 Date