# Milton Township Master Plan



# Milton Township, Antrim County, Michigan

Prepared by the Milton Township Planning Commission

Final Draft: April 14, 2015
Public Hearing: May 12, 2015
Adoption Date: May 12, 2015

# MILTON TOWNSHIP MASTER PLAN TABLE OF CONTENTS

Chapter 1: Introduction

Chapter 2: Community Character

Chapter 3: Community Demographics

Chapter 4: Land Use / Land Cover

Chapter 5: Natural Resource Inventory

Chapter 6: Public and Private Facilities

Chapter 7: Local Plans and Regulations

Chapter 8: Future Land Use Plan, Policies, Goals

Recommendations, and Actions

Appendix A: Property Owner Survey Results

Appendix B: Public Outreach Comments

Appendix C: Parks and Recreation Plan

# LIST OF MAPS

MAP#	TITLE	PAGE#
Map 1	Milton Township Geographic Location	2-2
Map 2	Environmentally Sensitive Lands Map	5-5a
Map 3	Topographic Map	5-5b
Map 4	Wetlands: Composite Map	5-6a
Map 5	Soils	5-11a
Map 6	Protected Lands Map	6-4a
Map 7	Zoning Map	7-4a
Map 8	Future Land Use Map	8-1a

# LIST OF TABLES

TABLE #	TITLE	PAGE #
Table 3.1	2000 & 2010 Population Distribution	3-1
Table 3.2	Age Group Comparisons 2010	3-2
Table 3.3	Household Size 1970-2010	3-2
Table 3.4	Population Trends	3-3
Table 3.5	Demographics by County Sub-Areas 2000-2010	3-4
Table 3.6	Population Projections	3-5
Table 3.7	Race and National Origin 2010	3-6
Table 3.8	Percentage of All Housing Reported as Seasonal Year 2010	3-7
Table 3.9	Employment by Selected Industry	3-9
Table 3.10	Employment by Occupation	3-10
Table 3.11	Household Income	3-11
Table 3.12	Elk Rapids Public Schools Enrollment	3-12
Table 3.13	Total Housing Units/Units In Structure	3-13
Table3.14	Total Housing Units - Years Structure Built	3-14
Table 3.15	Housing Market Value	3-15
Table 3.16	Mortgage Status & Monthly Homeowner Costs	3-16
Table 3.17	Year Householder Moved Into Unit	3-17
Table 3.18	Gross Rent	3-18
Table 3.19	Gross Rent as a Percentage of Household Income in 2010	3-19
Table 4.1	SEV Trend Analysis	4-2
Table 4.2	Total Real Properties	4-3
Table 4.3	Parcel Size Analysis	4-4
Table 4.4	Building Permits Issued by Antrim County For Milton Township	4-4
Table 4.5	Land Use Permit Issued	4-5
Table 5.1	Ancient Lake Levels of Lake Michigan	5-4
Table 5.2	Protected Species in Antrim County	5-12
Table 6.1	Milton Township Recreation Facilities & Public Lands	6-1
Table 6.2	Grand Traverse Regional Land Conservancy Lands	6-6
Table 6.3	Recreational Facilities in Milton Township	6-7
Table 6.4	Historic Places in Milton Township	6-11

# MILTON TOWNSHIP MASTER PLAN 2015

# **Chapter 1: INTRODUCTION**

Milton Township has prepared this Master Plan to address the future physical development of the community. Through the process of writing this Plan, it became evident that township planners and residents are keenly interested in maintaining the high quality of life presently available. The quality of life in Milton Township is defined by elements such as: the exquisite beauty of extensive inland and Great Lakes shorelines; the rolling, unspoiled rural landscape; shorelines and access to them; the ability to see a dark night sky; and peace and quiet. The challenge presented to township planners is the accommodation of inevitable future growth in a manner that does not degrade these values. Additional challenges include continued land and resource consumption; water quality protection and increased congestion and conflict among water users; and the

demand for public services expected to continue to grow as Milton Township's population increases.

Milton Township was officially incorporated by its board of supervisors during the winter of 1857. In October of 1865 the original Milton Township was split into the present day Milton and Helena Townships. The Milton Board of Trustees held its first meeting at the home of Truman Hawley on the first Monday of April 1866, with

Alexander Campbell, George Lukes, and David F. Parks as inspectors of election. The Milton Township Board of Trustees



Milton Township Hall, summer 2004

passed a resolution on in the fall of 2002 to request that the Milton Township Planning Commission work with the Board to prepare an updated "master plan for the Township pursuant to the Michigan Township Planning Act, MCL 125.321, et. seq.

This Master Plan identifies planning goals to direct the future of Milton Township. Similar to a good roadmap, this Master Plan defines a community vision and preferred direction outlining what the residents want the Township to be in the future, and how to get there. The goals are meant to be flexible, just as there is typically more than one route to get to a desired destination. This Master Plan outlines examples of actions that residents, public officials, business owners, landowners, residents, and others can take in

\_

<sup>&</sup>lt;sup>1</sup> The Organization of Antrim County's Townships, www.ole.net/~maggie/antrim/township.

order to cooperatively fulfill the community's goals.

This Plan is not designed to promote or prevent growth, but rather to *manage* growth to protect and promote public health, safety, and welfare. The intent of this Plan is to provide a way for growth to occur while still preserving the quality of life within Milton Township. Individual interests must be balanced with the interests of the community at large when public decisions are made.

During public participation sessions conducted for this Plan, residents repeatedly expressed their desire for the Township to retain its rural character, protect water quality and the environment, and to conserve its natural resources, especially farms and forests. Reaching these goals is possible if decisions made by the Milton Township Planning Commission and other public bodies respect the vision stated in this Master Plan.

The Milton Township 2006 Master Plan is meant to embody a proactive approach to community and land use planning. This Plan will be used as a guiding tool for decision-makers regarding future land use questions. This Master Plan defines the Milton Township community's vision of the future and lays the framework for growth, development and resource protection for the next 20 years (to be reviewed every five years). This Master Plan has been written with private property rights, water quality protection and natural resource sustainability in mind, with the intention that future generations will have an equal or better quality of life than that enjoyed by today's Township residents.

# **Legal Basis for the Master Plan**

The Milton Township Master Plan was prepared from January 2003 to January 2006. This revision is due in accordance with the Michigan Planning Enabling Act of Milton Township formally created a Planning Commission by resolution of the Township Board during 1974 in accordance with the Township Planning Act 168 of 1959, as amended. With the formation of an official Planning Commission, Milton Township may prepare and adopt a Master Plan.

Shortly before the preparation of this Master Plan, Michigan Public Act (P.A.) 168 of 1959 was amended by P.A. 263 of 2002, the Township Coordinated Planning Act [MCL 125.32, et. seq.]. The Milton Township Planning Commission followed the directives of Michigan's Coordinated Planning Act in the preparation of this Master Plan. It is with a spirit of cooperation and coordination between governmental jurisdictions, full and part-time residents, businesses and interested community members that this Master Plan has been prepared.

#### **Planning Process**

The process of writing the Master Plan began in earnest in January of 2003. Planning consultants from Ball Environmental & Planning Associates, LLC of Traverse City were hired to assist Milton Township planners in this process. During the Master Plan update process, there were many opportunities for residents to provide input. One of the more formal methods used was a written random survey of all property owners within the

Township—distributed in summer of 2003. The results overwhelmingly indicated that the respondents place a high degree of importance on the protection of water quality; voluntary farmland conservation; and the protection of natural resources, including forests, vistas and scenic views, wetlands, and wildlife. Concerning other related natural resources questions, the survey results from respondents are similar:

- On the subject of community characteristics, a strong majority of respondents feel that protecting rural character, water quality, farms and forests, and views of nearby waters are either very important or important to uphold.
- Most people indicate that they either strongly agree or agree that Milton
  Township should address the following issues: establishing a point of sale septic
  inspection program; participate in a voluntary farmland preservation program; not
  expanding either the Kewadin or Torch River Bridge areas to accommodate future
  commercial development; not allowing additional multiple family development
  on waterfront properties; and considering additional public shoreline access and
  trails development.

Please refer to Appendix A for a summary of 2003 written survey results.

A first Town Hall meeting held on May 5, 2003 focused on economic opportunity and new/existing business development within Milton Township-based on residents' input. Ball Environmental/Planning Associates presented information on the Master Planning process, master plans relationships to zoning, an explanation of public input methods, and the goals/objectives of the Master Plan update process. Discussion ensued regarding the growth objectives of the Township; need to accommodate future business (especially near Kewadin) and residential growth; need for increased coordination in planning with neighboring communities; and need to recognize that economically Milton Township is primarily a resort-based community. Others noted that Milton Township is perceived as rapidly becoming a "retirement community."

A second and third Town Hall meetings were held on May 10 and June 2, 2003, respectively, to present population and land use trends and other issues.<sup>3</sup> Four questions were asked of participants, including: 1) what do you like best about Milton Township; 2) what resources are most important to protect; 3) what are the main issues the Master Plan must address; and 4) what projects would you support to address Master Plan issues? Session attendees generated a list of issues, concerns and ideas for each question, and each participant was allowed to rate the overall list in terms of overall priority.

Residents in attendance indicated the importance of the natural beauty of the Township's waters, shorelines, forests and farmlands. It is evident people live in Milton Township because of its pristine waters and rich rural character. Specific features residents highly

\_

<sup>&</sup>lt;sup>2</sup> Eleven residents in addition to the Milton Township Planning Commission and staff attended this meeting facilitated by Sherrin Hood, AICP and Christopher Grobbel, PhD of Ball Environmental/Planning Associates.

<sup>&</sup>lt;sup>3</sup> Nineteen residents attended the second Town meeting and nine attended the third session, in addition to the Milton Township Planning Commission and staff. These sessions were facilitated by Sherrin Hood, AICP and/or Christopher Grobbel, PhD of Ball Environmental/Planning Associates.

value are: clean water and clean air; farm and forestlands; wetlands; views and ability to see the night sky; peace and quiet; and friendliness of residents. Attendees stress the need to plan for future hillside view property development, second and third-tier development along lakeshores, the need for a septic inspection program, community education about land use and environmental matters, and the need to comply with existing Township plans and enforce existing zoning.

Comments were also received regarding what residents want to see happen with respect to future commercial development within the township. Participants did not object to the concept of a new rural town center directed toward planning for the future of the Kewadin area. A number of people said they welcomed the opportunity to be proactive. Some ideas for such a rural town center included: the need for a compact mixed use center with limited access and a distinct identity; the need for additional commercial services, including a gas station; the need to make it a pedestrian-oriented, walkable community; strengthening existing commercial uses; and the need for a variety of housing types.

A fourth and final Town Hall meeting was held on June 16, 2004. Participants were asked to identify and describe the strengths, weakness, opportunities and potential pitfalls before the Township in planning for and advancing its vision for the future. A summary of ideas and responses given at the forth Town Hall meeting are also in Appendix B.

During the Master Planning process, existing land uses, land ownership, and the natural resource base were addressed. Existing zoning, planned unit developments, and other uses allowed under the present zoning were also discussed. Significant zoning action requests within the past five years were also reviewed.

Regular monthly and semi-monthly Milton Township Planning Commission meetings, noticed and open to the public in accordance with the Michigan Open Meetings Act , P.A. 267 of 1976 [MCL 15.261 et, seq.], were held to explore trends and identify goals, actions, and recommendations. The public was invited to and actively and meaningfully participated in all aspects of the Master Planning process.

In summary, a wide variety of methods of soliciting community input were utilized in the planning process for this Master Plan update. Residents were given many opportunities to participate and have their ideas and concerns addressed. These results have been incorporated into this Plan and referred to throughout the Plan.

As a result of the 2010 Census and in accordance with the requirements of the MPEA the Master Plan is being updated in 2012-13.

# **Chapter 2: COMMUNITY CHARACTER**

#### Introduction

A description of community character is important to this document. There must be an understanding of what makes a community unique, in order to direct future land use

patterns and/or land use regulation, if any. Factors to explore include community description, regional setting, and resources.

#### **Community Description**

Milton Township is rural and striking in its natural beauty, with extensive natural resources including: over ten miles of Torch Lake shoreline; approximately 8 miles of Elk Lake water front; over two miles of Lake Skegemog shoreline; over two miles of Torch River frontage; and over three miles of Lake Michigan



Milton Township Park, Elk Lake

frontage. The interior of Milton Township is adorned with highly productive agricultural land, primarily in fruit production with some specialty livestock, maple sugar, and nursery stock. A high glacial ridge runs along Northwest Torch Lake Drive above Torch Lake, presenting expansive water views, along with other locations, within the Township. The Township also possesses large blocks of upland hardwood forests, diverse wildlife habitat, rolling hills and meadows, wetlands, and prime and unique farmland. These natural resources contribute to a magnificent, mostly rural setting for people to live, work, and recreate within Milton Township.

The Township's population for the year 2010 was 2,204, as reported by the U.S. Census Bureau. Out of the fifteen townships in Antrim County, Milton Township had the third highest population in 2010. Also, U.S. Census data show that Milton Township has experienced continual population growth over the past four decades, with a substantial 73.4% increase from 1980 to 2010. Seasonal residents, visitors to private homes and rental cottages, and day tourists add significantly to the Township's population and economic base during summer months.

There are no incorporated villages or cities within the jurisdictional boundaries of Milton Township. The unincorporated hamlet of Kewadin, located at the northwestern edge of Milton Township, and the unincorporated settlement of the Torch River Bridge area, located at the southeastern entrance to Milton Township, are the busiest places within the Township. There are numerous parks, lake shore accesses, and other facilities representing recreational opportunity within the Township. A few nature preserves and conservation easements are owned or managed by the Grand Traverse Conservancy located within Milton Township. These properties contribute to the diverse landscape, unspoiled resources, and interesting history that make the Township a unique and special place.

The Kewadin area within Milton Township possesses a historic Indian Mission, originally a relatively large North American Indian settlement. Today it is comprised of the United Methodist Indian Mission and Church, a cemetery, and a park on Elk Lake. The Congregation includes members of the Grand Traverse Bay Band of Ottawa and Chippewa Indians.

## **Geographic Setting**

Milton Township is located in the southwestern corner of Antrim County, in the northwestern portion of the Lower Peninsula in the State of Michigan. Page 2-2a contains a map showing the location of Milton Township. Page 2-2b contains the Antrim County Political Subdivisions Map, depicting Milton Township's position within Antrim County as well as jurisdictional boundaries. Townships directly adjacent to Milton are Torch Lake Township to the north; Forest Home Township to the northeast; Helena Township to the east; and Elk Rapids Township to the southwest. The southern boundary of Kewadin within Milton Township is approximately 3 miles north of the Village of Elk Rapids and 15 miles north of the City of Traverse City, Michigan.





#### Historical/Cultural Resources

Every township has historic and cultural resources that usually contribute to a sense of pride and place, as well as providing definition and direction for the future. Milton Township's history is intertwined with the rich cultural heritage of neighboring townships. The first indigenous people who settled in this area at least 8,000 years ago were the mound builder Paleo-Indians.

The Ottawa (i.e. Odawa), Chippewa (i.e. Ojibwa), and Pottawatomie migrated from the North Atlantic coast to the Great Lakes area over 1,000 years ago. During the period before European contact in 1650 A.D., they settled in the Upper and Lower Peninsulas of Michigan.<sup>4</sup> The Odawa are part of the Three Fires Confederation, including closely related Ojibwa and Pottawatomie peoples calling themselves the *Anishnabeg* (meaning the "Good People or the Real People") with traditional settlements extending along the

<sup>&</sup>lt;sup>4</sup> Odawa (pronounced O-dow'-a) more accurately reflects the traditional Indian pronunciation of their tribal name than does the Anglicized word "Ottawa." Respectfully, the older spelling is used throughout this document.

Great Lakes shoreline from Chicago to Manitoulin Island, Ontario. By 1742 the Odawa moved their largest settlement from near Fort Michilimackinac to the "Wawgawnawkezee" coastline extending from Cross Village (Ah-numa-wau-tink-unmig or the Prayer Tree Place) to Seven Mile Point in western Emmet County. Clearing fields and constructing homes, the Indian population at Wawgawnawkezee reached between 1,500 and 3,000, and remained the center of Odawa polity even after European settlers began to settle the area.

The Anishnabeg inhabited much of the eastern Lower Peninsula of Michigan and the Upper Peninsula along with the northwest Lower Peninsula. The Ojibwa did not originally inhabit the Great Lakes Region, but migrated from the mouth of the St. Lawrence River following the north shore of Lake Huron. Many historians believed this migration took place sometime around A.D. 900. The Ojibwa in southwestern Antrim County were led by Chief *Ke-way-din* (meaning "northwest wind"). *Ke-way-din* fought for the British in the last war with Colonial England, and served in that conflict under Chief Anish-qua-gwan-a-ba, the principle of five Ojibwa chiefs governing tribes through the northwest Great Lakes region. *Ke-way-din* died sometime around 1884 in the home of his daughter, Maggie. The Indian Mission and Methodist Church, historically termed "The Grove" was erected in present-day Kewadin in 1886. In 1890 the names on the deed for the Grove were James Miller, Joseph Quanosa, Mark Mamagona, Samson Nada, and Martin Noonday. Many North American Indian families migrated to the Grove, which served as a haven for Indian people. An Indian cemetery lies next to the Mission, and is the burial site of North American Indians of any religion.

Many Indian colonies existed during this time along the east shore of Torch Lake. The Indians practice of using native herbs was very helpful to new arrived European settlers in the area. Reportedly, Torch Lake was named by an early European pioneer camped in the view of Torch Lake, and viewing the lake dotted with Indian resident's flaring pine pitch torches. These torches were located at Indian encampments convening for lake trout spearing season.

The earliest European settlers in this region included French voyagers, fur trappers, and Jesuit and other missionaries. Large Indian settlements were already established, and were consolidated in part around the locations of missions near present day Harbor Springs, Horton Bay, and on Old Mission Peninsula north of Traverse City. Historical accounts estimate that there were upwards of 30,000 Indians living between Petoskey and the Mackinaw area alone before European settlement.

The first recorded European pioneer and settler to Antrim County was Abram S. Wadsworth, who visited the region in 1846.<sup>7</sup> The next year he and his family landed at

<sup>&</sup>lt;sup>5</sup> Clifton, James A., George L. Cornell and James M. McClurken, <u>People of the Three Fires: The Ottawa</u>, <u>Pottawatomie and Ojibwa of Michigan</u>, Michigan Indian Press, Grand Rapids Inter Tribal Council, ISBN-0-9617707-0-8, 1988.

<sup>&</sup>lt;sup>6</sup> Bund, Sally, Report on the George and Delilah Cole Farm, from the National Register of Historic Places Nomination.

<sup>&</sup>lt;sup>7</sup> It is noted that missionary Rev. J.J. McLaughlin found the ruins of a cedar log cabin with rudimentary stone chimney on the shore of Elk Lake in 1854. From *The Settlement of the Towns of Antrim County*, Elsie

present-day Elk Rapids, and recorded the purchase of a tract of land. In the spring of 1848 Wadsworth built a log cabin at the site of the present-day Elk Rapids Township Hall. Elk Rapids was reportedly named for a large set of elk antlers discovered by Wadsworth at the mouth of the river. By 1860 there were 179 European settlers established and working in Antrim County. Antrim County was originally named *Megesee* County after an Ojibwa chief that signed treaties in 1821 and 1826. *Megesee* County was renamed Antrim County in 1863, after County Antrim in Ireland. Antrim County statistics indicate that in 1864, only 382 European immigrants lived in the County which at that time included the geographic area of present-day Kalkaska, Crawford and Otsego Counties. Missionary settlements eventually made way for larger numbers of European settlers arriving during the 1870 and 1880s.

The Township of Milton was originally organized in March 1857, and its initial boundaries consisted of the present-day Milton and Helena Townships. In 1865 the township was divided by the Township Board of Supervisors such that all of the land lying on the west side of Torch Lake was named Milton Township, and all of that portion lying on the east side of Torch Lake was named Helena Township. John Milton Goddard was the first recorded immigrant to purchase land and cleared a farm in Milton Township. At this time, present day Kewadin was called *Wawwahghedek* - after an Indian chief and many Indians still inhabited the town. Other early names for Kewadin included "Indian Town" and Sunnyside. Prior to the lumbering period, Milton Township was covered with mostly virgin hardwood.

At about the same time in the late 1860s and 1870s, the logging industry was beginning to get underway. Many farmers and Indians worked their fields in the summer months, and supplemented their income by working in the lumber camps in winter. Others were employed full-time by the lumber industry. It is said the hardwoods of northern Michigan helped rebuild Chicago after the fire of 1871. Tall ships and steamers often utilized the harbors within the Beaver Island archipelago for refuge and supplies, including South Manitou Island—the most southerly island in the Beaver group—before arriving in Chicago.

Timbering was an important winter occupation for pioneer farmers, and was the principle industry in the area in the late 1890s and early 1900s. Sawmills including Dexter and Noble of Elk Rapids and the Cameron Brothers of Brownstown (present-day Torch Lake village) were the two largest timber producers. The Elk Rapids Iron Company, an iron ore smelting plant was opened in Elk Rapids in 1873, and operated at that time by Dexter and Noble. Much of the cut timber that did not travel from the area to Chicago for rebuilding efforts went to the Elk Rapids Iron Company as charcoal to fuel the iron ore smelter. Torch Lake was heavily used to transport logs to Dexter and Noble mill. Rivers in the area were dredged for the timber tug boats operated by Elk Rapids Iron Company. The tug "The Torch" hauled saw logs from the banks of area lakes to Elk Rapids during non-winter months. Two other tugs known as "The Elk" and "The Albatross" usually hauled cordwood for the iron smelter or a wood products chemical works in Elk Rapids. Saw logs were hauled on area waters with the use of booms consisting of long lines of

small logs bound together with chains or cables forming an enclosure. These booms were opened at the head of Torch River and gathered up again at the mouth of Torch River on Round Lake (today known as Lake Skegemog).

Early census data shows the primary agricultural products were corn, wheat, potatoes, hay, and livestock producing cheese and butter. In 1874, 51 acres of apple, peach, pear, plum, and cherry orchards existed in Milton Township. After the turn of the century, the timber supply was largely exhausted, and agriculture and tourism became principal economic activities. During the 1930s, the production of cherries became the chief agricultural activity, due in large part to a favorable "micro-climate" along the Lake Michigan shoreline.

North and south Milton Township were assumed upon the establishment of different school districts. South Milton School was established in 1861, and North Milton School was erected in 1870. In 1886 the North Milton School burned down, and the second building was located across from Mud Lake on present-day Cairn Road. Three other schools existed in the early days. Kewadin School was located within present-day Kewadin, and was established sometime in the late 1800s. Creswell School was built in 1884 following a land sale from Elk Rapids Iron Company to Milton Township. Roberts School was reportedly the first building located on the north side of Easley Road, and was named for the Roberts pioneer family-which lived across the road from the school. This school was also referred to as District School Number 5, until a northern portion of Milton Township was annexed by Torch Lake Township between 1896 and 1910.

A historical feature of statewide significance exists just north of Kewadin on Cairn Highway. A unique stone monument (called a cairn) was built near the 45<sup>th</sup> parallel along the former route of Highway 31, and named the Hugh J. Gray Cairn. Hugh J. Gray was regarded as the father of the Michigan tourism industry. He spent many years on the Grand Trunk Railroad before being named Secretary of the Michigan Tourist Association. Rocks from each of Michigan's 83 counties were donated and shipped to the site, where the monument was constructed by Victor Schwenke of Antrim County.



Rock Cairn Monument, Cairn Highway, Milton Township, Antrim County.

The original Torch River bridge was a swing bridge, located east of the present bridge.

The original bridge was decommissioned in the 1950s, then fell over and remained there for several years until area residents dismantled it for its wooden planks.

#### **Summary of Findings**

When considering the community character, the regional setting, and the cultural/historical heritage of Milton Township, certain land use patterns begin to emerge. The early North American Indian history of the Township is directly linked to the settlement of the area's numerous lake shorelines and the region's abundant natural resources including fish, game, fertile lands and forests. Development pressures have continually increased along the shoreline through time.

Efforts to preserve historic areas and structures deserve special recognition and support within Milton Township. A partial list of historic preservation sites and structures is provided in Chapter 6 including: 1) the Old Milton Township Hall; 2) South Milton Township Cemetery; 3) United Methodist Indian Mission and Cemetery in Kewadin; 4) Milton, Roberts and South Milton schoolhouses; 5) Evan's property archeological dig site; 6) Hickin, VanHook, Sutter and Kaiser centennial farmsteads; 7) 1882 Methodist Church; and 8) the Rock Cairn Monument. History is important because it engenders a sense of identity, and fosters and informs a commitment to the community. Although history includes structures, it also encourages us to explore personal histories, former settlement centers, patterns of land use, and economic ways of life.

# **Chapter 3: COMMUNITY DEMOGRAPHICS**

#### Introduction

It is important to know the demographic composition of Milton Township when planning for its future. Assessed over time, trends emerge and changes become evident that will most likely affect future land uses and community services. In the following sections, information is reviewed regarding Milton Township's population by age groups (including senior citizens), employment trends, housing trends, population trends and projections, race and ethnic groups, gender, measures of income, etc. In most discussions, the 2010 U.S. Census data were used directly or from the Northwest Michigan Council of Governments. If data were not available by township, then Antrim County census data were used for comparison purposes.

#### **Age Groups**

Table 3.1 compares Milton Township population from 2000 to 2010. Milton Township's largest population segment in 2000 was comprised of Mature Families (45-60 years) at 30.4%. Milton Township's largest population segment in 2010 was also Mature Families at 32.3%. The greatest decrease was in Family Forming group (20-44 years) at -15.8%. The largest increase was among the Elderly (75+ years) at 46.5% with an increase of 30.7% among seniors. This reflects the aging of the resident population and also the in-migration of older age groups into the Township. As Milton Township has a relatively small total year-round population, even a small spurt or influx by any age group could significantly alter the Township's age group composition.

	TABLE 3.1 MILTON TOWNSHIP 2000 & 2010 Population Distribution									
Age Group	20	00	20	10		nge -2010				
g, s, t	No.	%	No.	%	No.	%				
Preschool Age (0-4 yrs)	82	4.0	92	4.2	10	12.2				
School Age (5-19 yrs)	405	19.5	374	17.0	-31	-7.7				
Family Forming (20-44 yrs)	531	25.6	447	20.3	-84	-15.8				
Mature Family (45-64 yrs)	630	30.4	712	32.3	82	13.0				
Seniors (65-74 yrs)	267	12.9	349	15.8	82	30.7				
Elderly (75+ yrs)	157	7.6	230	10.4	73	46.5				
Total	2,072	100	2,204	100	132	6.4				

Source: 2000 and 2010 U.S. Census.

Table 3.2 compares Milton Township's population with that of Antrim County and the State of Michigan. Milton Township has a lower percentage of preschool children, school-aged children, and family forming aged persons than Antrim County and the State of Michigan. Milton Township also has a slightly higher percentage of mature families. Both Milton Township and Antrim County have a substantially greater percentage of retirement age persons than the State of Michigan. These comparisons also support the finding that an increasing trend in Townships residents' age currently exists within Milton Township.

	TABLE 3.2 AGE GROUP COMPARISONS 2010										
Age Groups	Milton Township	Milton Township	Antrim County	State of Michigan							
Preschool (under 5 years)	92	4.2%	4.9%	6.0%							
School Age (5-19 years)	374	17.0%	18.0%	20.8%							
Family Forming (20-44 years)	447	20.3%	23.6%	31.5%							
Mature Family (45-64 years)	712	32.3%	31.3%	27.5%							
Retirement Age (65 years & older)	579	26.3%	22.1%	13.8%							
TOTALS	2,204	100%	100%*	100%*							

Source: U.S. Census 2010.

#### **Household Size**

Table 3.3 below summarizes trends in the size of households from 1970 to 2010. Milton Township's average number of persons per household declined since 1990. This appears to be consistent with the decreasing average family size experienced by Antrim County and the State of Michigan.

TABLE 3.3 HOUSEHOLD SIZE 1970-2010 (Persons Per Household)											
Community 1970 1980 1990 2000 2010											
Milton Township	N/A	N/A	2.51	2.42	2.31						
Antrim County	3.20	2.80	2.58	2.47	2.33						
State of Michigan	3.27	2.84	2.66	2.56	2.62						

Source: U.S. Census 1970 - 2010.

N/A = Not available.

<sup>\*</sup>Figures provided by U.S. Census do not equal exactly 100%.

## **Population Trends**

Table 3.4 tracks population trends over the thirty-year period from 1980 to 2010, comparing Milton Township with Antrim County, the Northwest Region of Michigan (including ten counties)<sup>8</sup>, and the State of Michigan.

TABLE 3.4 POPULATION TRENDS										
Community	1980 to 2010 % Increase									
Milton Township	1,271	1,468	2,072	2,204	73.4					
Antrim County	16,194	18,185	23,110	23,580	45.6					
Northwest Michigan Region	208,286	230,962	281,468	297,912	43.0					
State of Michigan	9,262,078	9,295,297	9,938,444	9,883,640	7.0					

Source: U.S. Census 2010.

Milton Township's population increase (73.4%) is much greater than that of Antrim County (45.6%), suggesting a relatively low population before 1980 and its subsequent "discovery" as a desirable place to live, work, and recreate. And, as suggested from the data in previous tables, the Township is an attractive destination for retirees. The State of Michigan increased only 7.0% during the period of 1980 to 2010 and actually lost population in the last decade

Table 3.5 represents demographic trends from 2000 to 2010 within Antrim County as a whole. All townships within the county are grouped into small geographic subgroups.

\_

<sup>&</sup>lt;sup>8</sup> The ten counties included were: Antrim; Benzie; Charlevoix; Cheboygan; Crawford; Antrim; Grand Traverse; Kalkaska; Leelanau; and Otsego.

DE	MOGRAPHI	TABLE 3		ADFAC		
DE:		M COUNTY				
County Sub-Area	Popula		2000-201		Proportion	of Total
Communities	2000	2010	No.	%	2000	2010
Eastern Antrim County						
<ul><li>Jordan Township</li></ul>	875	992	117	13.4		
<ul><li>Warner Township</li></ul>	389	416	27	6.9		
<ul><li>Chestonia Township</li></ul>	546	511	-35	-6.4		
<ul><li>Star Township</li></ul>	745	926	181	24.3		
<ul> <li>Mancelona Township</li> </ul>	4,100	4,400	300	7.3		
Subtotal	6,655	7,245	590	8.9	28.8%	30.7%
<b>Lakeshore Communities</b>						
<ul> <li>Kearney Township</li> </ul>	1,764	1,765	1	0		
<ul><li>Helena Township</li></ul>	878	1,001	123	14.0		
■ Forest Home Township	1,858	1,720	-138	-7.4		
<ul><li>Custer Township</li></ul>	988	1,136	148	15.0		
<ul><li>Central Lake Township</li></ul>	2,254	2,198	-56	-2.5		
<ul><li>Echo Township</li></ul>	928	877	-51	-5.5		
Subtotal	8,670	8,697	27	0.3	37.5%	36.9
<b>US-31 Corridor Townships</b>						
<ul><li>Banks Township</li></ul>	1,813	1,609	-204	-11.3		
<ul><li>Torch Lake Township</li></ul>	1,159	1,194	35	3.0	<u> </u>	
<ul><li>Elk Rapids Township</li></ul>	2,741	2,631	-110	-4.0		
<ul><li>Milton Township</li></ul>	2,072	2,204	132	6.4		
Subtotal	7,785	7,638	-147	-1.9	33.7%	32.4%
TOTAL COUNTY	23,110	23,580	470	2.0	100%	100%

Source: Antrim County Office of Planning and Zoning.

Table 3.5 shows that the eastern Antrim County experienced the highest rate of growth between 2000 and 2010, while the most populated areas are located in the lakeshore communities. Table 3.5 also indicates that the fastest growing areas during the last decade in Antrim County were within Star Township (24.3% increase), Custer Township (52.1% increase), Jordan (15.0% increase), and Helena Township (14.0% increase). Six of the Counties' 15 township lost population between 2000 and 2010. Banks Township lost 11.3% of its population during the decade.

#### **Population Projections**

Table 3.6 presents population projections for 2020 and 2030. Estimating future population numbers helps in planning for community services, recreation, and public facilities needs to adequately serve the additional Township residents while retaining the essential community character and natural resources. The 2006 Milton Township Master Plan projected a population of 2,676 in 2010, an increase of 604 persons. The actual increase was 132. The 2010 populations for the County and the other governmental entities within the County also fell far short of mid-decade projections. The recession in the latter part of the decade slowed in-migration and may have promoted out-migration. Improvements in the Michigan economy being realized in 2013 may continue through this decade and may stimulate more growth in the Township than experienced in the 2000 – 2010 decade.

TABLE 3.6 POPULATION PROJECTIONS											
Entity	2000	2010	2000- Cha No.		2020 Projection	2030 Projection					
Milton Township	2,072	2,204	132	6.4	2,336	2,468					
Elk Rapids Township	2,741	2,631	-110	-4.0	2,521	2,411					
Torch Lake Township	1,159	1,194	35	3.0	1,229	1,264					
Helena Township	878	1,001	123	14.0	1,124	1,247					
Forest Home Township	1,858	1,720	138	7.4	1,858	1,996					
Village of Elk Rapids	1,700	1,642	-58	-3.4	1,584	1,526					
Antrim County	23,110	23,580	470	2.0	24,050	24,520					

Source: 2000 and 2010 U.S. Census

There are many factors that influence population growth, although most are not easily quantifiable. However, based on the fact that Milton Township possesses two hamlet population centers (Kewadin and Torch River), exists two miles north of the Village of Elk Rapids (a local population/employment center), and approximately sixteen miles north of the City of Traverse City (a regional population/employment center), it is reasonable to project that Milton Township will continue to grow significantly. Charlevoix is 32 miles to the north from the northern edge of Milton Township, and Kalkaska is approximately 13 miles to the southeast. These cities are also considered within commuting distance of Milton Township.

Given these trends and projections, it is likely that Milton Township will continue to be an attractive rural area in which to settle through the year 2030. Although Milton Township has no public sewer or water services, it does possess numerous available future home sites and an abundant number of residential lots two acres and larger. Its year-round attraction as a prime recreational area close to lakes, beaches, ski hills, golf courses, and other recreational features, as well as full-time employment opportunities, add to its attractiveness for seasonal and permanent housing.

#### **Racial and Ethnic Composition**

Table 3.7 shows Milton Township's racial composition and national origin to be relatively similar to Antrim County with 95.9% of the population reported as white, 2.3% of the population as American Indian, and 1.6% as Hispanic or Latino. The remaining ethnic groups make up 0.2% of the total Milton Township population. Milton Township possesses nearly 4 times the statewide percentage of American Indians and Alaskan Natives, while the State of Michigan has a significantly higher proportion of Black and Asian/Pacific Islander populations.

	TABLE 3.	7								
RACE AND NATIONAL ORIGIN 2010										
D 21 10 11	Milton T	Township	Antrim	State of						
Race/National Origin	No.	%	County %	Michigan %						
White	2,098	95.2	96.8	78.9						
American Indian and Alaskan Native	50	2.3	1.0	0.6						
Black or African American	2	0.0	0.2	14.2						
Asian/Pacific Islander	6	0.1	0.2	2.4						
Hispanic or Latino	48	2.2	1.7	4.4						
TOTAL	2,204	100	100	100						

Source: U.S. Census 2010.

#### **Seasonal Population**

Table 3.8 shows the percentage of all housing reported by the U.S. Census as "seasonal" for three Antrim County townships along the Lake Michigan and Elk River Chain of Lakes shorelines, Antrim County as a whole, and the State of Michigan. All three shoreline townships have high rates of seasonal, occasional, or recreational housing use. These homeowners have more than one home and reside in Milton Township temporarily to enjoy seasonal opportunities and/or visit recreationally at different times of the year. All three townships experience seasonal housing rates greatly in excess of the 5.5% average for the State of Michigan. Of these Antrim County shoreline communities, Torch Lake Township has the highest percentage of seasonal housing at 50.4%, followed by Milton Township at 48.9%, and Elk Rapids Township at 27.6%. Because Elk Rapids has a significant proportion of its population residing in the Village of Elk Rapids, it should be expected to have less seasonal housing.

# TABLE 3.8 PERCENTAGE OF ALL HOUSING REPORTED AS SEASONAL YEAR 2010

	•
Governmental Jurisdiction	% Seasonal Housing
Milton Township	48.9
Torch Lake Township	50.4
Elk Rapids Township	27.6
Antrim County	36.5
State of Michigan	5.5

Source: U.S. Census 2010.

In 1996 the Northwest Michigan Council of Governments published a report called Northwest Michigan Seasonal Population Model. This report documented seasonal populations of Antrim County and nine other counties, finding on the average annually that 22% of the population of Antrim County are visitors, tourists, or summer home occupants (5,638 persons). During the months of June, July, and August, the average number of visitors, tourists, or summer home occupants increased by 38% to 12,371 persons/month. The month of August, at least in 1995, had the highest single month estimate at 12,700 visitors, tourists, or summer home occupants at 39% total township population.

There are several variables to consider when discussing seasonal population. Much depends on how persons completing U.S. Census surveys interpret the words "occupied" and "vacant," particularly when they reside in two or more different locations at different times of the year. However, it is assumed that the information provided by the U.S. Census above is useful for Township planning purposes. Milton Township possesses some tourist-oriented overnight accommodations, much seasonal housing and the natural resource base to attract seasonal visitors. It is a fair assumption that the Chain of Lakes and Lake Michigan shorelines will continue to be a major attraction for the residents and visitors alike, and that the demand for seasonal dwellings will continue to increase. However, there are few vacant shoreline properties remaining and a trend is to see older housing stock razed and new, most often larger, homes constructed.

# **Employment by Selected Industry**

Table 3.9 shows the percentage of employment by industry for Milton Township residents and Antrim County as a whole during the period of 2000 to 2010. Milton Township's leading employment industry in 2010 was Educational, Health and Social Services at 20%; followed by Arts, Entertainment, Recreation, Accommodation, Food and Other Services at 15.6%; Professional, Scientific, Management & Administrative at 11.9%.

The fastest growing industry for residents of Milton Township between 2000 and 2010 was the Agriculture and related activities (74 additional employed in the Township during that period). From 1990 to 2000, there was a decrease of 30 in this category, but still a 44% increase over the last 20 years that is comparable to the increase in Antrim County during the last decade. The only other growth industry was the Professional, Scientific, Management and Administrative with a growth of 17.7%. The greatest decrease in employment by industry is manufacturing with a decrease of 87 jobs (59.6%). Antrim County had a decrease in manufacturing jobs of 40.5%. This reflects the impact of the recession nationally on this sector. Both the Township (-12) and the County (-601) had fewer total employed persons in 2010 compared to 2000.

# TABLE 3.9 MILTON TOWNSHIP Employment by Selected Industry

		2	000			2	010			Cha 2000-	nge -2010	
Industry		lton nship	Antr Cour			lton nship	Ant Cou	rim ınty		ilton ⁄nship		rim ınty
	No.	%	No.	%	No.	<b>%</b>	No.	%	No.	%	No.	%
Agriculture, Forestry, Fishing, Hunting & Mining	31	3.2	342	3.4	105	11.1	477	5.1	74	238.7	135	39.5
Construction	98	10.2	937	9.4	101	10.6	858	9.1	3	3.1	-79	-8.4
Manufacturing	146	15.2	2,170	21.7	59	6.2	1,292	13.7	-87	-59.6	-878	-40.5
Transportation, Warehousing & Utilities	39	4.1	289	2.9	37	3.9	269	2.9	2	5.1	-20	-6.9
Wholesale Trade	23	2.4	209	2.1	15	1.6	130	1.4	-8	-34.8	-79	-37.8
Retail Trade	99	10.3	1,117	11.1	92	9.7	1,117	11.9	-7	-7.1	0	0
Information					17	1.8	176	1.9				
Finance, Insurance & Real Estate	58	6.0	432	4.3	49	5.2	398	4.2	-9	-15.5	-34	-7.9
Professional, Scientific, Management, Administrative & Waste Management Services	96	10.0	656	6.5	113	11.9	519	5.5	17	17.7	-137	-20.9
Educational, Health & Social Services	192	20.0	1,780	17.8	195	20.5	1,851	19.7	3	1.6	71	4.0
Arts, Entertainment, Recreation, Accommodation, Food and Other Services	145	15.1	1,742	17.4	148	15.6	1,937	20.6	3	2.1	195	11.2
Public Administration	34	3.5	344	3.4	18	1.9	393	4.2	-16	-47.1	49	14.2
Total	961	100	10,018	100	949	99.9	9,417	100.2	-12	-	-601	-

Source: American community Survey – U. S. Census Bureau

# **Employment by Occupation**

Table 3.10 shows the percentage of employment by occupation for Milton Township residents and Antrim County as a whole during the period of 2000 to 2010. Milton Township's leading occupation in 2010 was Management, Business, Science and Arts occupations at 38.7%, followed by Sales and Office at 22.0%. The fastest growing occupation was Natural Resources, Construction and Maintenance at 40.5%.

The steepest decline in occupation among Milton Township residents was Production, Transportation and Material Moving at -32.3 percent. This is consistent with the loss of manufacturing jobs in the Township. The increase in agriculture related jobs in the Township is reflected in the reported increase of 51 positions in the Natural Resources, Construction and Maintenance sector – a 40.5% increase.

				TA MILTO nployme		VNSHII						
		2	000			20	10				ange -2010	
Occupation		lton nship	Antı Cou			ilton nship	Antr Cou			lton nship		rim ınty
	No.	%	No.	%	No.	%	No.	<b>%</b>	No.	%	No.	%
Management, Business, Science & Arts Occupations	274	28.5	2,495	24.9	367	38.7	2,668	28.3	93	33.9	173	6.9
Service Occupations	152	15.8	1,727	17.2	114	12.0	2,026	21.5	-38	-25.0	-299	-17.3
Sales and Office	276	28.7	2,260	22.6	201	21.2	2,073	22.0	-75	-27.2	187	-8.3
Natural Resources Construction & Maintenance	126	13.1	1,370	13.7	177	18.7	1,161	12.3	51	40.5	-209	-15.3
Production, Transportation & Material Moving	133	13.8	2,166	21.6	90	9.5	1,489	15.8	-43	-32.3	-677	-31.3
Total	961	100.0	10,018	100.0	949	100.1	9,417	99.9	-12	-1.2	-601	-6.0

Source: U. S. 2000 Census and 2010 estimate based on 2007-2011 American community Survey - U. S. Census Bureau

#### **Income Measures**

U.S. Census data in Table 3.11 below indicate an increase in median household income (28.9%) in Milton Township from 2000 to 2010. These trends also suggest the inmigration of wealth and/or an overall improvement of the economic climate within Milton Township and Antrim County during the last decade. It should be noted that there was an increase among households with less than \$10,000. In Antrim County the percent of the population living in poverty increased from 8.8% in 2000 to 15.2% in 2010, even though there was 6.6% gain in median income. Michigan fared much worse than the rest of the United States with virtually no gain in median income. Again this is in large part due the recession in the latter part of the decade and associated increase in unemployment. These dollar figures have NOT been adjusted for inflationary factors.

TABLE 3.11 MILTON TOWNSHIP Household Income										
Household Income	2000	2010	Change 2000-2010							
	No.	No.	No.	%						
Less than \$10,000	37	48	9	24.3						
\$10,000 to \$14,999	40	15	-25	-62.5						
\$15,000 to \$24,999	101	81	-20	-19.8						
\$25,000 to \$34,999	119	91	-28	-23.5						
\$35,000 to \$49,999	173	189	16	9.2						
\$50,000 to \$74,999	155	149	-6	-0.4						
\$75,000 to \$99,999	106	156	50	47.2						
\$100,000 to \$149,999	71	120	49	69.0						
\$150,000 or more	53	81	28	52.8						
Total Households	855	930	75	8.8						
Milton Township Median Income	\$44,890	\$57,857		28.9						
Antrim County Median Income	\$39,491	\$42,083		6.6						
Michigan Median Income	\$45,202	\$45,354		0.3						
U. S. Median Income	\$41,186	\$48,340		17.4						

Source: U.S. Census 2000 and 2010.

# **Public Schools**

Milton Township exists entirely within the Elk Rapids School District. The Elk Rapids School District experienced a decrease in the number of students in Kindergarten through 12th Grade during the period of academic school years 2001/02 to 2011/2012 as summarized in Table 3.12 below.

TABLE 3.12 ELK RAPIDS PUBLIC SCHOOLS ENROLLMENT 2001/02-2011/12										
Grades	Grades         2001/02         2011/12         No. Change         % Change									
K through 6 <sup>th</sup>	787	740	-47	-6.0						
7 <sup>th</sup> and 8 <sup>th</sup>	257	207	-50	-19.5						
9 <sup>th</sup> through 12 <sup>th</sup>	482	467	-15	-3.1						
<b>Total Enrollment</b>	1,526	1,414	-112	-7.3						

Source: Northwest Michigan Council of Governments.

# **Housing Measures Total Housing Units/Units in Structures**

Table 3.13 below summarizes housing trends within Milton Township from 2000 to 2010. In Milton Township the number of single-family homes make up 97.6% of all housing units and increased by 23.5% between 2000 and 2010.

	TABLE 3.13 MILTON TOWNSHIP Total Housing Units/Units in Structure											
		20	000			2010				Cha 2000-	nge -2010	
<b>Housing Units</b>	Milt Town No.		Antr Cour No.		Milt Town No.		Antr Cour No.			ilton vnship %	Antı Cou No.	
1-unit, detached	1,498	95.5	12,297	81.5	1,840	97.5	14,681	83.7	342	22.8	2,384	19.4
1-unit, attached	3	0.2	151	11	14	.1	144	0.8	11	366.7	-7	-4.6
2 units	11	0.7	151	1	0	0	188	1.1	-11	-100.0	37	24.5
3 or 4 units	3	0.2	182	1.2	0	0	328	1.9	-3	-100.0	146	80.2
5 to 9 units	0	0	286	1.9	0	0	352	2.0	0	0	66	23.1
10 to 19 units	0	0	176	1.2	0	0	90	0.5	0	0	-86	-48.9
20 or more units	0	0	56	0.4	0	0	44	0.2	0	0	-12	-21.4
Mobile Homes	50	3.2	1,655	11	25	1.3	1,702	9.7	-25	-50.0	47	2.8
Boat, RV, van, etc.	4	0.3	136	0.9	8	0	17	0.1	4	100.0	-119	-87.5
Totals	1,569	100	15,090	100	1,887	100	17,546	100	318	20.3%	2,456	16.3

Source: 2000 and 2010 U.S. Census

### **Year Structure Built**

Table 3.14 below summarizes the age of housing within Milton Township. The data indicates that one-third of the housing units in Milton Township was constructed between 1980 and 2000-631 units. This corresponds well with the population growth depicted in Table 3.14 above. The recession during the latter part of the decade between 2000 and 2010 had a negative impact on the construction of new housing units.

TABLE 3.14 MILTON TOWNSHIP Total Housing Units - Years Structure Built										
Years structure Built	No.	%								
2000 – 2009	135	7.2								
1990 – 1999	356	18.9								
1980 – 1989	275	14.6								
1970 – 1979	333	17.6								
1960 – 1969	181	9.6								
1950 – 1959	236	12.5								
1940 – 1949	110	5.8								
1939 and earlier	261	13.8								
Total	1,887	100								

Source: 2010 U.S. Census

# **Housing Market Value**

Table 3.15 below summarizes housing market value within Milton Township during the year 2010. Table 3.15 indicates that there are more homes within the \$300,000 to \$449,000 range during 2010 in Milton Township, followed by the \$200,000 to \$299,000 price range. After adjusting for inflation, the median housing value increased by 19.4% during the decade, even after the impact of the housing crises of 2008 – 2010. It is important to consider the availability of affordable housing within Milton Township. Only 33.6% of housing was valued as less than \$200,000.

TABLE 3.15 MILTON TOWNSHIP Housing Market Value										
	20	000	2	010						
Housing Market Value	(641 Owner Occupied) No.	%	(847 Owner Occupied) No.	%						
Less than \$50,000	12	1.9	10	1.2						
\$50,000 to \$99,999	131	20.4	39	4.6						
\$100,000 to \$149,000	135	21.1	126	14.9						
\$150,000 to \$199,000	72	11.2	110	13.0						
\$200,000 to \$299,000	104	16.2	175	20.7						
\$300,000 to \$449,000	109	17.0	196	23.1						
\$500,000 to \$999,000	78	12.2	140	16.5						
\$1,000,000 or more	0	0	51	6.0						
Median (dollars)	\$177,777		\$272,300							
in 2010 dollars	\$228,109		\$272,300							

Source: 2000 and 2010 U.S. Census

## **Mortgage Status**

Table 3.16 below summarizes the mortgage status of Milton Township residents from 2000 to 2010. Table 3.16 indicates a significant increase in Township and County residents who do not have a mortgage. Of those with mortgages, there is a substantial increase of mortgages above \$1,500 per month (187%). This suggests that new housing stock is relatively more expensive. These trends will have been seriously ameliorated through 2012, because of the recession beginning in 2007/08 and the subsequent fall in average home values and the shift to very low mortgage rates.

TABLE 3.16 MILTON TOWNSHIP												
		N	Aortgage					er Costs	6			
			00			20				Change 2000-2010		
		Milton Antrim Township County No. % No. %		Milt Town No.		Antr Cour No.			ilton vnship %	Antrim County No.   %		
With Mortgage	396	61.8	<b>No.</b> 3,190	61.2	481	56.8	5,318	62.5	85	21.5	2,128	66.7
Less than \$300	2	0.3	24	0.5	0	0	6	0	-2	-100.0	-18	-75.0
\$300 to \$499	40	6.2	3,38	6.5	8	0.1	162	1.9	-32	-80.0	-176	-52.1
\$500 to \$699	38	5.9	781	15.0	19	2.2	425	5.0	-19	-50.0	-356	-45.6
\$700 to \$999	111	17.3	1,017	19.5	33	3.8	1,220	14.3	-78	-70.1	203	20.0
\$1,000 to \$1,499	107	16.7	656	12.6	142	16.8	1,911	22.5	35	32.7	1,255	191.3
\$1,500 to \$1,999	63	9.8	212	4.1	118	13.9	799	9.4	55	87.3	587	276.9
\$2,000 or more	35	5.5	162	3.1	161	19.0	795	9.3	126	360.0	633	390.7
Monthly Median (dollars)	1,026		816		1,613		1,198		587	57.2	382	37.2
in 2000 dollars	1,313		1,044		1,613		1,198		300	22.8	154	14.8
Not Mortgaged	245	38.2	2,019		366	43.2	3,192		121	49.4	1,173	58.1

Source: 2000 and 2010 U.S. Census

Note: percentages are of total owner occupied homes.

### Year Householder Moved into Unit

Table 3.17 below summarizes when Milton Township householders moved into homes occupied within the Township in 2010. Table 3.17 suggests a significant in-migration of new homeowners since 2000 (368 or 39.6%), although not as many as during 1990 – 1999. Some 43.1 percent of those in 2000 who reported moving into a unit in the decade of the 1990s either left the Township or relocated within the Township.

TABLE 3.17 MILTON TOWNSHIP Year Householder Moved Into Unit											
		20	00			20	10				
	Milton T	ownship	Antrim	County	Milton T	ownship	Antrim	County			
	No.	%	No.	%	No.	%	No.	%			
Occupied Housing Units	863	100	9,222	100	930	100	10,043	100			
2000- 2009	NA	NA	NA	NA	368	39.6	4,605	45.9			
1990-1999	497	57.6	5,758	62.4	283	30.4	3,024	30.1			
1980-1989	190	22.0	1,695	18.4	112	12.0	1,237	12.3			
1970-1979	129	14.9	1,020	11.1	99	10.6	732	7.3			
1969 or earlier	47	5.4	749	8.1	68	7.3	445	4.4			

Source: 2000 and 2010 U.S. Census

N/A = Not available.

#### **Gross Rent**

Table 3.18 below summarizes trends in overall permanent housing rental costs within Milton Township from 2000 to 2010. The number of rental unites increased from 47 to 83 between 2000 and 2010. The 83 rental units represent 8.9% of all housing units in the Township in 2010. Note that 33 of the occupants of the 83 rental units do not pay cash rent. Table 3.18 indicates a general rise in housing rental costs within the Township. These data also suggest that the monthly cost of rental units in the Township were a better value in 2010 than 2000 (down 14.1%, adjusted for 2010 dollars).

	TABLE 3.18 MILTON TOWNSHIP Gross Rent												
		2	000			20	010		Change 2000-2010				
		lton nship	Antı Cou			Milton Township		Antrim County		Milton Township		Antrim County	
	No.	<b>%</b>	No.	<b>%</b>	No.	<b>%</b>	No.	<b>%</b>	No.	%	No.	%	
Specified Renter- Occupied Housing Units	47	100	1,281	100	83	100	1,553	100	36	76.6	272	21.2	
Less than \$200	0	0.0	32	2.5	0	0	34	2.2	0	0	2	6.3	
\$200 to \$299	0	0.0	75	5.9	0	0	53	3.4	0	0	-22	-29.3	
\$300 to \$499	18	38.3	564	44.0	22	26.5	273	17.6	4	22.2	-291	-51.6	
\$500 to \$749	15	31.9	340	26.5	16	19.3	514	33.1	1	6.7	174	51.2	
\$750 to \$999	2	4.3	80	6.2	0	0	354	22.8	-2	-100	274	342.5	
\$1,000 to \$1,499	2	4.3	24	1.9	12	14.4	82	5.3	10	500	58	241.7	
\$1,500 or more	0	0.0	3	0.2		0	11	0	0	0	8	266.7	
No cash rent	10	21.3	163	12.7	33	39.8	232	14.9	23	230	69	42.3	
Median (dollars)	504		460		609		663		105	20.8	203	44.1	
in 2000 dollars	709		589		609		663		-100	-14.1	74	12.6	

Source: 2000 and 2010 U.S. Census

# Gross Rent as a Percentage of Household Income in 2010

Table 3.19 below summarizes trends in overall permanent housing rental costs as compared within renters' income in 2010. Table 3.19 indicates a significant decrease in housing rental costs within the Township, as compared to renters' income. In 2010 there were no renters whose rent was 25% or more of their income. This compares to 53.7% of Antrim County renters whose rent was 24% or more of their income. It should be noted that the relatively low number of overall renters in the Township might significantly skew these findings as a result of small changes in renter status.

TABLE 3.19 MILTON TOWNSHIP Gross Rent as a Percentage of Household Income in 2010												
		20	000		20	10				nge -2010		
		lton nship	Antı Cou			lton nship		Antrim County		ilton vnship		trim inty
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 15%	6	12.8	2,133	40.9	38	45.8	188	12.1	32	533.3	1945	-91.1
15% to 19.9%	4	8.5	862	16.5	0	0	178	11.5	-4	-100.0	-684	-79.5
20% to 24.9%	2	4.3	636	12.2	12	14.5	123	8.0	10	500.0	-513	-80.7
25% to 29.9%	8	17.0	429	8.2	0	0	119	7.7	-8	-100.0	-310	-72.3
30% to 34.9%	2	4.3	325	6.2	0	0	120	7.8	-2	-100.0	-205	-63.1
35% or more	15	31.9	785	15.1	0	0	593	38.2	-15	-100.0	-192	-24.5
Not computed/ No Cash Rent	10	21.3	39	0.7	33	39.7	232	14.9	23	230.0	193	494.9

Source: 2000 and 2010 U.S. Census

Percentages are of total including "Not computed" / "No Cash Rent"

#### **Summary of Findings**

This section of the Master Plan provides a description of the community by analyzing and summarizing the demographic composition of Milton Township. The overall population grew by 6.4%, from 2000 to 2010 to 2,204 people. This is significantly less than that projected in the 2006 Township Master Plan. The fastest growing age group in Milton Township between 2000 and 2010 is seniors (aged 65 and over). The number of persons per household in Milton Township has decreased from 2.51 in 1990 to 2.31 in 2010. While the Milton Township population has increased 73.4% since 1980, the greatest increase was in the 1990s. Population increases throughout Antrim County are the result of new in-migration, as opposed to new births. The population of Milton Township is expected to increase to 2,336 people by 2020 and 2,468 by 2030.

The racial composition of Milton Township is predominantly white, with North American Indian and Hispanic as the only other races present at greater than 2% of the Township's population. Milton Township has a significant proportion of households indicated as seasonal at 48.9%. With the onset and continuation of the retirement of the baby boomer segment of the population, Milton Township will likely see an increased conversion of seasonal to permanent housing and residences in future years. As lakefront properties are nearly fully developed, older housing stock on lakes and rivers will be razed and replaced with new structures. Median household income in Milton Township increased by 28.9% to \$57,857 a much greater increase than the United States, Michigan and Antrim County. In spite of the downturn in housing values nationally, the median housing value in Milton Township rose by 19.4% between 2000 and 2010.

# **Chapter 4: LAND USE/LAND COVER**

#### Introduction

The following discussion addresses changes in land use and land cover in Milton Township. A *land use* is the type of human activity that takes place on a developed parcel such as: residential; multiple-family; commercial; agricultural; industrial; or other. *Land cover* refers mostly to the type of vegetation as interpreted from aerial photographs. Some land cover categories include: agriculture (active); upland forest; upland field (i.e. inactive agricultural land); open water; wetland; barren; and urban/built-up (typically residential, but also consisting of the lack of other land cover categories).

Generally, *land use* characterizes human activities while *land cover* provides a general picture of the effect of human activities on the land, along with resources and vegetation. It is recognized that overlap exists occasionally between *land use* and *land cover* when examining changes over time. When planning for the future, each land use and/or natural resource requires unique public services and special consideration. For example, the removal of trees and vegetation for a golf course or housing development requires the implementation of effective storm water control. A cumulative effect of land use/land cover changes can be tracked and analyzed to project future community needs and land use policies.

# **Land Cover Analysis**

The tendency for increased shoreline development is apparent, along with an increase in inland residential structures.

Residential development has nearly filled in buildable land along the shorelines of inland lakes and Lake Michigan in Milton Township, with second tier shoreline development observed in many locations. As the Township's population grows, it is expected there will be a greater demand for land for residential development within second tier shoreline areas, along ridgelines with water views, and along most county roads, resulting in the conversion of shoreline areas, ridges and hillsides, farms, and forests.

Commercial uses, as well as residential uses, are clustered around and north of Kewadin; compactly clustered within lower, gently sloping areas within the Torch River Bridge area, and at scattered locations north of Kewadin and near the U.S. 31 Highway corridor. Most public lands and uses are found in the vicinity of Kewadin, especially adjoining the Milton Township Hall, and within the Torch River Bridge area at or near water resources.

With buildable shoreline lots filling in along with second tier lake view and ridge lines Milton soon began to feel development pressure further inland. Planned Unit Developments and Site Condo/Subdivision created over 222 residential lots on the Agriculture and Upland Field/Forest parcels. With the economic downturn toward the end of 2007 to 2012 many of the PUD's and Site Condo developments fell on hard times reverting back into one parcel of upland field and forests.

#### LAND VALUATION/PARCEL ANALYSIS

#### Introduction

This section looks at building permit activity, state equalized value, parcel counts, and parcel sizes in Milton Township, as compared with neighboring townships and Antrim County.

# **State Equalized Value**

State Equalized Value or "SEV" is a measure of the dollar value of land. The SEV figure represents one-half of a property's fair market value at a given time. SEV values can also be used to compare the degree to which communities are developing, and for tracking land values and taxation rates as properties are improved, bought, and sold.

# TABLE 4.1 SEV TREND ANALYSIS ANTRIM COUNTY LAKESHORE TOWNSHIPS

State Equalized Values By Year (in U.S. dollars)

Township	2003	2007	2009	2012	2003-2012 % Change
Milton	352,612,600	472,173,700	461,554,769	355,605,600	+ .848 %
Banks	109,504,490	152,910,840	143,297,950	108,523,200	896 %
Central Lake	159,111,350	213,006,000	204,157,250	147,555,100	- 7.26 %
Torch Lake	282,826,000	371,296,900	348,258,200	278,821,100	- 1.41%
Forest Home	237,200,800	314,073,700	301,062,900	228,409,750	- 3.70 %
Elk Rapids	268,135,800	375,352,100	334,023,800	284,879,400	+ 6.24 %
Helena	139,148,450	188,234,200	188,221,350	146,636,800	+ 5.38%
Kearney	156,195,900	194,444,900	191,789,800	136,114,800	- 20.08 %
Echo	44,560,540	60,044,150	59,485,700	39,582,000	- 11.17 %
Antrim County	2,102,857,925	2,795,898,327	2,649,883,269	2,037,887,950	- 3.08 %

Source: Milton Township Assessor and Antrim County Equalization.

Table 4.1 indicates several trends. From 2003 to 2007, the steady increase in Township SEV was also reflected in the County SEV. Between 2007 and 2012 the SEV started to mirror the poor state of the economy, housing crises, foreclosures and high unemployment. Home values were dropping so much that by 2012 Elk Rapids, Helena and Milton were the only Township's showing a small increase in Total SEV since 2003. All other Township's experienced a loss in SEV, with Kearney being hardest hit at – 20.08% and Antrim County losing 3.08% of its Total SEV.

#### **Parcel Counts**

When examining land use patterns within a political jurisdiction over time, a trend may be observed by which large land parcels are gradually divided and/or developed into smaller parcels. New parcels are created by decisions made by landowners pursuant to Michigan's land division, platting, site condominium, and/or planned unit development (PUD) laws. The comparison of parcels over time within a township can be instructive in revealing trends in the conversion and eventual development of farm, field and forestlands.

Table 4.2 indicates measures of change in the total number of Milton Township real properties, and represents the change in the number of parcels from 2003 to 2012. Between 2003 and 2007 Milton Township experienced a major increase in the number of real properties with the development of Site Condo/Subdivisions and PUD's. With the housing crises/foreclosures and poor economy, developments fell upon hard times, some even withdrawing their subdivision status. The multi lot development reverted back to a single parcel resulting in the drop in real property between 2007 and 2012.

	TABLE 4.2 MILTON TOWNHIP Total Real Properties				
Year 2003         Year 2007         Year 2012         Number Change 2003 to 2012					
2,575	2,919	2,873	+298		
	Total Personal Properties				
Year 2003 Year 2012 Number Change 2003 to 2012					
37		46	+9		

Source: Antrim County Equalization Department.

The term "personal property" is used here synonymously with "business." As summarized in Table 4.2 above, Milton Township assessment records indicate that in 2012, thirty-four (34) of the properties recorded as personal were actually businesses, while the remaining nine (9) were utilities, including gas, telephone, electric, radio and internet along with three (3) industrial.

#### **Parcel Size**

Parcel information has been digitally recorded for Milton Township since 2001. Table 4.3 compares the size of parcels in the year 2004 with parcel sizes in 2012. Data from 2004 to 2012 show that an additional 223 parcels were created within Milton Township from "parent" parcels. As development pressures started to decrease after 2007 the major increase in parcel size was in the 5 to 10 acre parcels as the 40 acres and greater remained the same.

TABLE 4.3 MILTON TOWNSHIP PARCEL SIZE ANALYSIS				
Parcel Size Range in Acres   Year 2004   Year 2012   % Change				
0.0 to 0.99 acre	1,458	1,587	+ 8.84 %	
1.0 to 4.99 acres	739	822	+ 11.23 %	
5.0 to 9.99 acres	118	135	+ 14.40 %	
10.0 to 19.99 acres	140	141	+ .714 %	
20.0 to 39.99 acres	107	100	- 6.54 %	
40.0 and greater acres 113 113 0 %				
Total Number of Parcels	2,675	2,898	+ 8.33 %	

Source: Antrim County Equalization Department.

#### **Building Permit Activity**

Table 4.4 shows the number of building permits issued between the years 2006 to 2012. Building permits are required for new construction, additions, alterations, structures or structural changes, foundations but may also include window replacement, re-roof and interior alterations.

BUILDI	TABLE 4.4 BUILDING PERMITS ISSUED BY ANTRIM COUNTY FOR MILTON TOWNSHIP		
Year	<b>Building Permits Issued</b>	All New Dwellings	
2006	110	32	
2007	72	11	
2008	52	11	
2009	48	6	
2010	46	7	
2011	51	9	
2012	42	6	

Source: Antrim County Building Department.

#### **Land Use Permit Activity**

Table 4.5 shows the number of land use permits issued between the years 2006 and 2012. Land use permits are required for excavation for any new construction, addition, alteration or any new structure or structural change. According to this information, the number of land use permits issued annually in Milton Township mirrored the rapid drop in building permits as well as new dwellings.

	TABLE 4.5 MILTON TOWNSHIP LAND USE PERMITS ISSUED			
Year	<b>Land Use Permits Issued</b>	All New Dwellings		
2007	60	11		
2008	50	11		
2009	31	6		
2010	32	7		
2011	45	9		
2012	27	6		

Source: Milton Township Zoning Administrator.

#### **Summary of Findings**

From the above analysis, it is concluded that between 2007 and 2012 a rapid decline in building permits, residential development and housing values was being felt within Milton Township. Building and land use permits, as measures of growth, indicate that permits issued annually by the Antrim County Building Inspection Department and the Milton Township Zoning Administrator for new structures, remodeling, etc. have declined by over 50% since 2006. SEVs also indicate a significant drop in land values within Milton Township and nearby lakeshore townships. This trend is interpreted to be primarily due to the poor economy of the times with high unemployment, housing crises, drop in the stock market and increase in home foreclosures.

#### **Chapter 5: NATURAL RESOURCE INVENTORY**

#### **General Characteristics**

Milton Township is 25.8 square miles in size, and irregular in shape due to its setting nestled between Torch Lake, Torch River, Lake Skegemog, Elk Lake, and Lake Michigan. The Township's natural resource base is comprised of rolling agricultural lands, beautiful hardwood and coniferous forest stands, wetlands, and highly valued shorelines. This natural resource base and the Township's water quality are central to the definition of community and quality of life within Milton Township. People are naturally attracted to these areas, yet development if unguided may erode and degrade this resource base.

Historically, Milton Township was extensively forested, and these forests were used for timber production and clearing land for farming. At that time, the Antrim Chain-of-Lakes and Lake Michigan served as the primary sources of transportation, food, and other needs. Milton Township's natural resources still hold special attraction today.

Throughout northern lower Michigan and beyond, the population of cities is decreasing and rural areas are growing at least partly because people want to be "closer to nature." Some argue that we are beginning to "love rural communities to death" in some parts of Michigan. Population migration in Antrim County is no different, with the most populated townships being located on inland lakeshores and/or Lake Michigan, according to the 2010 Census. As population grows, conflicts between people surrounding future land use and its potential impact on Milton Township's natural resource base are likely to increase. In turn these trends can threaten Milton Township's rural character, rich with rolling farmland, mature woodlands, exquisite water resources, and spectacular views.

During 2003 and 2004 Milton Township undertook public input sessions and conducted a survey of property owners to gather opinions to inform the process of updating the Township's master plan. Results of these methods indicate that Township respondents place a high degree of importance on the protection of natural resources including: water quality, steep slopes, wetlands, farmlands, forests, and wildlife. Concerning other related natural resource questions, survey results from respondents were typified by:

- A majority of respondents feel that rural character or "open space" within the Township is comprised of views of farms and forests, and views of inland lakes and Lake Michigan.
- Most respondents either agree or strongly agree that Milton Township should address the following issues: conversion of farmland to non-farming uses; controlling the expansion of Kewadin and Torch River areas; directing future development to areas served or to be served by public sewer and/or water; establishing a point-of-sale septic inspection program; water quality protection; and forest and farm conservation.

The natural resource base of Milton Township is discussed below to document its location, quality, and special features. A summary of perceived threats to Milton

Township's resource base is provided for each natural resource category.

Natural areas not only provide us with economic opportunity, but they provide other important values such as scenic views and inspiration, wildlife habitat, and providing clean air to breathe and pure water to drink. These areas also provide enormous recreational opportunities, and thereby are important future economic resources within Milton Township. Specifically, such areas are used for economic pursuits such as water-based recreation, farming, forestry, hunting, and tourism. Retention of an intact natural resource base within Milton Township is not only necessary for aesthetic considerations, but for the protection of the public health, safety, and general welfare. Future development of the Township should be carefully guided to fit into and not significantly adversely impact the Township's water quality, rural character, and natural resource base identified in this chapter. This plan identifies: 1) significant natural and cultural features; 2) areas that exhibit limitations for development; and 3) land that is or may be appropriate for guided future development.

#### **Surface Water Resources**

Milton Township is blessed with some of the most impressive surface water resources in the State of Michigan and the nation. Lake Michigan forms the Township's northwestern boundary, Torch Lake and Torch River form the Township's eastern boundary, and Elk and Skegemog Lakes form the Township's south-southwest boundary. The Township has over 3 miles of frontage on Lake Michigan, about 12 miles along Torch Lake, approximately 7 miles of Elk Lake shoreline, about 2.5 miles of frontage along Skegemog Lake, all primarily residentially developed and generally accessible by County Roads. There are several small streams within the interior of the Township, but Torch River is the only major river within its boundaries. "Perennial" or permanent streams flow from Mud and Maplehurst lakes (originally called High Lake). Lake frontage property within the Township is highly valued for its scenic beauty, panoramic views, potential for home construction, and access to large interconnected water bodies for recreational opportunities.

#### **Threats to Surface Water Resources**

Surface waters and shorelines can be degraded by: 1) deposition from erosion; 2) algae growth enhanced by nutrients from leaching septic systems and/or from over application of fertilizers; 3) filling or alteration of lakefront wetlands; 4) increased loss of native shoreline vegetation, especially for wildlife habitat and water quality protection; and 5) increased storm water runoff from impervious or sealed surfaces, roof tops, driveways, parking areas, and/or manipulated landscapes.

Historically there have been many homes constructed on the shorelines of inland lakes and Lake Michigan in Milton Township. Generally, few undeveloped shoreline parcels remain with enough buildable space to easily accommodate future residential development. A recent trend on the shoreline is to replace or significantly remodel smaller shoreline cottages with larger homes, and/or to seek to locate home sites on steep

\_

<sup>&</sup>lt;sup>9</sup> Shoreline surveys suggest that parcels surrounding Torch and Elk Lakes are over 90+% developed (excluding conserved parcels).

slopes leading to the water's edge. Homes being built today are generally much larger than the seasonal cottages once common in these areas. Future shoreline residential and/or changes in commercial uses can be categorized as a potential threat to water quality within Milton Township.

#### **Geologic and Topographic Setting**

Topography refers to the elevations, relief features, and surface conditions of a geographic area. For the purpose of this chapter, steep slopes refer to hills of 18% (10.2°) slope or greater. Slope is defined as rise in elevation over "run" in lineal feet. Subsurface "hydrogeology" is defined as the science of how water is distributed throughout the soil and rocks under the Earth's surface.

A significant series of glacial ridges exists along the western shore of Torch Lake and Torch River, and within the interior of the southern tip within Milton Township. These ridges exist up to 200 feet above Torch Lake's maintained water level of approximately 590 feet above mean sea level, and in some instances steep ridges are located at or within a few hundred feet of Torch Lake. Similarly, long tear-drop shaped hill landforms known as glacial "drumlins" exist within northern portions of the Township. These features were formed by the work of ice and water during the last glacial age—the Wisconsinan approximately 14,000 years before present. During glacial advances "till" (a relatively even mix of unsorted sand, silts and gravels) was laid down beneath (forming drumlins) and along ice fronts (forming glacial ridges known as "moraines"). During the waning of this glacial period, ice up to two miles in thickness periodically covered what is now Milton Township and blocked Lake Michigan's discharge through the Straits of Mackinac, while contributing huge amounts of melt water into the ancient Lake Michigan basin. The closing off of Lake Michigan's discharge through the Straits of Mackinac backed up waters within the basin, periodically forcing the cutting of new discharge outlets through present-day Chicago, Illinois and North Bay, Ontario. Importantly, Lake Michigan and therefore Torch Lake, Torch River and Elk Lake's water levels varied dramatically (up to 60 feet higher and 15 feet lower than today's average Lake Michigan level at 580 feet above mean sea level) with advancing and receding glaciers during this period. At higher lake levels periods, Torch Lake was connected to and considered an embayment of Lake Michigan, much like East and West Grand Traverse Bays today. Also during these ancient high lake levels, the bluff along Milton Township's eastern margin were periodically wave-cut, resulting in the undermining of the bluff face and formation of extremely steep-and eventually forested-slope faces. Table 5.1 below summarizes ancient levels of Lake Michigan and the lower Antrim Chain-of-Lakes during the Wisconsin glacial age.

	TABLE 5.1				
	ANCIENT LAKE LEVELS OF LAKE MICHIGAN				
	DURING TH	HE MOST RECEN	T GLACIAL AGE		
Years Before Present	Lake Michigan Stage	Lake Level (above mean sea level in feet)	Comparison to Modern Lake Michigan (~580 feet)	Comments	
3,500	Algoma	595 feet	+15 feet	Present discharge outlets	
3,500 – 4,500	Nipissing	605 feet	+25 feet	Outlets at Chicago and North Bay, Ontario	
9,500	Chippewa	230 feet	-350 feet	Outlet down cut at North Bay, Ontario	
10,000 – 11,500	Algonquin	605 feet	+25 feet	Valders ice re-advance, outlet at Chicago	
11,850	Keweenaw/Kirkfield	565 feet	-15 feet	Outlet at North Bay, Ontario	
12,000	Early Algonquin	605 feet	+25 feet	Outlets at Chicago and North Bay, Ontario	
12,250	Calumet	620 feet	+40 feet	Outlet through Chicago	
13,000 – 13,500	Glenwood I & II	640 feet	+60 feet	Outlet through Chicago Pt. Huron moraine formed.	

Source: Dorr, John A., Jr. and Donald F. Eschman, <u>Geology of Michigan</u>, The University of Michigan Press, Ann Arbor, 2001 reprint.

Along the Lake Michigan shoreline there are no State-designated critical sand dune areas, unlike other areas of Torch Lake Township to the north. However, the entire Lake Michigan shoreline within Milton Townships is designated as a high risk erosion area by the Michigan Department of Environmental Quality.

Another important consideration of these glacial ridge features is groundwater (or the sub-surface hydrology). As a result of the presence of highly porous and highly permeable surface soils in the area, many portions of Milton Township possesses relatively few surface water features such as small lakes, wetlands, or large rivers. The primary transport route for rainwater and snowmelt is downward by means of infiltration through the soil into the water table or groundwater. There are several permanent small and intermittent streams within Milton Township that are known to sustain flow from Mud and Maplehurst lakes, and draining wetlands and highlands to Torch Lake, Elk Lake or Lake Michigan. In a few locations, intermittent streams or drains exist, then disappearing below the land's surface illustrating the connection between surface and groundwater as a single resource in the area. It is important to consider that periods of increased groundwater discharge from steep slope faces occur following spring snowmelt and high precipitation events. This increase of groundwater discharge along slopes can add weight to and/or lubrication between clay, till, and sandy strata (called inter-grain contacts), and potentially combine to contribute to slope instability and occasionally result in bluff failure or "slumps."

The map–Milton Township Environmentally Sensitive Areas–on page 5-5a illustrates a

number of important environmentally sensitive areas relating to Township topography, soils, shorelines, and wetlands. Blue lines on this map represent both permanent and intermittent streams. Red hatching represents areas with steep slopes of 18% or above. Light green, dark green, orange, dark yellow, pale yellow, and brown areas represent large wetlands of varying types, and the yellow zone represents a shoreline buffer of 100 feet in width along lakeshores.

#### **Other Topographic Township Features**

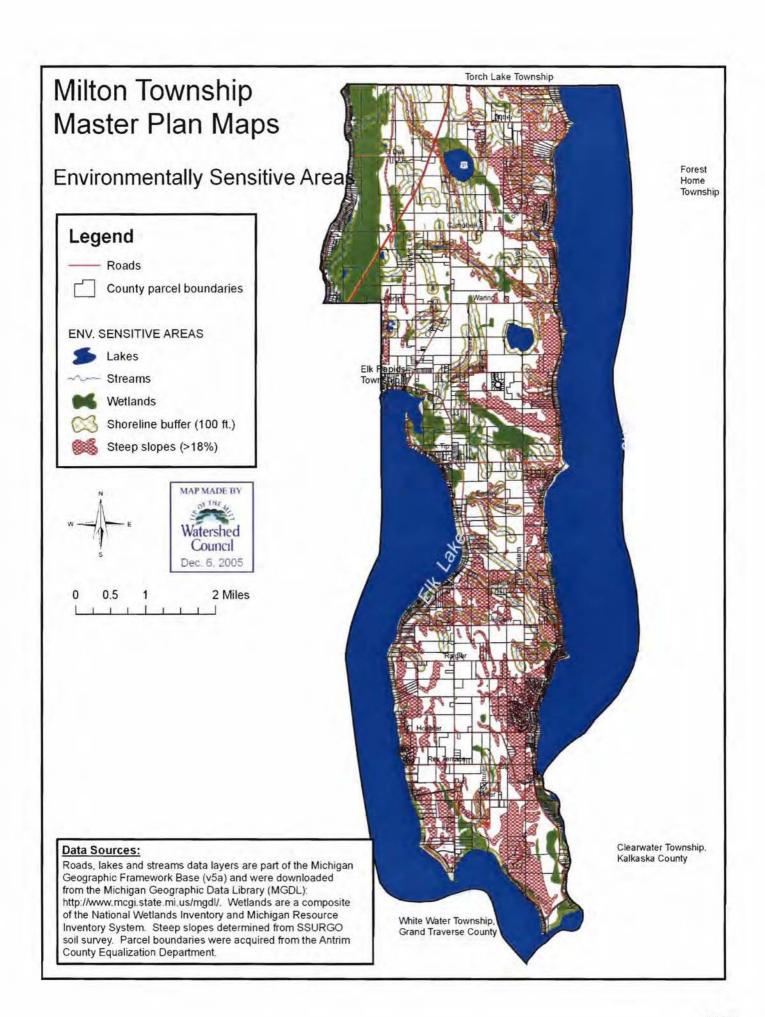
Milton Township also has noteworthy topographic features in the non-lakeshore areas. For example, driving along many roads within Milton Township one experiences its rolling landscape and many panoramic vistas. These hillsides contribute to the striking rolling rural character, exceptional scenic views, and a multitude of recreational opportunities. They are also environmentally sensitive features that can be damaged by inappropriate development, unless good planning principles are undertaken and adhered to. Due to the presence of high quality sands and gravels, Milton Township also possesses several active and inactive sand and gravel extraction operations. Active sand and/or gravel mining operations are currently located near the eastern end of Indian Road in Section 7; two within the Milton Township industrial district north of Kewadin in Section 2; at a property south of Campbell Road, and east of U.S. 31 in Section 35; and within a parcel less than one-half mile west of Campbell and Powell Roads in Section 36. Inactive sand and/or gravel mining sites in Milton Township include: near the middle of Bussa Road in Section 13; at two separate privately-held parcels west-southwest of the Torch River Bridge area in Section 12; and two within the Milton Township industrial park north of Kewadin in Section 2.

A Topographic Map of the Township is provided on page 5-5b. Torch and Elk Lakes' shared mean elevation is approximately 590 feet above sea level. The Township's highest hills rise to over 790 feet above sea level, an increase of 200 feet above the surface of Torch and Elk Lakes. The topography of the remainder of the Township rolls from hill to valley to hill or exist as a series of old shoreline terraces running parallel to the Lake Michigan and Chain-of-Lakes shorelines.

#### **Threats to Other Topographic Township Features**

Topographic features such as those found in Milton Township can be restrictive to development. Generally speaking, level or moderately sloping sites are preferred for home sites and septic fields, as well as commercial and many agricultural uses. Commercial and industrial uses and their driveways and parking lots require flat or nearly level surfaces. Development that occurs on steeper slopes may require specialized storm water and erosion control measures, careful grading, and/or enhanced engineering design.

Disturbance of hillsides can result in the loss of soil stability, leading to increased erosion potential. Removal of vegetation from hillsides deprives the soil of the stabilizing function of roots, as well as the moderating effects leaves and branches have on wind and water erosion. Erosion degrades property values and can impair surface water quality, as well as wetlands, as a result of siltation. Spring thaws and strong rains on unstable slopes can produce mass movements, such as landslides, slumps, and flaws particularly in steep

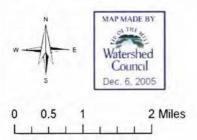


#### Milton Township Master Plan Maps

#### Topography

(10 ft. Contour Intervals)







#### **Data Sources:**

Roads, lakes, streams and contours data layers are part of the Michigan Geographic Framework Base (v5a) and were downloaded from the Michigan Geographic Data Library (MGDL): http://www.mcgi.state.mi.us/mgdl/. County parcel boundaries were acquired from the Antrim County Equalization Department.

areas. Slope disturbance can also increase the rate of storm water runoff, and development may alter the natural drainage patterns of a hillside, increasing runoff and potentially causing erosion. The removal of slope vegetative cover and construction of impervious surfaces in these areas, such as roads and building roofs, can decrease percolation of precipitation into the soil. Loss of the infiltration of precipitation in turn reduces the amount of groundwater recharge, and contributes additional runoff that would ordinarily be absorbed by trees and other vegetation. Accelerated runoff many also contribute to flooding hazards.

Inactive sand and gravel mining operations can leave behind very steep, non-vegetated slopes susceptible to erosion and/or slumps. Milton Township encourages the restoration, re-contouring and replanting of inactive sand and gravel extraction sites in accordance with Township-approved site restoration plans to prevent erosion/sedimentation to adjoining properties, public roadways, and waterways, and to protect public safety. Man-made waterbodies from sand and gravel operations should be protected and/or utilized in such a manner as to protect public safety and the environment.

Finally, the disturbance of hillsides can also negatively impact community aesthetic resources. Denuded slopes; significant alteration of site topography; and damage to surface waters, groundwater, and wetlands can result in the loss of valued Milton Township resources and rural character.

#### **Wetland Resources**

Milton Township possesses other important water resources, including wetland areas. Michigan's Part 303: Wetland Protection Act, P.A. 451 of 1994, as amended, [MCL 324.30301, *et. seq.*] defines wetlands as "land characterized by the presence of water at a frequency and duration sufficient to support, and under normal conditions does support, wetland vegetation or aquatic life and is commonly referred to as a bog, swamp, or a marsh."

There are generally six (6) large and several smaller wetland areas located in Milton Township, some of which have permanent or intermittent streams running through or discharging from them. The largest wetland complexes exist: west of U.S. 31 along Lake Michigan; northwest and southeast of Mud Lake; along and inland of Elk Lake southeast of Kewadin; southeast of Kewadin and east of Cherry Avenue, and draining to Torch Lake; intermittently along and west of Torch River; and along Skegemog Lake at the southern tip of Milton Township, and east of Chippewa Trail. These important natural resources provide wildlife habitat, protection of drinking water aquifers, the filtration of pollutants from surface water runoff, recreational values, and help in the prevention of flooding. Wetlands are sensitive to alteration, biologically diverse, and are wonderful places to observe plants and animals in their natural habitat. See Milton Township Composite Wetlands Map page 5-6a, for wetland locations and permanent and intermittent streams located in Milton Township.<sup>10</sup>

.

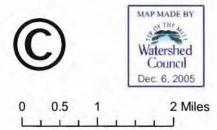
<sup>&</sup>lt;sup>10</sup> Special Wetland Area Management Project (SWAMP), Composite Wetland Area and Base Map Data (Projection State Plan NAD83, Feet) Northwest Michigan Council of Governments, April 9, 2001.

#### Milton Township Master Plan Maps

Wetlands: Composite of MIRIS NWI and SSURGO

(Michigan Resource Inventory System; National Wetland Inventory; US Conservation Service Soil Survey)

# Legend Roads Streams Parcel boundaries Lakes WETLAND VEGETATION TYPE Aquatic Bed Emergent Forested-Coniferous Forested-Dead Forested-Deciduous Forested-Unclassified Open Water/Pond Shrub/Scrub



#### Data Sources:

Roads, lakes and streams data layers are part of the Michigan Geographic Framework Base (v5a) and were downloaded from the Michigan Geographic Data Library (MGDL): http://www.mcgi.state.mi.us/mgdl/. Wetlands data are from the Michigan Resource Inventory System (MIRIS), National Wetlands Inventory (NWI) and the United States Conservation Service Soil Survey (SSURGO). Parcel boundaries were acquired from the Antrim County Equalization Department.



#### **Threats to Wetland Resources**

The Michigan Department of Environmental Quality estimates that over 75 percent of Michigan wetlands are privately-owned. Since European settlement, the contiguous 48 U.S. states are estimated to have lost about 55 percent of their original wetlands, and Michigan has lost over 50 percent (approximately 5,600,000 acres) of its original wetlands. Michigan shoreline and coastal wetlands are particularly at risk to wetland loss; about 70 percent of Michigan shoreline wetlands have been destroyed since European settlement.<sup>11</sup>

According the *Michigan Natural Resources Inventory Wetland Trends* report, Antrim County circa 1830 possessed approximately 30,000 acres of wetlands, or 9% of the county land surface. Importantly, about 90% of the original wetland resource base within Antrim County consisted of conifer swamp, with mixed conifer and cedar swamp being the prevalent wetland types. Comparison with existing MiRIS land cover data indicates a net wetland loss of roughly 3,630 acres or 11% of Antrim County wetlands since European American settlement. Most historic wetland losses in the County are attributed to agricultural drainage and urban development along Antrim County's Lake Michigan shoreline. Importantly, of original Antrim County wetlands, it is estimated that 60% of the conifer swamp has been lost through conversion to lowland hardwood swamp. <sup>12</sup> Due to past and current over-browsing by whitetail deer, the natural restoration of original conifer swamp is considered unlikely.

Impacts from human activity and development can be highly threatening to wetland ecosystems. Care must be taken to ensure an adequate balance of water and nutrient inputs and buffers to wetland environments. Even extensive foot traffic or subtle changes in water level or chemistry can irreversibly degrade a bog or other wetland type.

Development of land near or hydrologically connected to wetlands are encouraged to use best management practices. These practices include ensuring adequate groundwater and surface water supply and quality, which can be accomplished by requiring hydrogeologic investigation of proposed land uses, combined with innovative on-site storm water treatment and disposal techniques. These techniques also include utilizing "green" technologies such as vegetative "treatment trains," and storm water infiltration structures (swales, rain gardens, etc.) to ensure that wetland functions remain intact.

#### **Groundwater Resources**

Groundwater refers to water below the surface of the Earth (called the water table or "aquifers") trapped beneath layers of soil and bedrock. Importantly, groundwater is the sole source of drinking water for residents within Milton Township. Currently, there are no public water sources in the Township. Groundwater is susceptible to contamination through human activities, including certain land use activities.

<sup>&</sup>lt;sup>11</sup> Wil Cwikiel, *Living With Michigan's Wetlands: A Landowner's Guide*, Tip of the Mitt Watershed Council, 1996, pp. 1-3.

<sup>&</sup>lt;sup>12</sup> Wetland Trends in Michigan Since 1800: A Preliminary Report, Michigan Natural Features Inventory, #1996-03, June 1996, p. 45. Report methods are based upon the comparison of the original surveyor's notes with recent MIRIS land cover analyses.

There are many locations in Milton Township where the aquifers of choice that supply drinking water are relatively deep, i.e. up to 500 feet below the ground surface. Shallower groundwater wells in Milton Township likely extract groundwater from "perched" layers of sand and/or gravel lying above low permeability clays or till. Wells within these shallow or perched aquifers are especially susceptible to contamination from activities at the land surface.

#### **Threats to Groundwater Resources**

Increasingly communities within Michigan are facing groundwater disputes between landowners and/or proposals for large quantity groundwater extraction operations, e.g. irrigation systems, mineral extraction, and/or water bottling. Milton Township planners believe that sufficient scientific study (i.e. hydrogeological and soils investigation, pump tests, irrigation plans, etc.) and comprehensive land use planning (i.e. special use permit, impact statements, site plan review, etc.) should be required prior to the approval of large quantity groundwater extraction proposals to protect nearby private properties (well water and future groundwater use), sensitive natural features (i.e. springs, wetlands, etc.), and waterbodies (i.e. rivers, creeks, ponds, and lakes, etc.).

Milton Township is currently the location of significant oil and natural gas exploration or development. Milton Township's neighboring communities possess numerous mineral extraction wells, pipelines, collection and/or processing facilities, etc. Milton Township planners recognize that oil and gas exploration and/or development represent threats to groundwater and the environment from the handling and disposal of well cuttings and brine, including pits and deep well injection; potential spills at processing and collection plants, pipelines and during transport; etc. Milton Township encourages proper mineral extraction facility operation and maintenance; appropriate by-product and waste handling and disposal; proper well abandonment; and site restoration in accordance with State law.

Septic systems can also be a source of contamination to groundwater resources, and must be sufficiently separated from drinking water. Furthermore, abandoned agricultural or residential wells should be plugged to prevent aquifer contamination. There are no estimates available of the number of abandoned water wells within Milton Township. Gas stations, auto repair/boat maintenance, dry cleaners, photographic labs, salvage yards, and hair salons are examples of commercial land uses that are potentially hazardous to groundwater due to the nature of chemicals routinely used and the potential for disposal within septic systems. Special care must be taken to prevent accidental spills or the mishandling of chemicals at businesses or other properties that are serviced by private wells and septic systems.

The over-application, accidental spillage, or improper storage of fertilizers, fungicides, pesticides, and herbicides can also represent potential sources of groundwater and surface water pollution. Due to these facts and the hydrogeologic setting of Milton Township, integrated turf grass management, chemical storage and application management, wildlife management, spill prevention and pollution incident planning, and groundwater and surface water monitoring practices are strongly encouraged at future golf courses, if any, within Milton Township.

Significant tree removal, large areas of soil disturbance, and construction (including septic systems) on steep slopes associated with golf course, planned unit and other residential development are similarly of concern in Milton Township.

Individual homes can also be sources of groundwater contamination. Potential contaminants associated with these land uses include the use, storage, and disposal of garden chemicals, paints, solvents, and many household cleaners. Auto, recreational vehicle, boat, and equipment maintenance can also cause unnoticed pollution and groundwater contamination. Milton Township residents and others have the responsibility to properly handle products in accordance with labeling, and to safely dispose of household hazardous products. Township residents are encouraged to utilize composting, water conservation, organic fertilization, and integrated pest management, as well as nontoxic household products to prevent groundwater and surface water contamination problems before they occur. Residents may call the Antrim County Planning Department to find out when household hazardous waste days are scheduled, and for tips on proper disposal methods for hazardous or potentially hazardous household and agricultural products.

#### Watersheds

People usually identify the place they live based on political jurisdictions, such as villages, cities, townships, or counties. Natural features, however, extend beyond political boundaries. Viewsheds, productive farmland soils, rivers, streams, lakes, and wetlands may cross many political jurisdictions. Planners and residents should consider such natural features and boundaries when making land use decisions in order to protect the natural resource base within Milton Township.

A "watershed" consists of a defined land area within topographic highs, such as ridgelines, within which rain and snowmelt flows down to a common point such as a wetland, lake, river, or stream. Interestingly, residents of the northwest corner of Milton Township are located within the Lake Michigan watershed, while remaining Township residents are located within the Elk River/Antrim Chain-of-Lakes watershed.

Water quality protection is an essential planning element to be cooperatively undertaken within political jurisdictions sharing a common watershed. As the land area included in the Elk River/Chain-of-Lakes watershed is comprised of thousands of acres across several townships and two Counties, it is imperative to remember that land use practices we employ can affect the water resources used by many people - locally as well as far downstream. The cool, clean waters of Torch Lake, Elk Lake, and Lake Michigan and their tributaries are a main contributor to the economy of Milton Township and nearby communities. Consequently, watershed protection is necessary not just for the health and environmental quality of Milton Township, but also for its future economic well-being.

#### **Other Threats to Water Resources**

On a watershed basis, one of the most significant threats to water quality is non-point source pollution. Unlike pollution <u>point sources</u> such as sewage treatment plants, and industrial discharges, etc., pollution from non-point sources is dispersed and includes

runoff of agricultural fertilizer and pesticides; debris and contaminants that collect on impervious surfaces such as roads, walkways, and parking lots; lawn chemicals; and soil erosion and sedimentation

Due to topography and hydrology, Milton Township waters are especially susceptible to non-point pollution sources, and may be addressed as follows:

- Lawn and garden chemicals should be applied strictly in accordance with label directions.
- Used oil, antifreeze, paints, and other household hazardous chemicals should be strictly used in accordance with labeling and disposed of properly at an Antrim County hazardous waste collection event.
- Soil erosion from construction sites should be appropriately controlled. Controls should be maintained in accordance with permits and best management practices. Greenbelts consisting of natural shrub and tree buffers should be retained. Native groundcovers, trees, and shrubs should be retained wherever and whenever possible, and replanted with development. Construction should avoid sensitive areas such as steep slopes, dunes, wetlands, seeps and springs, streams and creek corridors, and groundwater recharge areas.
- Fluids, including battery acid, motor oil, lubricants, fuels, etc., from vehicle, boat, and other equipment maintenance should not be disposed of in septic systems, allowed to drain onto the ground, applied to roads or parking areas for dust control, or washed onto roads. Instead, such hazardous materials should be collected and taken to a disposal and/or recycling center. Milton Township expresses its ongoing interest in promoting, supporting, and participating in Antrim County's hazardous materials, solid waste, and construction waste recycling programs and initiatives.
- Forestry erosion control practices should be required throughout the construction, maintenance, and closure of logging roads and skid trails. Logging activities that do not protect against non-point source pollution should be reported to appropriate county, state, and federal forestry and water quality agencies.
- Septic systems need to maintained and pumped on a periodic basis.
- Litter should be prevented from washing into waterways from roads, road ends, home sites, beaches, boats, and recreational water activities. Nutrients from livestock, pets, and other animal wastes, leaf and organic material composting and other debris, and storm water runoff should be treated on-site, controlled and prevented from flowing directly into lakes, rivers, streams, wetlands, and groundwater recharge areas.

#### Soils

According to the *Antrim County Soil Survey*, there are a variety of soil associations in Milton Township. A soil association is a pattern of soils, normally consisting of a major and one or more minor soil types within an area, and is typically named for the major soil. Each soil type has a characteristic slope, drainage capacity, suitability for construction and septic disposal, water-holding and nutrient filtration capacity, and erosion potential, etc. The examination of soil characteristics is encouraged prior to

development within Milton Township to provide information regarding soil suitability for various land uses. While many soil types are suitable for development, others limit development and may be best suited as conservation areas due to slope, wetness/ponding, flooding, high water table, poor nutrient filtration capacity, etc.

Soils along the Lake Michigan shoreline in the northwest corner of Milton Township are generally sandy, with beaches extending in a narrow ribbon from north to south along Lake Michigan. Loamy to sandy soils exist on glacial outwash plains, ridges, and moraines west of Torch Lake. "Loamy" soils are equal mixes of clays, silts, and sands and are generally considered productive soils. The *Antrim County Soil Survey* indicates "E" slopes of 18% (approximately 10.2°) to 25% (14°) and "F" slopes of 25% (14°) to 60% (31°) in this and many other areas of the Township. These soils are categorized as "very steep" with a much thinner than typical soil profile and a high susceptibility to erosion. Moving from north to south along the Torch Lake shore, steep slopes rise up from the shoreline in prominent ridges.

Soils within a thin strip along Milton Township's shorelines are generally comprised of mucky, loamy and/or sandy soils known as the Tawas-Ensley-Roscommon Association. These soils are generally poorly drained, organic soils within depressions or wetlands. See the Milton Township Soil Associations Map on page 5-11a.

#### **Soil Limitations**

Soils along ridges and bluffs with slopes of 18% (10.2°) and greater are considered highly susceptible to erosion. If vegetative cover is removed, erosion is encouraged and/or debris may be deposited in or near lakes or other waterways—or spill onto adjacent lands. Soil erosion and sedimentation of waterways is a violation of Michigan's Part 91: Soil Erosion and Sedimentation Control Act, P.A. 451 of 1994, as amended. Appropriate care and engineering measures must be utilized and maintained in perpetuity to avoid degradation of the steep slopes and when future shoreline development occurs.

Inland soils of the Emmet-Montcalm association are best suited for recreation and development, as well as farming and pastureland. These are also highly productive soils for growing hardwood forests. According to the Antrim County Soil Survey, only soils with associated slopes of 18% (10.2°) or greater could present limitations for development.

Soils of the Tawas-Ensley-Roscommon series are generally considered unsuitable for development, due to high organic content, low permeability, and excessively wet characteristics. These soils are appropriately managed as conservation areas, woodlands, and wildlife habitat.

#### Fish and Wildlife

Fish and wildlife are abundant in Milton Township. It is common to see whitetail deer, wild turkeys, fox, grouse, raccoons, striped skunk, beaver, partridge, woodcock, red fox, snowshoe hare, squirrels, opossum, eastern cottontail, porcupines, mink, weasels, and coyote in the Township. Residents also express interest in viewing and/or preserving habitat for elusive species such as black bear, bobcat, pine marten, and gray fox.

Fishing on nearby lakes and rivers is an important recreational activity enjoyed by residents and visitors. A private marina is located at Torch River Village in Milton Township, and numerous public access and put-in points for boats exist within the Township. See Chapter 6 for a complete inventory of water accesses within Milton Township. Nearby Elk Rapids possesses a state-owned marina on Lake Michigan. Recreational fishing and the viewing of wildlife are important components of the quality of life in Milton Township. There are several protected birds, plants, and animals that can be found within the Township. A table of protected species existing within Antrim County and current federal and state status follows:<sup>13</sup>

	TABLE 5.2		
	<b>Protected Species In Antrim C</b>	County	
Common Name	State Status	Federal Status	
PLANTS			
Calypso or fairy-slipper	Threatened		
Pitcher's thistle	Threatened	Listed Threatened	
Ram's head lady's slipper	Special Concern		
False-violet	Threatened		
Ginseng	Threatened		
Pine-drops	Threatened		
Lake Huron tansy	Threatened		
ANIMALS			
Eastern massasauga snake	Special Concern		
BIRDS			
Red-shouldered hawk	Threatened		
Northern Goshawk	Special Concern		
Common loon	Threatened		
Bald eagle	Threatened	Threatened in part of US range.	
INSECTS			
Eastern flat-whorl	Special Concern		
Lake Huron locust	Threatened		
THREATENED FEATURES			
Champion Tree	State Champion White Ash		
Devonian earth history			
Drumlin			
Great Lakes marsh			
Open dunes			

<sup>&</sup>lt;sup>13</sup> County Elements List – Antrim County, Michigan Natural Features Inventory, Michigan Sate University Extension, September 1999.

\_

#### Milton Township Master Plan Maps

Soil Types (SSURGO Soil Survey)





0 0.5 1 2 Miles

Torch Lake Township

Forest Home Township

#### Legend

- Roads

Lakes

- Streams

Parcel boundaries

#### SOIL TYPES

AuA = Au Gres sand, loamy substratum, 0 to 4 percent slopes

Be = Bergland-Sims silty clay loams

CbA = Charlevoix Sandy Loam, 0 To 4 Percent Slopes

CdA = Croswell Sand, 0 To 4 Percent Slopes

DeC = Deer Park Sand, 2 To 20 Percent Slopes

DrC = Deer Park-Roscommon Complex, 2 To 20 Percent Slope

EaB = East Lake loamy sand, 0 to 6 percent slopes

EmB = Emmet sandy loam, 2 to 6 percent slopes

EmD = Emmet sandy loam, 12 to 18 percent slopes

EoB = Emmet-Onaway sandy loams, 2 to 6 percent slopes

IoA = Iosco Sand, 0 To 4 Percent Slopes

KeB = Kalkaska-East Lake Complex, 0 To 6 Percent Slopes

KmB = Kalkaska-Montcalm Complex, 0 To 12 Percent Slopes

KmD = Kalkaska-Montcalm Complex, 12 To 40 Percent Slopes

KsA = Kawkawlin Silt Loam, 0 To 3 Percent Slopes

Ps = Pickford Silty Clay Loam

FS - FICKIOID SILLY CIAY LUA

Pt = Gravel Pit

Ro = Roscommon Mucky Sand

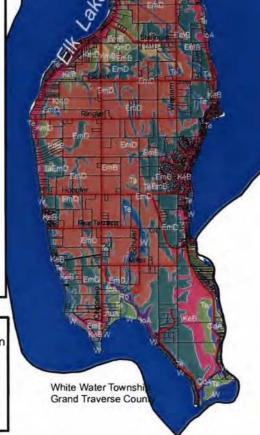
Ta = Tawas muck

Te = Tawas-Ensley Complex

W = Water

#### Data Sources:

Roads, lakes and streams data layers are part of the Michigan Geographic Framework Base (v5a) and were downloaded from the Michigan Geographic Data Library (MGDL): http://www.mcgi.state.mi.us/mgdl/. Soils data are from the SSURGO soil survey and also downloaded from the MGDL. Parcel boundaries were acquired from the Antrim County Equalization Department.



Clearwater Township, Kalkaska County

#### State and Federal Status terms used in Table 5.2 are defined as follows:

**Endangered species** are in danger of extinction throughout all or a significant part of their range (excluding insects that would, according to the Michigan Department of Natural Resources or Secretary of Department of Interior, represent an overwhelming or overriding risk to humans).

**Threatened species** are deemed likely to become an endangered species within the foreseeable future throughout all or in a significant portion of its range.

**Special Concern species,** while not afforded legal protection under the Michigan or federal Endangered Species Acts, are declining or relict populations in Michigan. Includes rare species. Protection now is prudent before they reach dangerously low population levels, and to prevent listing as Threatened or Endangered.

It is important to recognize that hunting, fishing, boating, and the accompanying enjoyment of viewing wildlife in its natural habitat contributes to Milton Township's economy, as well as providing recreational opportunities for residents.

#### Threats to Fish and Wildlife

The largest threats to fish and wildlife within Milton Township are the loss and breaking-up or "fractionalization" of habitat. As rural areas of Milton Township are converted to residential uses, habitat loss and fractionalization are inevitable. Conservation planning and low impact development should include inventorying, mapping, and conservation of existing natural resources, including wildlife habitat. Guiding new development, when it occurs, in a manner that retains large and connected tracts of contiguous open spaces (especially wetlands, shorelines and stream corridors) and forest lands will help to conserve wildlife and wildlife habitat as Milton Township continues to grow.

#### **Forests**

Intact forestlands provide the potential for sustainable timber development, soil erosion and flood control, groundwater recharge, surface water quality improvement and maintenance, wetland and wildlife habitat, aesthetic values and community character, year-round recreational opportunities, noise buffering, climate moderation, and the reduction of air pollution.

According to the U.S. Army Corps of Engineers 1998 Land Cover Analysis, 12.9% of Milton Township's land base (or 4,473.4 acres) was in upland forest in 1998. Upland forestlands were defined as aspen-birch, pine, mixed deciduous and conifer, other upland hardwood, and Christmas trees. This total acreage represented an 8.1% increase (or additional 334.6 acres) from upland forestlands interpreted from 1978 aerial photographs by the Michigan Department of Environmental Quality's (MDEQ) Michigan Resource Inventory Systems (MiRIS). Milton Township residents are encouraged to work with the Antrim County Forester through the Antrim Conservation District and/or qualified private foresters for professional advice in establishing long-term sustainable forest yield plans and implementing other best forest management practices.

#### Threats to Forests

The continued parcelization of private forestlands from large parent parcels to smaller and smaller parcels limits forestland potential for sustainable forest development and ecological values. Private landowners are encouraged to enter into forest management plans to foster sustainable forestry practices and environmental protection. Poorly planned or executed forest resource development can lead to: soil erosion and sedimentation to neighboring lands, streams and wetlands; fragmentation of wildlife habitat and migration corridors; flooding of lakes, adjacent parcels, and public ways; a decrease in nearby land values; and other negative aesthetic impacts. All of which can result in public and private expenditures to prevent and/or remediate damage from poorly planned or indiscriminate forest cutting.

Sustainable forest management and conservation planning should include the inventorying and mapping of existing forest resources. Conserving large and connected tracts of contiguous forestland will help to retain economic, environmental, and aesthetic values as Milton Township continues to grow.

#### **Farmlands**

According to the U.S. Army Corps of Engineers 1998 Land Cover Analysis, 19.9% of Milton Township's land base (or 6,894.5 acres) was in agriculture in 1998. Agricultural land was defined as active cropland, active farmland, permanent pasture or other agriculture. This total acreage represented a loss of 9.2% (or 701.4 acres) from agricultural lands interpreted from 1978 aerial photographs by the MDNR's MiRIS.

#### **Threats to Farmlands**

The Michigan Association of Planning has determined that Antrim County lost over 15% of its farmland from 1982 to 1992. <sup>14</sup> This farmland gain/loss rate is reportedly among the highest in Michigan during this period, and the Michigan Association of Planning considers future farmland loss in Antrim County as "high" when compared to other Michigan counties. <sup>15</sup> Empirical study in Michigan and elsewhere in the Midwest has documented the significant increase in local tax burdens to support rising costs of community services (education, fire, safety, sewer/water, roads, etc.) associated with rapid conversion of farmland to residential uses. "Farming of the fringe" of residential development is often wrought with conflict between generally accepted farming practices (noise, dust, chemical use, odors, hours of operation, etc.), and the typical expectations of newly established residential landowners.

The gradual loss of farm operations within any locale can lead to the loss of nearby farm support businesses and result in the onset of an "impermanence syndrome." Within such an environment, farmers are reluctant to reinvest in farm operations—especially in the face of likely increasing land fragmentation and conflict with encroaching non-farm land uses. This trend has been observed throughout Michigan and the nation, and can lead to the permanent loss/conversion of farmland to residential, commercial, institutional, and other

\_

<sup>&</sup>lt;sup>14</sup> Michigan Association of Planning, *Michigan Trends Future*, *Patterns on the Land: Our Choices – Our Future*, 1995, Map 7, p. 24.

<sup>&</sup>lt;sup>15</sup> *Id.*, Map 25, p. 54.

land uses. In the short run, farm fields may be taken out of production or left fallow, and eventually sold for their highest market value—typically residential development. Farms with highly prized views of Torch Lake and/or Lake Michigan, open fields, and intact forestlands face additional residential development pressure. Moreover, the average age of farmers has never been higher, new farm starts have never been fewer, and the price for many farm products has never been lower in the State of Michigan. The average age of Michigan farmers was 65 in the year 2000. Finally, Michigan remains the only state in the U.S. that taxes agricultural land at its development value, rather than its productive agricultural value. Needed change in Michigan's tax structure regarding farmland will require a new State constitutional convention, and therefore is unlikely to change in the foreseeable future. Meanwhile, Milton Township supports the exploration and establishment of voluntary farmland preservation tools in Antrim County and regionally, such as the purchase of development rights, transfer of development rights, leasing of development rights, farmland conservation easements, well-connected conservation/farmland conservation developments, the promotion of specialty/valuedadded agriculture (i.e., small-scale organic, hydroponics, tree/shrub nursery stock, direct marketing, on-site production, and other specialty crops), and improved local markets for locally-grown agricultural products. Milton Township does not support the establishment of "factory farms" or large confined animal feeding operations in the Township.

#### **Scenic Viewsheds**

A "viewshed" is often used to describe views encompassing multiple directions and varied distances. A 2003 resource inventory within Milton Township as part of this Master Plan update process identified twenty (20) scenic viewsheds from public thoroughfares: including scenes to the west and southwest toward Lake Michigan from east-west roads in northern Milton Township along Erickson Road, Sutter Road, Campbell Road, Cairn Highway, and Waring Road; and along NW Torch Lake Drive at French Point to the southeast overlooking Torch Lake south of the intersection with Sutter Road. Panoramic views along public roads within the southern portion of Milton Township include: westerly views over Elk Lake from Ringler and Hoopfer Roads; a northerly view over Elk Lake toward Kewadin from Cherry Avenue; a northwesterly rural view from Western Road, just north of its intersection with Stallman Road; and to the east over the southern end of Torch Lake from Hickin Road. Views from public roads at the southern tip of Milton Township include: views over the eastern end of Elk Lake and western end of Skegemog Lake (originally called Round Lake) toward Grand Traverse County's Skegemog Point from Miller Road; and a similar water level view at the southern end of Chippewa Trail at the inlet between Elk and Skegemog lakes

Although specific economic value is difficult to ascribe to viewsheds within Milton Township, it is acknowledged that real estate values are dramatically increased if they possess aesthetically pleasing views, and that many tourists traveling to and through Milton Township each year enjoy viewing its rural character; natural setting; shorelines; forests, especially autumn color; historic and cultural resources; and panoramic views.

#### **Threats to Scenic Viewsheds**

Separate decisions made by individual landowners and public agencies can degrade viewsheds by the large-scale removal of natural vegetation, unscreened structures and

lighting, driveways, etc. Based on residents' opinions (from input sessions and the survey as part of this Master Planning process), Milton Township encourages the use of filtered views, appropriate setbacks from ridgelines, the prohibition of construction on steep slopes, and protection of dark night skies.

#### **Cultural & Historic Resources**

Historic structures and culturally significant places within Milton Township include the Hugh J. Gray Rock Cairn, located along Cairn Highway south of Campbell Road. The monument was constructed in 1938 with 83 stones – one donated from and shipped free of charge by each of Michigan's counties. The Rock Cairn is located along the original route of U.S. 31 Highway, with a view of Lake Michigan and near the 45 parallel. Hugh J. Gray was regarded as the father of the Michigan tourist industry, having served as the secretary of the Michigan Tourist Association. The Rock Cairn's 1938 dedication was officiated by then Michigan Governor Frank Murphy, among other dignitaries. A crypt behind the monument's metal plaque contains newspapers, resort booklets, and other materials from the 1930's. Once one of northern Michigan's busiest highways, U.S. 31 was later relocated from Cairn Highway straight north from Elk Rapids, dramatically decreasing traffic by and visitation of the Rock Cairn.

The Cairn Highway Monument, Old Milton Township Hall, Kewadin United Methodist Indian Mission and cemetery are considered structures or locations of local historical importance. Township residents also value the historic and cultural significance of the Milton Schoolhouse, Roberts Schoolhouse, South Milton Schoolhouse, Old Methodist Church (on Hickin Road), the South Milton Cemetery at the west end of Hickin Road, and archeological dig site at the southern tip of Milton Township. Other important historic cultural features within Milton Township include the Hickin, Van Hook, Sutter, and Kaiser Centennial Farms.

#### **Threats to Cultural & Historic Resources**

Historic structures and locations such as the Rock Cairn, Indian Mission, churches, cemeteries and other burial grounds, schoolhouses, archeological sites, and other historically significant properties, structures and features; etc. can be lost or irreparably altered by private-ownership uninformed about or uninterested in preserving or enhancing cultural or historic values. Milton Township supports the exploration and establishment of voluntary historic preservation tools in the Township, Antrim County, and regionally, such as historic preservation and conservation easements; the public purchase of historic structures and culturally significant properties; conservation developments that set aside, protect and/or allow some public use of historic structures and culturally significant locales; and seeking private, foundation, and/or government funds to assist in historic structure and cultural preservation projects.

#### **Summary of Findings**

Milton Township is endowed with extraordinary waterways, and rich natural, scenic, cultural, and historic resources. However, Milton Township residents are aware that, lacking voluntary protection, historic structures within private ownership are vulnerable to significant alteration or destruction. Further, absent well-crafted, enforced, and fairly

applied regulation, water quality, farmlands, and other natural and scenic resources are also at risk.

It is the position of Milton Township and its residents that the quality of life, economic welfare and environmental well-being of the Township are inherently tied to guiding future growth in a manner that will not negatively impact but conserve and/or enhance these resources. Milton Township also recognizes the need for the identification, application, and maintenance of public and voluntary private conservation tools to these important resources.

#### **Chapter 6: PUBLIC AND PRIVATE FACILITIES**

#### Introduction

Inventorying existing public facilities, public land, and quasi-public lands is an important step in the planning process. Public facilities within Milton Township include state and township-owned land, parks, boat launches, and public accesses to area waterways. Quasi-public lands include lands owned by the Grand Traverse Regional Land Conservancy.

#### Public and Quasi-Public Properties/Recreation Facilities

Milton Township presently owns ten separate parcels. These public parcels include: the Milton Township Hall with adjoining park, sports fields, and main fire station (10 acres); a multi-purpose sports facility northeast of the Township Hall acquired in 2002 (40 acres); a public beach, park, and shoreline access to Elk Lake (5 acres); Milton Township Elk Lake boat launch (~0.7 acres); the East Elk Lake Drive Park Annex (~0.7 acres); the Milton Township Cemetery (~2.5 acres); the Old Milton Township Hall (~1.5 acres); South Milton Township Fires Station (3.5 acres); Lot #30, Torch Woods Subdivision on Torch Lake (0.33 acres); and a beach access to Lake Michigan on Joe Marks Trail (~0.5 acres). Please refer to Table 6.1 for descriptions of public recreational features and lands within Milton Township.

TABLE 6.1 MILTON TOWNSHIP RECREATION FACILITIES & PUBLIC LANDS			
Milton Township Public Land/Facility	Recreational Facilities	Public Land Acres	
**Milton Township Hall/Park Fire Station #1 (located in Kewadin)	Athletic fields, basketball courts, playground, picnic grounds, tennis courts, and open space	10 acres	
**Milton Township Sports Park (located northeast of the Milton Township Hall/Park)	Ball fields, tennis courts, skateboard park, soccer fields, concessions building, walking path, and pond.	~40 acres	
**Milton Township Beach (south of the Milton Township Hall/Park)	Volley ball, swimming beach	5 acres	
**Milton Township Elk Lake Access (located in Kewadin)	Boat launch	50' x 180' (~0.2 acre)	
*East Elk Lake Drive Park Annex (on Elk Lake)	Swimming beach, picnic areas, shelter	100' x 240' (~0.55 acre)	

Milton Township Cemetery (located on Hickin Road)	N/A	~2.5 acres
South Milton Township Fire Station #2 (located in Torch River Village)	N/A	3.5 acres
*Old Milton Township Hall (located in Kewadin)	Social events, rentals, cell tower	~1.5 acre
*Lot #30, Torch Woods Subdivision (on Torch Lake)	Unimproved Antrim County-owned parcel, 100-year lease to Township)	0.5 acre
*Lot, Joe Marks Trail	Lake Michigan access, beach	~0.5 acre
Total		~57.25 acres

<sup>\*</sup> Local Recreation Acres are those that are owned by and designed to be used by the local community. These lands are usually not advertised or promoted, and are intended primarily for local use.

The Milton Township Hall sits on 10 acres of land at the corner of Cairn Highway and Cherry Avenue. The Township Hall has one large meeting room, five offices, downstairs meeting, storage rooms and a maintenance bay; and bathrooms. This parcel includes a Township-owned recreational complex including basketball and tennis courts, soccer fields, and a playground. The Milton Township Fire Station #1 also exists on this parcel's northwestern corner.

<sup>\*\*</sup>Regional Recreation Acres are generally larger in size and have a more area-wide attraction.



Milton Township Park/Playground adjoins the Town Hall to the north, south of Indian Road, East of Cairn Highway, and north of Cherry Avenue. The site contains the children's playground, ball fields and diamonds, and tennis and basketball courts. The park is landscaped, and has parking designed to accommodate up to 125 cars. Overall, this park represents a significant piece of publicly-owned recreational property.

Milton Township purchased an additional 34 acres, located to the north-northeast of the Township Hall in 2002. This area, known as the Milton Township Sports Park, and serves as a multipurpose recreational area with ball fields and diamonds, tennis courts, and a skateboard park. Parking at this location is designed to accommodate up to 200 cars.



The Milton Township Beach exists on 5 acres immediately south of the Town Hall/Park property, and provides beach access to the north end of Elk Lake. The Township Beach has a volley ball court, beach, and parking area. Plans are currently under development to improve this Township recreational asset to include a new access, parking, landscape, observation platforms, and trail/path development. The park has parking designed to accommodate up to 45 cars. This property was transferred to Milton Township in 1989.

The Milton Township Elk Lake Access exists within Kewadin, and provides boat launch/access only to Elk Lake. This boat launch exists within an approximately 50 foot wide by approximately 600 foot deep parcel, representing approximately 0.7 acres. Parking at this location is limited to approximately 2 vehicles with boat trailers at the boat launch, although an additional approximately 60 feet by 60 feet parking area is available behind the Old Milton Township Hall. The access site is adjacent to the Kewadin Methodist Indian Church beach and park (with picnic tables and shelter), which is private/semi-private and designed for church members only.

Milton Township East Elk Lake Drive Park Annex exists on an approximately 0.7 acre parcel on the eastern shore of Elk Lake on East Elk Lake Drive. The annex parcel contains walk-in lake access, beach, picnic area and shelter. Parking at this location is limited to approximately 5 or 6 vehicles.

The Milton Township Cemetery is approximately 7 acres in size, and is located on the west end of Hickin Road. The Milton Township Cemetery was doubled in size in 1999. Less than ½ of cemetery lots had sold at the time of this writing.

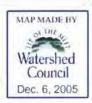
#### Milton Township Master Plan Maps

#### **Protected Lands**

## Legend Roads Parcel boundaries Lakes Streams PROTECTED LANDS Antrim County Grand Traverse Reg. Land Conservancy Milton Township State of Michigan



0 0.5 1 2 Miles



## Torch Lake Township Forest Home Township Clearwater Township, Kalkaska County White Water Townsh **Grand Traverse Cour**

#### **Data Sources:**

Roads, lakes and streams data layers are part of the Michigan Geographic Framework Base (v5a) and were downloaded from the Michigan Geographic Data Library (MGDL): http://www.mcgi.state.mi.us/mgdl/. Parcel boundaries were acquired from the Antrim County Equalization Department. Protected lands determined by Tip of the Mitt Watershed Council referencing the 2003 Antrim County Plat Book.

The Grand Traverse Regional Land Conservancy (GTRLC) owns three preserves and holds an easement on one active farm within Milton Township. The GTRLC portion of wetlands at the northern end of Elk Lake known as the Kewadin Wetlands Preserve consists of 41 acres in size, and is located southeast of Kewadin. The Kewadin Wetlands Preserve was donated to the GTRLC in 1995 by the Dennis Irelan family with the assistance of the Elk-Skegemog Lake Association.

The GTRLC's portion of wetlands at the northwestern end of Skegemog Lake, known as North Skegemog Nature Preserve, consists is 37 acres in size, and is located along the south end of Milton Township near the confluence of Elk and Skegemog lakes. Lastly, the GTRLC owns a 10-acre property located within Milton Township's Section 19. The North Skegemog and Kewadin Wetlands parcels are open to limited public use in accordance with management plans. The preserve within Section 19 is not open for public access or use.

In January of 2004, the GTRLC with funding from the Friends of Milton Township, State of Michigan Farmland Protection Program, Federal Farm and Ranchland Protection Program, and others purchased the development rights on the 158-acre Byrnece White farm within Section 23 of northwestern Milton Township. The Byrnece White farm is also the site of an active bald eagle nest, a federally protected bird species. The GTRLC currently holds no conservation easements on properties within Milton Township. Protected lands within Milton Township owned and/or managed by the GTRLC total 88 acres. Refer to Table 6.2 below for details.

## TABLE 6.2 GRAND TRAVERSE REGIONAL LAND CONSERVANCY LANDS WITHIN MILTON TOWNSHIP

	1	
Conservation Tool	Acres	Location
North Skegemog Nature Preserve	37	Two adjoining parcels at the southern end of Township, along northwestern end of Lake Skegemog in Section 12
Kewadin Wetlands Nature Preserve	41	Northern end of Elk Lake, Section 11
Nature Preserve (no public access)	10	Section 19
Subtotal Nature Preserves	88 acres	
Purchase of Development Rights Farmland Conservation - Byrnece White Farm	158	Section 23, northern portion of Milton Township
Subtotal Conserved Farmland	158 acres	
Grand total protected lands	246 acres	

#### **Private and Semi-Private Facilities**

The Kewadin Methodist Church and Kewadin Indian Mission has a playground, lake access, pavilion, and picnic area on church property within the center of Kewadin. This property is intended for use by parishioners only. Maplehurst Camp exists on 39.5 acres along the eastern side of Maplehurst Lake, and is a private boys and girls summer camp. Several private resorts, summer communities, and associations exist within Milton Township.

#### **Recreational Facilities in Milton Township**

There are a variety of recreational facilities and opportunities existing within Milton Township. These facilities include public lands, parks and access; privately-owned facilities; public and private trails; and road ends at lakeshores with limited public access. Milton Township possesses approximately 26 road ends, some of which area maintained by Milton Township from April through October.

Other recreational facilities are private, but open to the public; owned by the Township and open to the public; or maintained by the Township but with limited public uses and/or access. These recreational facilities are described within Table 6.3 below.

### TABLE 6.3 RECREATIONAL FACILITIES IN MILTON TOWNSHIP

MILTON TOWNSHIP				
Facility	Description	Location		
Road end, limited access  – Joe Marks Trail	33 foot road end between Cottrill's Grand Traverse Bay and Woodcreek, short-term waterfront access	On Lake Michigan, northwestern portion of Milton Township, Section 22		
Public access – Joe Marks Trail	94 feet on Lake Michigan, pathway, short-term waterfront access. Township maintained stair access	On Lake Michigan, northwestern portion of Milton Township, Section 22		
Road end, limited access – Erickson Road	66 foot road end (33 feet of which exist in Milton Township), public short-term waterfront	On Lake Michigan, northwestern portion of Milton Township, north line of Section 22		
Road end, limited access  – O'Dell Road	66 foot road end, public short-term waterfront	On Lake Michigan, northwestern portion of Milton Township, between Sections 22 and 27		
Maple Acres - private	Sugar bush operation with sales	Northeast portion of Milton Township, Section 26		
Road end, limited access – Elkton Road	50 foot road end Plat of White Sands Subdivision, public short- term waterfront access	On Lake Michigan, northwestern portion of Milton Township, Section 34		
Lake front access – Stevens Court	50 foot walk-in lakefront Plat of White Sands Subdivision, public short-term waterfront access	On Lake Michigan, northwestern portion of Milton Township, Section 34		
Road end, limited access  - Carne Court	50 foot walk-in lakefront, Plat of White Sands Subdivision, public short-term waterfront access	On Lake Michigan, northwestern portion of Milton Township, Section 34		
Bay Woods Condominium Preserve – Private	Preserve, inland, privately-held for association use	Northwestern portion of Milton Township, southern portion of Section 34		
Road end, public access  – Winters Road	66 foot road end, public short- term waterfront (33 foot in Milton Township)	On Lake Michigan, northwestern portion of Milton Township, Section 34		
Kewadin Public Access	50 foot easement, public access, short-term waterfront	At north tip of Elk Lake, in Kewadin, Section 11		
Road end, limited access  – Bussa Road	96 foot road end plus triangular parcel (30'x100') owned by Milton Township, public short-term waterfront	On Elk Lake, southeast of Kewadin, between Sections 11 and 14		
Road end, limited access  – Easley Road	66 foot road end, public short- term waterfront	On Elk Lake, southeast of Kewadin, Section 14		

Road end, access – Sandy Shores	16' road end	On Elk Lake, southeast of Kewadin, Section 24
Road end, limited access  – Swietzer Lane	66 foot road end	On Elk Lake, southern portion of Milton Township, between Section 23 and 26
East Elk Lake Drive, MDNR – public boat launch	Boat ramp, pit toilet	On Elk Lake, southern portion of Milton Township, Section 26
East Lake Drive Park Annex – public beach	Milton Township-owned beach, picnic, shelter and parking	On Elk Lake, southern portion of Milton Township, Section 26
Road end, limited access  – Ringler Road	66 foot road end, public short- term waterfront	On Elk Lake, southern portion of Milton Township, between Sections 26 and 35
Road end, very limited access – Hoopfer Road	66 foot road end, poor condition, public short-term waterfront	On Elk Lake, southern portion of Milton Township, between Sections 35 and 2
Road end, limited access  – Rex Terrace Road	66 foot road end, public short- term waterfront	On Elk Lake, southern portion of Milton Township, Section 35
Road end, limited access  - Chippewa Trail	66 foot road end, Skegemog Lake access, limited	At narrows between Skegemog and Elk Lakes, southern portion of Milton Township Section 11
Lake Access, ramp – Fairmont Drive	Milton Township-owned, Skegemog Lake boat ramp	On Skegemog and Elk Lakes, southern portion of Milton Township Section 13
Road end, limited access  – Fairmont Lane	66 foot road end, public short- term waterfront	On Skegemog Lake, southern portion of Milton Township, Section 18
Road end, limited access  – Quail Street (end of W. Torch River Road)	40 foot easement Plat of Fairmont Subdivision No. 1, public short-term waterfront	On Skegemog Lake, southern portion of Milton Township, Section 18
Bald Eagle Nest Observation	Maintained by the MDNR	On Skegemog Lake point, southern portion of Milton Township, Section 18
Lakefront – Torch Woods Subdivision	100.83 ft. Plat of Torch Woods Subdivision, Lot #33	On Torch Lake, northern portion of Milton Township, Section 6
MDNR Preserve, Land and Mineral Services Division	13 acres	Southern tip of southern portion of Milton Township, Section 18
MDNR - Torch Bridge Boat Launch	Public access, boat ramp with separate nearby parking	At the mouth of Torch River, Section 6, Torch River Village within the southern portion of Milton Township
Road end, limited access  – Sutter Road	66 foot road end, public short- term waterfront	On Torch Lake, northern portion of Milton Township, Section 19
Road end, limited access  - Campbell Road	66 foot road end, public short- term waterfront	On Torch Lake, northern portion of Milton Township, Section 31
Road end, limited access	66 foot road end, public short- term waterfront, adjoins MDNR	On Torch Lake, northern portion of

- Waring Road	50' wide parcel	Milton Township, between Sections 31 and 6
Road end, limited access  – Torch View Street	60 foot road end Plat of Torch Lake Acres, public short-term waterfront	On Torch Lake, northern portion of Milton Township, Section 7
Road end, limited access  – Indian Road	66 foot road end, public short- term waterfront	On Torch Lake, northern portion of Milton Township, between Sections 6 and 7
Road end, limited access  – Hickin Road	66 foot road end, limited access	On Torch Lake, north of Deepwater Point, Section 30, southern portion of Milton Township
Road end, limited access  – Second Avenue	30 foot road end, limited access	On Torch Lake, north of Deepwater Point, Section 30, southern portion of Milton Township
Road end, limited access  – First Avenue	30 foot road end, limited access	On Torch Lake, north of Deepwater Point, Section 30, southern portion of Milton Township
Road end, limited access - Severance Avenue Township improved and maintained	66 foot road end, limited access, lake access, excellent beach, portable toilet provided by Milton Township	On Torch Lake, Deepwater Point, Section 31, southern portion of Milton Township
Stover Avenue, Harbor Beach Plat – access	50' platted access, limited access	On Torch Lake, southern portion of Milton Township, Section 30
Rice Avenue, Harbor Beach Plat – access	50' platted access, limited access	On Torch Lake, southern portion of Milton Township, Section 30
Hammond Avenue, Harbor Beach Plat – access	50' platted access, limited access	On Torch Lake, southern portion of Milton Township, Section 30
Sun Rise Subdivision – private access	Private lake access	On Torch Lake, Pray's Harbor, southern portion of Milton Township, Section 31
Orchard Hills Park, private access	Private park, lake access	On Torch Lake, southern portion of Milton Township, Section 31
Road end, limited access  – Lake Street	66 foot road end, public short- term waterfront, north of Torch River Bridge	On Torch Lake, southern portion of Milton Township, Section 6
Kewadin/Elk Lake Access	Milton Township-owned 50 foot Boat ramp, limited lake access	Kewadin, Section 11, on Elk Lake
Kewadin Marina/Yacht Club	Marina, boat repair, storage, sales, and repair – open to the public	Kewadin, Section 11, on Elk Lake
Luhr's Landing	Private marina, sales, service rental, and dockage	On Torch River, Section 7, southern portion of Milton Township
Rosemary's Dockage	Private dockage	On Torch River, Section 6, Torch River Village within the southern portion of Milton Township
Torch River Marine	Private, open to the public, dockage, boat sales, service, storage, rental, limited camping	On Torch River, Section 6, Torch River Village within the southern portion of Milton Township

Northwinds Motel	Private, open to the public, lodging and beach	On Torch Lake, north of the Torch River Village, Section 6, southern portion of Milton Township
Fabiano's	Private, open to the public, boat gas, food, beverages, boat rental	On Torch River near mouth with Torch Lake, Section 6, southern portion of Milton Township
Torch River Resort	Private open to the public, lodging	Torch River Bridge village, Section 6, southern portion of Milton Township
Maplehurst Camp	Private boys and girls summer camp	Northern portion of Milton Township, Section 6

#### **Historic Structures/Places**

Milton Township possesses a rich and diverse human and natural history. A review of state historic places data bases, local historical accounts and maps, and interviews with residents have identified the following as sites of local and/or regional historical significance. Refer to Table 6.4 below for an inventory of historic places in the Township.



## TABLE 6.4 HISTORIC PLACES IN MILTON TOWNSHIP

Facility	Description	Location
Kewadin Indian Cemetery	Active, historic Indian Cemetery at Kewadin Methodist Indian Mission	Kewadin, Section 11
Old Milton Township Hall	Rentals available for social functions	Kewadin, Section 11
Evan's property - Archeological dig site	Indian artifacts, 1950's Michigan State University excavation	Southern tip of southern portion of Milton Township, Section 18
Cairn Monument	Historic marker, attraction on Cairn Highway	Section 36, northern portion of Milton Township 36
Hickin Centennial Farm	Single-family owned farm for more than 100 years.	Section 30, southern portion of Milton township
VanHook Centennial Farm	Single-family owned farm for more than 100 years.	Section 25, southern portion of Milton Township
Sutter Centennial Farm	Single-family owned farm for more than 100 years.	Section 25, northern portion of Milton Township
Kaiser Centennial Farm	Single-family owned farm for more than 100 years.	Section 25, northern portion of Milton Township
Milton School	One-room schoolhouse at northeast corner of Indian Road and Cairn Highway. Renovated to private, single-family residence.	Section 25, northern portion of Milton Township
Methodist Church, built 1882	One-room church on Hickin Road.	Section 25, northern portion of Milton Township
Roberts School	One-room schoolhouse on Easely Road. Now Private residence. Stone/brick, renovated to private single-family home.	Section 13, southern portion of Milton Township
South Milton Cemetery	Old settler cemetery on Hickin Road	Section 26, southern section of Milton Township
South Milton School	One-room schoolhouse on Cherry Avenue. Renovated to private, single-family residence.	Section 36, southern section of Milton Township



Old Milton Township Hall undergoing renovation, summer of 2003.

#### **Educational Facilities**

There are no public or private school facilities within Milton Township's political boundaries. School-age children within Milton Township are included within the Elk Rapids School District, and take Elk Rapids Schools buses to public schools located between 2 and 10 miles away from Milton Township children.

The Elk Rapids High School grades 9 through 12 exists within the southeastern portion of the Village of Elk Rapids, and possesses a new athletic complex including ball fields and diamonds, practice fields, an auditorium, and gymnasium. The Elk Rapids Cherryland Middle School grades 6 through 8 exists just north of the Elk Rapids High School, and is the location of school district bus transportation office, storage and fueling. The Middle School is also adjacent to Elk Rapid's High School's Glowicki sports complex, possessing football stadium, ball fields and diamonds, and an outdoor basketball court. Lakeland Elementary serves grades K through 5 to the north of the middle school, and includes a playground and garden. The combined Middle School/High School also includes a senior center/swimming pool/ball fields. All Elk Rapids public schools are located within the incorporated city limits of Elk Rapids.

# **Emergency Services Protection**

Milton Township provides fire protection/emergency services for residents of Milton Township. Milton Township is a voluntary fire department that serves within a mutual aid/support agreement with the volunteer fire departments of Elk Rapids and Torch Lake

<sup>&</sup>lt;sup>16</sup> Elk Rapids School District serves elementary school children in the Williamsburg area with grades K-5 at the Mill Creek School in Williamsburg.

Townships. Milton Township residents approved a 1.0 mil to provide emergency and fire protection services 24 hours a day, 7 days per week to the residents of the Township. The Milton Township fire department is managed by the Milton Township Board.

The Milton Township Volunteer Fire Department's Fire Station #1 is located within Kewadin, and the Milton Township Fire Hall #2 is located approximately one mile north of the Torch River Bridge area. Milton Township fire hall houses a Class A pumper truck, point truck, brush rig, and a 2,000 gallon tanker truck. Additional firefighting equipment at the south fire hall within the Torch River Bridge area houses a Class A pumper truck, brush rig and a 2,000 gallon tank truck. Lake accesses/underground water storage tanks for firefighting are located in several places within the Township. 10,000 gallon underground water tanks exist at both fire halls, and a dry hydrant water access is located at the Torch River Marine property and the Cottage Cove development. A 10,000 gallon underground water tank is also located on Miller Road within the southern portion of Milton Township.

Police services are provided through the Antrim County Sheriff's Department with a satellite office within the Milton Township Hall and the State Police Post at Kalkaska. Provisions for ambulance services are obtained through a contractual arrangement with Elk Rapids Township. All emergency services, including 911, are handled through the Antrim County Emergency Management agency.

#### Solid Waste Disposal and Recycling

Solid waste disposal and recycling operations for Milton Township are handled by a consortium of area townships in accordance with Antrim County's Solid Waste and Recycling plan. All operational landfills located within Antrim County were closed in the 1980s, (i.e. Central Lake Dump on M-88 Highway north of Central Lake). To serve residents of Milton Township, a waste receiving station is located in Elk Rapids Township on Cairn Highway, east of the Village of Elk Rapids. Specifically, residents of Milton Township, Village of Elk Rapids, Elk Rapids Township, and the southern ½ of Torch Lake Township fund this facility. Wastes are compacted and transported under contract with landfills in neighboring counties. Milton Township provides large trash item pick-up (appliances, metal, debris, etc.) twice per year as funded by Milton Township general funds. Antrim County organizes and sponsors county-wide household hazardous waste collection events. The household hazardous waste collection is funded through Antrim County general funds.

County residents have demonstrated strong and continued support for recycling as an alternative to landfilling. Milton Township provides a recycling site behind the old Township Hall.

#### **Roads and Transportation**

Cairn Highway and Cherry Avenue (C.R. 593) exist as the two primary county roads within Milton Township. Other generally less traveled collector and seasonal roads, both paved and unpaved, include Erickson Road, O'Dell Road, Sutter Road, Campbell Road, Winters Road, Quarterline Road, Waring Road, Powell Road, Indian Road, NW Torch

Lake Drive, Bussa Road, Jones Road, Easely Road, Western Road, Stallman Road, Hickin Road, Ringler Road, Hoopfer Road, Rex Terrace Road, SW Torch Lake Drive, Torch River Road, Schuler Road, Chippewa Trail, and Miller Road. Smaller paved and or seasonal drives include Joe Marks Trail, Juniper Road, Mackenzie Drive, Sutter Lane, Zawora Road, Fairmont Drive, and Elk Lake Drive. Some seasonal roads generally unpaved with no winter maintenance in Milton Township include Sutter Road's westend, the east-end of Rex Terrace Road, and the west-end of Hoopfer Road.

The only state road within Milton Township is U.S. 31 Highway. Cairn Highway, the original route of U.S. 31 Highway, is known for the location of the Rock Cairn and views of Lake Michigan and adjoining orchards forming an arch-typical rural scene within Milton Township. It is a pleasant ride at any time of year, but is especially beautiful during the spring blossom or during the autumn color season. No state designated Natural Beauty Roads exist within Milton Township.

The Michigan Department of Transportation completed studies within 2003, suggesting the need for additional passing lanes on U.S. 31 Highway north of Elk Rapids. A fourlane, passing lane is reportedly planned in the near future on U.S. 31 Highway for two miles from Campbell to Erickson Roads within Milton Township.

# **Transportation Summary**

It is anticipated that future residential and commercial development within Milton Township will necessarily translate into more vehicle trips on primary Township roads, with calls to straighten curves, build deceleration and passing lanes, erect more signage or even traffic lights, etc.

Milton Township residents have access to an Antrim County supported public transportation system – Dial-A-Ride. Individuals may call ahead for transportation by bus from their home to and from destinations within the County. Weekly transportation is provided to Traverse City for medical appointments and three trips weekly to medical offices and facilities in Kalkaska. A nominal fee is charged to riders for each trip with multi-trip passes available.

# **Chapter 7: LOCAL PLANS AND REGULATIONS**

#### **Local Master Plans**

In planning for the future of Milton Township, it is important to consider the plans of adjacent areas. The development of adjacent municipalities will impact Milton Township, and vice versa.

Antrim County adopted its Master Plan on November 8<sup>th</sup>, 2012. Milton Township is one of fifteen (15) townships within the political boundaries on Antrim County. Central Lake, Chestonia, Custer, Echo, Jordan, Mancelona, Star and Warner Townships are unplanned and unzoned. Milton, Banks, Forest Home, Helena, Kearney, and Torch Lake Townships are planned and zoned in accordance with the Michigan Planning Enabling Act, being Act 33 of 2008, as amended. Similarly, the Villages of Bellaire, Central Lake, Ellsworth, and Mancelona undertake their own planning and/or zoning. The Village of Elk Rapids and Elk Rapids Township have developed and adopted a joint Master Plan.

Of all its neighboring townships, Milton Township may have the most in common with Elk Rapids Township. Both Townships possess significant Elk Lake and Lake Michigan shoreline; similar topography; some remaining large parcels; rich natural resources; and shared a regional identity – as symbolized by the shared boundaries of the Elk Rapids Public School District. In addition, both Townships share similar land use challenges and visions for the future.

#### **Milton Township Recreation Plan**

On March 10, 2015 the Milton Township Board of Trustees unanimously adopted the *Milton Township 2014-2018 Recreation Plan* developed by the Milton Township Park & Recreation Committee with the assistance of a professional coordinator/planner. Among other things, this plan inventoried recreation resources, public lands, and quasi-public lands representing recreational opportunities within Milton Township. Importantly, the Plan identified existing opportunities, and recommended and prioritized future actions to enhance recreation resources in the Township.

#### **Milton Township Zoning Regulations**

Milton Township adopted a zoning ordinance in June of 1975, and the zoning ordinance was last revised in August of 2012. The new zones consist of Residential (R-1), Agricultural (A), Agricultural Residential (A-R), Village (V), Environmental (E), Manufacturing (M), and Manufactured Housing (R-3). There are Special Uses and Permitted Uses in each of these zones, as specified in the ordinance.

#### **Antrim County Resident Opinion Survey**

Antrim County completed a 2001 County Resident Opinion Survey, which was published on December 13, 2001. Randomly sampled respondents felt that economic growth should

be balanced, versus greatly limited or encouraged. Leading economic priorities included natural areas; recreation; professional services; tourism; agriculture; forest products; and retail and other services, in descending order. Respondents strongly favored environmental protection measures, including controlling junk yards and dumping; increasing recycling options; protecting and improving water quality; and protecting and improving drinking water quality. Survey respondents favored year-round jobs at local businesses with low environmental impact. Respondents also noted that noise and speed on Antrim County lakes has gotten somewhat worse, while fishing remained about the same since 1991.

Respondents also favored to strongly favored establishing or increasing setbacks for buildings along lakeshores; utilizing zoning and other voluntary tools to conserve farmland; regulations to preserve forests on private lands; limiting billboards; limiting the number of dwellings that share access to lakeshores through a single parcel (i.e. "funneling"); and protecting sites of local historical or cultural significance. High priorities for recreational resource development include: beaches/swimming accesses; environmental education; fishing; and creating non-motorized trials. Medium priorities identified include cross country and downhill ski areas. Low priorities include motorized trails. The resident opinion survey regarding future land use found public safety and environmental quality as moderate to very important. Other important factors include having friendly neighbors, retaining a small town atmosphere, and increased lake access. To achieve this vision, respondents favor township and county zoning; county-wide master planning with township zoning; developer payment for public improvements, if reasonable, on-site and proportional; local land subdivision control; and limiting strip development along roadways. When asked what the primary purpose of zoning is, respondents evenly split on the control of and protection of private property rights.

Antrim County also completed a resident's future preference survey in the Elk Rapids/Milton Township area with a visioning session held at the Elk Rapids Township Hall on August 22, 2003. The highest priority issues identified within this session, in descending priority order, include: 1) the preservation of residential character & stability of R-1 Residential zones; 2) water quality protection through strict zoning enforcement; 3) careful zoning to maintain ordered growth and control density; 4) protecting lakes, water, habitat, wetlands, woods, etc.; 5) providing high quality educational opportunities; 6) shoreline protection; 7) natural scenic vista preservation; 8) protecting water quality by limiting growth in high density areas; 9) long term farmland preservation, especially orchards; 10) updating the Antrim County comprehensive plan to guide township planning; 11) forest preservation; 12) preventing over-building on small lots; 13) year-round viable jobs, including health care; 14) maintaining and improving public infrastructure to keep pace with population growth; and 15) improving and supporting farm profitability.

A visual preference survey also administered to Elk Rapids/Milton Township area residents during 2003 determined and supported previous findings: 1) that residents are strongly interested in accommodating and guiding future growth in such a manner as to preserve small town, rural character respectful of existing architectural styles; and 2)

promoting conservation design/development. A proposed bi-county (Antrim and Grand Traverse Counties) farmland preservation ordinance was being considered by the Antrim County Commission at the time of the preparation of the Milton Township 2004 Master Plan.

# **Antrim County Recreation Planning**

Also as part of the Antrim visual preference survey in 2003, parks and recreational resource development recommendations for the Elk Rapids/Milton Township area included: preserving natural scenic vistas; enhancing recreational opportunities for quality of life; avoiding funneling (land division with private lakeshore access) by decreasing the number of boat docks per foot of shoreline; improving water quality; developing safe, non-motorized recreational trails and road-ends for hiking; need for parks, camping, biking trails, access to waterways for the general public; maintaining water visibility from roads; avoiding/eliminating/controlling noxious, exotic plants; designating/marking bike baths; controlling recreation usage on the lakes; establishing a community foundation; increasing year-round recreational services; and increasing boating safety.

# **Antrim County Land Use Change Study**

Land use/land cover change study for Antrim County was completed in 2003, with the publication of the Antrim County Land Use Atlas 1978-1998. Utilizing the Michigan Department of Natural Resources 1978 Michigan Resource Information System (MiRIS) land cover data, as compared to a 1998 land cover analysis completed by the Land Information Access Association, Antrim County planners found:

- A 18.8% county-wide decrease in agricultural acreage (down 11,675 acres);
- a 30.6% county-wide decrease in grass and shrub lands (down 18,233 acres);
- a 7.9% county-wide increase in forest land (up 12,746 acres); and
- a 45.2% increase in urban and built-up acreage (up 7,271 acres);

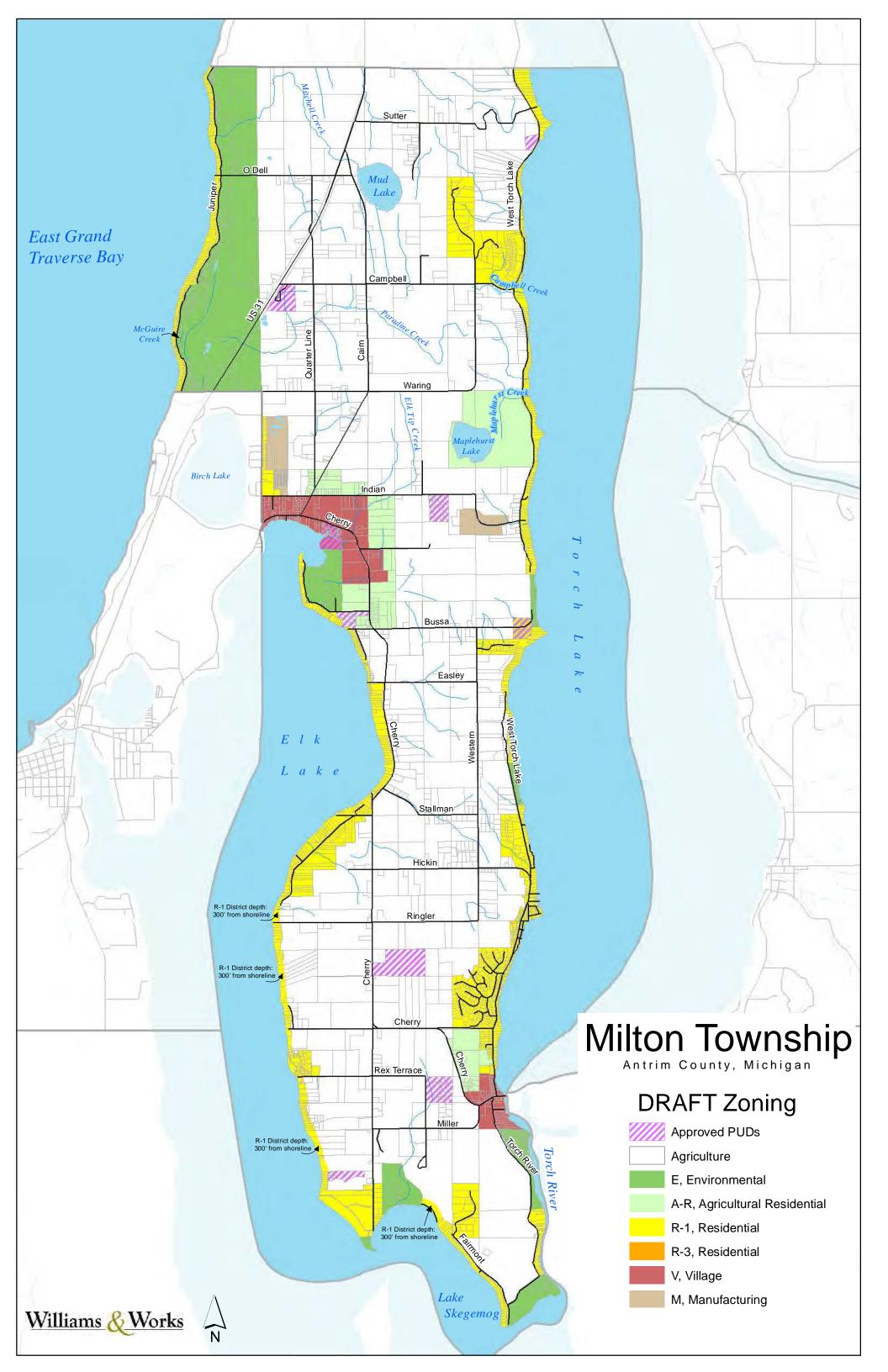
Due to errors in the interpretation of 1978 aerial photographs, change in wetland use/cover could not be accurately determined.

#### **Summary of Findings**

The projected potential 2030 population of Milton Township is 2,468 persons. This projection represents a 12.0% future population increase from the 2010 census. Antrim County's population as a whole is projected to grow 4.0% by the year 2030. The future land use visions embodied within municipal basic plans and township master plans within Antrim County will determine how zoning will guide inevitable future land development to accommodate present and future populations.

Coordination in planning and zoning between neighboring municipalities and townships, such as those undertaken by the Village of Elk Rapids and Elk Rapids Township, and leadership established by the current Antrim County planning process will significantly determine how well these visions and regulations advance and integrate the goals and future land use preference of Antrim County residents. Milton Township is committed to

working collaboratively and in a coordinated fashion with its neighbors and within Antrim County as a whole.	



# Chapter 8: FUTURE LAND USE PLAN, POLICIES, GOALS, RECOMMENDATIONS, and ACTIONS

For the purposes of this Master Plan, policies, goals, and recommendations, actions have been identified by the Milton Township Planning Commission and other participants in the Master Planning process concerning a number of interest areas within the Township. "Policies" are general statements of shared values that assist local decision-makers in making goals and implementing recommendations. "Goals" are defined here as broadbased statements of community interest and intent. "Recommendations" are the stated means by which Milton Township intends to reach its goals. "Actions" are near-future activities to be undertaken by the Township. A Master Plan update was completed by the Milton Township Planning Commission from 2003 to 2006 and revised again from 2012 to 2013.

The plan is based on a participatory process including; 1) a written survey; 2) four township visioning sessions; and 3) Planning Commission and/or subcommittee meetings on a monthly or more frequent basis. These meetings were open to the public, and had remarkable resident and landowner participation. The 2006 Milton Township Master Plan is also based on the exploration of community character and history; land use and demographic trends; property owner surveying, visioning and input; regional settings and economy; plans, policies, and regulations within neighboring communities, Antrim County, State of Michigan and other entities; and an inventory of Milton Township's cultural and natural resources.

Milton Township recognizes the results of the 2003 citizen survey which show most property owners either "strongly agree" or "agree" that Milton Township should: 1) promote the rural quality of the Township; 2) participate in voluntary farmland preservation program; 3) discourage the conversion of agricultural land to new home sites; 4) restrict multi-family dwellings on waterfront property; and 5) not expand the Torch River bridge area for commercial development. Most people surveyed "agree" or "agree somewhat" that existing commercial services within the Township adequately meet their needs.

Milton Township also recognizes the importance of existing community businesses in serving the local Milton Township and adjacent Township communities, which also use its commercial services.

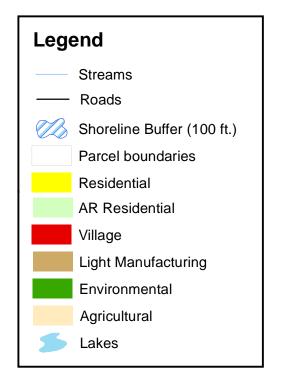
#### **Future Land Use Map/Plan**

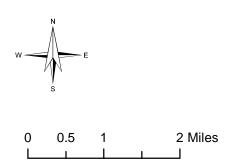
The fundamental purpose of this Master Plan (and the process which created it) is to gather wide ranging data and observed trends related to community economics, employment, demographics, natural resources, physical setting, public and private infrastructure, history, character, land cover/land use, community challenges, etc. to assist in the visioning of what Milton Township could be in the year 2034, i.e. twenty years from the completion of this planning process. An important part of this process is the creation of a future land use map that embodies the vision to guide future land use decision-making within Milton Township. Based on this Master Plan and the policy

#### Torch Lake Township

# Milton Township Master Plan Maps

# **Future Land Use**





# Forest Home Township Elk Rapids Township Clearwater Township, Kalkaska County White Water Township, Grand Traverse County

#### **Data Sources:**

Roads, lakes and streams data layers are part of the Michigan Geographic Framework Base (v5a) and were downloaded from the Michigan Geographic Data Library (MGDL): http://www.mcgi.state.mi.us/mgdl/. Shoreline buffers created using MGDL hydrography layers. Parcel boundaries were acquired from the Antrim County Equalization Department. Future land use data layer digitized by the Northwest Michigan Council of Governments.

recommendations and goals detailed below, a Future Land Use Map is located on page 8-1a.

#### **GENERAL POLICY STATEMENTS**

- 1. Township planning is based upon and undertaken for the protection of the public health, safety, and welfare of residents of Milton Township.
- 2. The Township will enforce the principles of this plan, as codified within Milton Township zoning and other ordinance(s).
- 3. The Township will seek to manage and guide growth to maintain and enhance the high quality of rural life for Milton Township residents through the implementation of this Master Plan.
- 4. Within Milton Township the long-term quality and conservation of natural resources, water quality protection, and the sustainability of the environment should be considered of significant importance when making land use decisions.
- 5. Township decision-makers should balance the public interest in sound land planning, as expressed by and embodied within in this Master Plan, with the rights and interests of private property owners when considering land use decisions.
- 6. The Township will work with residents, neighboring communities, the media, and others to promote and provide continuous opportunity for gathering public opinion and fostering public participation in the community planning process.

#### **GENERAL GOALS**

In order to achieve the above policies, Milton Township should:

- 1. Retain its existing character by promoting the preservation of farms, forests, and water resources and shorelines as well as minimizing impacts from uncontrolled growth.
- 2. Plan for and guide future growth consistent with this community-created Master Plan.
- 3. Maintain a current Township Master Plan by reviewing it every five years, and updating it through amendment when appropriate.
- 4. Use public input and survey results from this Master Plan when making land use decisions and/or promulgating Township regulations.
- 5. Support the preservation of historic buildings and culturally

significant areas.

#### RECOMMENDATIONS

#### **Environment**

To maintain and enhance environmental quality within Milton Township, the Township should:

- 1. Promote the protection of sensitive environmental resources including but not limited to steep slopes, wetlands, wildlife habitat, springs/seeps, waterways, and shorelines
- 2. Encourage landowners to recognize the natural and cultural resource base within Milton Township, and work with and seek to fit future development within the Township's natural and cultural landscape.
- 3. Explore the adoption of a steep slopes overlay district zoning ordinance (as it relates to innovative on-site storm water management techniques, appropriate setbacks from hillcrests, natural buffers zones, lot configuration, percent of lot coverage, post-construction filtered views, strictly regulated lighting on the slope side of structures, and percent of impermeable surface requirements, etc.) to protect the rural character and water quality of Milton Township.
- 4. Recognize the dark night sky as an important and fragile natural resource to be protected within the Township. Require the use of appropriate lighting with future development, including but not limited to: screened, timed, downward directed lighting at appropriate heights designed to prevent the "spillage" and/or loss of light to the sky; or glare as viewed from or the illumination of adjoining properties.
- 5. Secure open spaces by utilizing planning tools and techniques, including but not limited to:
  - Working with conservancies and others to protect identified conservation and recreation areas.
  - Support the purchase of development rights, transfer of development rights, and conservation easements that voluntarily preserve natural and/or cultural resources.
  - Use and promote conservation design and low impact development techniques that will allow development to occur while protecting and linking resources.
  - In the review of future development plans, the Township will consider and seek to conserve open space and natural buffers, and recognize the need for interconnected tracts of land as wildlife corridors.
  - As supported by a survey of Township residents, consider the purchase of

- unique parcels to protect sensitive natural resources and culturally significant areas.
- Consider future recommendations of the Antrim-Grand Traverse County farmland preservation task force.
- 6. Utilize best management practices, including but not limited to promoting the use of native plants, on-site treatment and disposal of storm water by encouraging low impact design techniques, soil conservation, sustainable forest yields, and the restoration of damaged lands.
- 7. Utilize an inventory of the Township's natural resource base for on-going development and land conservation decisions.
- 8. Protect groundwater, representing the Township's drinking water source, and surface waters from contamination, depletion, and degradation.
- 9. Promote the protection of wetlands in maintaining and improving water quality within the Township.

#### **Economy**

Milton Township recognizes its two existing population centers, i.e. Torch River bridge area and Kewadin, and seeks to sustain and improve the Township's economy through this planning process. The Township also recognizes that its water quality, rural character and natural environment are among its most important economic assets. These assets provide economic opportunities, recreational enjoyment, wildlife habitat, and together create a desirable place to live, work, and play. To promote and sustain appropriate economic development within Milton Township, the Township should:

- 1. Seek to retain and promote small businesses within the Township.
- 2. Seek to understand the benefits and challenges represented by tourism within the Township.
- 3. Seek to protect existing farms, unique farmland, and water quality.
- 4. Seek to balance residential and commercial development, and promote the voluntary protection of finite natural resources, including active farmland.
- 5. Assist willing farmers in the voluntary conservation of active farms, forest lands, and prime farmland.
- 6. Support farmers' diversification of agricultural production, including increasing value-added agriculture (such as on-site processing, sales, and direct marketing), farm stands, agriculture-based tourism and recreation, etc.
- 7. Retain the Torch River and Kewadin village boundaries, and enhance the

- opportunities for infill of existing villages.
- 8. Allow but control home occupations/businesses as a viable economic activity without altering the character of neighborhoods and residential areas.
- 9. Direct future light industrial and manufacturing development to the Township's Manufacturing zoning district.
- 10. Protect and enhance existing natural and cultural resources within the Township.
- 11. Recognize the important economic connections of existing Township population centers, i.e. Torch River bridge area and Kewadin, with adjacent areas.
- 12. Discourage the creation of mega-stores that are inappropriate in size for the residential, agricultural, recreation and economic nature of the Township.

#### **Public Facilities, Infrastructure & Utilities**

To promote and maintain the rural character within Milton Township, the Township should:

- 1. Encourage the future development of appropriate multi-user and private infrastructure (sewer, water, roads, and/or recreational facilities, etc.).
- 2. Require the development of septic, water well, road and pedestrian infrastructure at future housing developments that conform with and may be readily connected to future Township and other multi-user infrastructure projects.
- 3. Work with utility companies to locate future power, communication, and other utility infrastructure in a manner that will not negatively impact rural character or fragment farmland or natural ecosystems.
- 4. Require the underground installation of all utilities at future housing developments, and strongly encourage underground utility placement at single parcel residential developments.
- 5. Encourage the clustering of utilities such as electrical substations, transmitter towers, cell phone or other towers, etc.
- 6. Collocation on existing and future communication towers will be required. Collocation of emergency services communication on existing structures should be strongly encouraged.

### **Residential Development**

To promote the maintenance and enhancement of water quality and the rural character of Milton Township while balancing the need for new residential development, the

#### Township should:

- 1. Be receptive to the housing needs and foster the creation of housing opportunities for people of all income levels, including first time home buyers, elder housing, and/or assisted care facilities.
- 2. Encourage the use of conservation design and low impact development standards for all new housing developments.
- 3. Require the retention and maximize the creation of greenbelts and buffers within future development.
- 4. Include a landscape's elements, such as site topography, open space and sensitive natural features, etc., in the review of site plans in an attempt to avoid potential conflict between landowners.
- 5. Incorporate plans for non-motorized trails for all new housing developments. Provide adequate links to open space on adjacent properties and housing developments, as well as links to public and quasi-public lands.
- 6. Seek to ensure that such development adequately provides infrastructure (water, sewer, utilities, etc.) to residents, and are appropriate in location, scale, density, design, screening, lighting, traffic patterns, etc.
- 7. Support the efficient layout of roads and public facilities within housing developments.
- 8. Support programs to encourage home renovation and rehabilitation through obtaining grants for old water well abandonment, solar energy, water conservation, home repair/upgrades and insulation, etc.

#### Recreation

To promote recreational resource development, the Township should

- 1. Consider the recommendations of the *Milton Township Parks and Recreation Program* plan.
- 2. Plan for a variety of recreational needs and preferences, and develop recreational opportunity for all residents including complying with physical needs-based recreational standards.
- 3. Recognize that land-based recreation within the Township primarily relies upon private lands (i.e. little State land exists within the Township), and plan for a variety of recreational needs and preferences.
- 4. Where appropriate, consider the public acquisition of unique natural

- and/or cultural resources as public recreation lands (i.e. lake accesses for temporary uses such as swimming, unique natural features, scenic overlooks, etc.).
- 5. Ensure the public use of any rest area, public beach, public and other shared water access, picnic area, roadside park, or any County, Township or Private road end at a lakeshore in the Township is *temporary* in duration (unless overnight camping is specifically allowed), and does not result in the unreasonable interference with the comfortable use and enjoyment of adjoining private properties or the riparian and/or public use of waters.
- 6. Manage land within the Township for the preservation of natural resources, including Township-owned lands.
- 7. Consider the development of new and linkage of existing non-motorized pedestrian trails, especially along but separated from State or County road surfaces. Future non-motorized trails may be considered along Cherry Avenue between Kewadin and Torch River, and/or north and south parallel with the U.S. 31 corridor.
- 8. Support and maintain existing Township recreation lands and facilities.
- 9. Obtain Michigan Department of Natural Resources approval of the *Milton Township Park & Recreation Master Plan 2014*.

#### **Transportation**

To promote the maintenance and enhancement of transportation infrastructure within Milton Township, the Township should:

- 1. Retain and enhance Cherry Avenue as the major traffic route within the Township.
- 2. Address parking needs by facilitating shared parking and shared accesses when appropriate.
- 3. Develop and evaluate options for "calming" traffic in the village of Kewadin to provide for greater pedestrian safety.
- 4. Minimize congestion on roads and highways by using well-designed access points and intersections, and by minimizing accesses along county and state thoroughfares.
- 5. Establish and maintain good communication with the Michigan Department of Transportation and Antrim County Road Commission to ensure efficient

- transportation policy and future transportation improvement projects in accordance with the vision embodied within this Master Plan.
- 6. Recognize the existing and increasing importance of regional public transportation to meet resident's needs, while alleviating some of the demand on public roads within the Township. Support the expansion of Antrim County's Dial-A-Ride program as appropriate.

#### Waterfront Areas

To maintain the existing quality of life, water quality and the character of the Township, the Township should:

- 1. Discourage large resort type commercial development on waterfronts.
- 2. Control commercial expansion within the Kewadin and Torch River bridge boundaries in proportion to the needs of the Township and adjacent areas.
- 3. Protect the water quality and near shore environment of lakes, ponds, streams, creeks, and wetlands from degradation, pollution, and other negative impacts.
- 4. To the extent possible, seek to protect existing native vegetation, water resources, wildlife habitat, and unbroken forest canopy on shorelines and stream banks.
- 5. Support the enforcement of existing federal, state, and local laws/ordinances that protect waterfront resources and the environment.
- 6. Encourage lakefront and other shoreline landowners to follow best practices to maintain and enhance the natural character of shoreline properties. Make information available regarding such recommended practices.
- 7. Consider the public acquisition of any large or contiguous individual waterfront parcels for future public access.
- 8. Support the provision of existing educational materials and brochures to educate waterfront property owners. Encourage the distribution of these materials through MSU Extension, county and township agencies and departments, real estate offices, code enforcement officials, lake and property owners associations, etc.

#### **Farm and Forest**

To promote the maintenance and enhancement of farms and forests within Milton Township, the Township should:

1. Support and promote voluntary efforts to preserve active farm and forestlands, such as conservation easements, the State of Michigan's or other purchase and/or

leasing of development rights programs.

- 2. Maintain the Township's rural character by utilizing planning tools and techniques, including but not limited to the following:
  - Working with landowners to voluntarily protect, enhance, and conserve farm, forest, wetlands, shorelines, and other recreation lands.
  - Explore the use of the purchase of development rights, and/or transfer of development rights that voluntarily preserves natural resources.
  - Use and promote conservation design and low impact development techniques that allow development to occur while protecting and linking resources.
  - Consider future recommendations of the Antrim and Grand Traverse Counties' farmland conservation task force.
- 3. Support the diversification of agricultural land use, including ornamental and other tree nurseries, and woodlot production activities such as sugar production, hunting, camping, and other recreational use.
- 4. Consider the potential impact of land use planning and zoning decisions within Milton Township on agriculture, forest land and other open spaces, and seek to avoid unintended negative impacts from land use and infrastructure decisions on farm and forest operations.
- 5. Encourage farm operations within the Township to utilize Generally Accepted Agricultural Management Practices (GAAMPS), as defined by the Michigan Department of Agriculture, to legally protect farm operations from encroaching incompatible land use in accordance with the Michigan Right to Farm Act.
- 6. Explore the use of innovative financing tools to facilitate voluntary farmland conservation, which may include, but are not limited to federal, state, and local grants, and/or private and community foundations, etc.
- 7. Support the establishment of voluntary farmland preservation tools in Antrim County and regionally, such as the purchase of development rights, transfer of development rights, and/or well-connected conservation developments with farmland and woodlot conservation components.
- 8. Partner with local, regional, and state governmental and nonprofit agencies and landowners to protect farmland.
- 9. Recognize the importance of woodlands in providing wildlife habitat, erosion control, groundwater recharge, recreational uses such as hunting, and other enjoyment.

- 10. Encourage forestland owners to enter into sustainable forest management and conservation plans.
- 11. Encourage reforestation on steep, sandy, wet, and other fragile soils.

# **Commercial Development**

To guide the future commercial development of Milton Township, the Township should:

- 1. With growth, design a streetscape that will beautify the Kewadin and Torch River Bridge areas, promote and enhance pedestrian travel, provide a sense of place, be safe for children, and to control traffic.
- 2. Incorporate best management practices and low impact development techniques to reduce amounts of impermeable surfaces, storm water runoff, and require onsite natural treatment of storm water.
- 3. Discourage low density and strip development along state and county roads to minimize potential public costs. Encourage a safe, "bikeable," and walkable community.

# **Regional Planning**

To facilitate regional planning, the Township should:

- 1. Consider the economic, cultural, environmental, and other connections of the Torch River bridge and Kewadin commercial areas with adjacent communities.
- 2. Recognize that Milton Township's natural resources are part of a much larger ecological system. The natural resource base often crosses other jurisdictional boundaries and can impact them.
- 3. Be aware that decisions in one community may affect other nearby communities, encourage and promote multi-jurisdictional collaboration on development decisions that affect more than one community.
- 4. Enhance communication and meaningfully cooperate with adjacent Townships and Counties on planning and other shared issues such as public safety.
- 5. Support regional strategies to better protect water quality and preserve active farmland, forest lands, and other open spaces along Township boundaries when it advances the interests of Milton Township as expressed by this Master Plan.
- 6. Promote coordination between this Master Plan, a future Antrim County Comprehensive Plan (if any) and adjacent townships' master plans.

- 7. Consider the results of the 2001 Antrim County Resident Opinion Survey in land use planning.
- 8. Consider the results of the 2001 Antrim County Future Preference Survey (Visual Preferences and Future Development Preferences) in land use planning.
- 9. Consider county-wide trails planning, and coordinate with adjacent counties as well as state and federal agencies on recreational resource planning and implementation.
- 10. Consider the results of county-wide wetland and/or groundwater studies to document the quality and quantity of area wetlands and regional aquifers supplying drinking water.
- 11. Direct future commercial uses to established, appropriately zoned areas within the Township.
- 12. Consider and support regional efforts to develop public and pedestrian-oriented transportation choices.
- 13. Cooperate with county, regional, state, and federal agencies to facilitate a range of housing choices.

# Zoning

To promote the community vision embodied within this Master Plan, the Township should:

- 1. Continue to plan and zone at the Township level.
- 2. Explore the development and implementation of a steep slopes overlay zoning ordinance with the Township.
- 3. Encourage the use of pre-development incentives to promote conservation design/low impact development and facilitate resource protection by methods including but not limited to displaying and providing design-based zoning regulations in pictorial fashion to better illustrate conservation and low impact development goals.
- 4. Encourage and support continual, consistent and fairly applied zoning enforcement.
- 5. Retain rural roadside image by considering appropriate building setbacks, natural and agricultural vegetative buffers, shared access drives, rear commercial parking, and the placement of large loading doors and construction staging areas to rear yard area, etc.

- 6. Guide the appropriate development, location, design, scale and density of future housing developments and commercial enterprises.
- 7. Enhance coordination with Antrim County and adjacent communities to articulate the vision and goals stated in this Master Plan.

#### SUMMARY OF FUTURE LAND USE ACTIONS

To promote the Township's vision for future land uses as expressed by this Master Plan, the Township should:

- 1. Direct residential development away from narrow strip lots along roads, and guide future residential development in a manner that preserves the Township's rural character and water quality.
- 2. Develop and evaluate options for "calming" traffic in the village of Kewadin to provide for greater pedestrian safety.
- 3. Consider Developing and implementing a steep slopes protection overlay zoning ordinance, e.g. 18% slopes and above, to protect environmental quality and rural character within the Township.
- 4. Participate in voluntary farmland preservation by identifying large contiguous parcels currently in active farm and forest use, and work with landowners to encourage conservation, sustainable development, and the retention of rural character if divided or developed.
- 5. Where appropriate, consider the public acquisition of important natural and/or unique cultural resources.
- 6. Consider conducting a build-out study to assess the maximum future land use density proscribed by current Township zoning.
- 7. Consider effective septic disposal systems in the review of site plans, and the expansion of existing and/or establishment of new septic systems. Septic disposal systems are encouraged to be designed to integrate with and connect to potential future multi-user septic systems.
- 8. Require the development of septic, water, road and pedestrian trail infrastructure at future housing developments that conform with and may be readily connected to future public and private infrastructure projects.