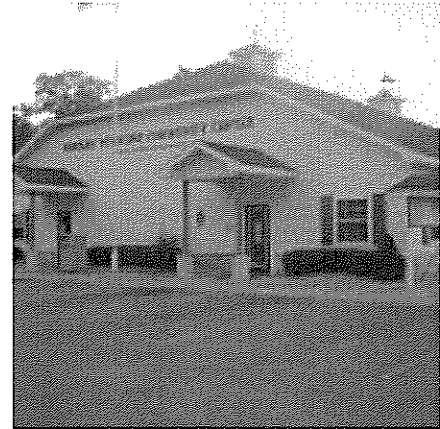


NORMAN TOWNSHIP MASTER PLAN REVISION 2015

Chapter 1: INTRODUCTION

Norman Township adopted a Master Plan in 2008, updated it in 2014 **and revised it in 2015** to address the future physical development of the community. Through the process of writing this Plan, it became evident that residents are keenly interested in maintaining the high quality of rural life presently available. The quality of life in Norman Township is defined by elements such as: the natural beauty of the forested and rural landscape; the diverse topography and waterways, including national forests and high quality rivers, streams and wetlands - and access to them; the small town character of the community; and the many recreational opportunities, friendliness, safety, peace and quiet it affords. The challenge presented is to encourage and manage the amount and type of growth appropriate in Norman Township. Secondary challenges include land use conflicts, natural resource degradation; and demand and resources needed for public services as the population changes.

Norman Township Planning Commission has worked with the Board to begin to prepare a comprehensive land use or “master” plan for the Township. The Norman Township Planning Commission audited the Master Plan and began Master Plan revision and update in May of 2013. Master Plan revisions were completed in July of 2014. **The Norman Township Master Plan serves as a “zoning plan” to enable, guide and inform the Norman Township Zoning Ordinance as required by Michigan law.**



Norman Township Community Center, summer 2013

The Master Plan identifies planning goals to direct the future of Norman Township over the next twenty (20) years. 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 by identifying options to get there. The goals are meant to be flexible. There may be more than one route to get to the desired destination. This Plan outlines examples of actions that public officials, landowners, business owners, residents, and others can take in order to cooperatively fulfill the community’s goals.

This Plan is not designed to directly promote or in any way prevent growth, but rather to *guide* “appropriate” growth to protect and promote public health, safety, and general welfare. The intent is to provide a way for growth to occur while still preserving the existing high quality of life found within Norman Township. In so doing individual interests and private property rights 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 existing small-town, rural character – including its

friendly and peaceful atmosphere, and to protect its natural resources such as its productive forests, lakes, rivers, streams and wetlands. Reaching these goals is only possible if decisions made by the Norman Township Planning Commission and other public bodies respect the ideas stated in this Plan.

The Norman Township Master Plan is meant to be a proactive and highly participatory approach to land use planning. It is to be used as a guiding tool for decision-makers regarding land use questions. It defines the community's vision of the future and lays the framework for growth, development, and resource protection for the next 20 years and is to be reviewed every five (5) years in accordance with Michigan law. **The Master Plan serves as a "zoning plan" which is the basis for Norman Township's regulation of land development and use within its zoning ordinance.** This Plan has been written with democratic principles and community/environmental sustainability in mind, so 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 existing Norman Township Master Plan (adopted May 13, 2008 and amended through June 9, 2009) was audited and updated from May 2013 to August 2014. With the formation of an official Planning Commission, the Township may prepare and adopt a Master Plan.

The Michigan Planning Enabling Act (MPEA), Public Act 33 of 2008, [M.C.L. 125.3841 and 125.3843, *et seq.*] requires the submittal of a draft Master Planning to adjacent townships and nearby communities, tribes, surrounding regional and county governments, and some utilities and transportation entities for their review and comment in the spirit of coordinated planning. The Norman Township Planning Commission followed the directives of the MPEA in the preparation and updating of this Master Plan. It is with a spirit of cooperation and coordination between governmental jurisdictions and interested community groups that this Plan has been prepared.

Planning Process

The process of writing the Master Plan update began in earnest in late-May of 2014. The process of revising and updating the Master Plan, including a public hearing on November 6, 2014 and September [redacted], 2015. The Norman Township Planning Commission adopted the revised, updated Master Plan on [redacted], 2015. Planning consultants from Grobbel Environmental and Planning Associates of Traverse City were hired to assist the Township. During this process, there were many opportunities for residents to provide input.

A series of facilitated public input sessions during the summer and fall of 2013. A first public input session was held on July 25, 2013 to identify planning issues, goals and actions for future land use planning in Norman Township.¹ Four questions were asked of participants, including: 1) what do you like best about Norman 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? Each participant provided answers to each question, and answers were summarized by the facilitator and presented to the meeting as a whole.

¹ Sixteen residents attended this meeting facilitated by Christopher Grobbel, PhD, Sr. Planner, Grobbel Environmental & Planning Associates.

Participants were then allowed to prioritize all responses by “voting” with a total of five (5) stickers on any statement.

Existing community demographics/housing, land uses and trends, economic patterns, and the natural resource base were addressed. Existing zoning, previous developments, and other uses allowed under the present zoning were also discussed. Significant land use changes and zoning action requests within the past few years were also reviewed. Asked what residents like most about Norman Township forty percent of four (4) out of ten (10) participants stated the recreational opportunities found within Norman Township; two (2) identified the Township’s community; one (1) identified Crystal Lake park; and others mentioned the Townships’ spacious landscape and forestlands. When asked what is most important to protect in Norman Township four (4) identified the Township’s population, area businesses and youth facilities each; three (3) identified the environment and Township fire and ambulance services; and another mentioned the fishing event at Crustal Lake. When asked what are the big issues that must be addressed: four (4) responded “community vision/direction; two (2) responded business retention, educational opportunities, and re-invigorating community events, respectively, one (1) each stated removing barriers to new businesses and zoning and zoning enforcement. Finally, when asked what projects would you support; four (4) stated a new fire barn; two (2) stated improving community through better out-reach from decision-makers; and one (1) stated promoting good community relations. *Refer to Appendix A for a copy of 2013 Norman Township Public Input Session summaries.*

A second public input session was held on August 8, 2003 to identify problems found within and new efforts that could be undertaken in Norman Township in terms of planning issues, goals and actions for the future. Of the eighteen (18) participants the number one problem identified by thirteen (13) of participants centered on the lack of an all terrain vehicle/off road vehicle (ATV/ORV) ordinance in the Township. Other problems identified included the current economic situation, too aggressive zoning enforcement, lack of tourism and entertainment facilities, and a need to steer the community toward economic opportunities from recreation/tourism. New efforts identified included adopting an ATV/ORV ordinance (10 votes); amending zoning to ease the burden on existing and new businesses, especially those focusing on recreation/tourism (7 votes); re-invigorating Wellston’s economy as a way point between the cities of Manistee and Cadillac (2 votes); establishing snowmobiling as a winter economic activity/focus (1 vote); and another mentioned promoting the recreational opportunities found within the “wilderness” areas in Norman Township. *Refer to Appendix A for a copy of 2013 Norman Township Public Input Session summaries.*

A third and final public input session was held on August 24, 2014 consisting of a strengths, weakness, opportunities and potential projects (SWOP) visioning exercise. Residents in attendance indicated that strengths include community involvement/engagement; great fishing; beautiful lakes; and a view of the Township is a tourism/recreation destination - the back-bone of the community and its economy. Asked what are Norman Township’s challenges participants stated that tourism is down at present; one-half of Township landowners are absentee; numbers of hunting game are down; that the Michigan Department of Natural Resources (MDNR) salmon program is now gone; few ATV/ORV opportunities, especially on County roads; the loss of Wellston Elementary School; need to get visitors and residents to

slow down on the M-55 Highway and stop and spend money in Wellston; need for and to allow small farm stands; and that zoning enforcement is too aggressive. Opportunities identified for Norman Township to improve included getting the word out; holding community/cultural events; promoting tourism; promote community and businesses at the annual Hoxeyville music festival; enhancing community identity; organizing and promoting a community watch; working with Michigan Department of Transportation (MDOT) to highlight Wellston's highlight community identity. When asked what new program/projects would you support participants identified better communicating with the MDNR; produce a Township promotional pamphlets; improving communication with residents/landowners; promoting community events; hiring a coordinator to organize, promote and oversee events; establishing a community "welcome wagon" to reach out to new residents; promoting senior events; re-establishing a teen club; and connecting with well-known hometown people to promote community and events. *Refer to Appendix A for a copy of 2013 Norman Township Public Input Session summaries.*

On October 3, 2014 a workshop for the Planning Commissioners, Township Board, and residents was held to provide an overview of the risks and local governmental regulatory options of the oil and gas industry. In addition, the Norman Township Planning Commission met monthly from June 2013 through July 2014 to prepare the updated Master Plan, as well as work on current zoning issues. The meetings were advertised and the public invited in accordance with the requirements of the Open Meetings Act, P.A. 267 of 1976 [MCL 15.261 *et seq.*].

The Norman Township Planning Commission directed the audit and revision of Chapter 1: Introduction; Chapter 3: Community Demographics, Chapter 6: Public Facilities/Infrastructure, Chapter 8: Future Land Use Plan, Policies, Goals and Actions, and an updated Future Land Use map during the 2013-2014 Master Plan review and updating process.

In summary, community input was solicited and 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.

Chapter 2: COMMUNITY CHARACTER

Introduction

A description of community character is important to document. There must be an understanding of what makes a community unique, in order to obtain a sense of a community's character and to direct future land use patterns and/or land use regulation, if any. Factors to explore include community description, regional setting, and historical/cultural resources.

Community Description

Norman Township is rural and rich in natural beauty, with extensive natural resources including: national forestlands; hundreds of miles of inland lake, river and streams; diverse wildlife habitat; forested hills and open meadows; and numerous wetlands. These natural resources contribute to a beautiful, mostly rural setting for people to live, work, and recreate within Norman Township.

The Township's population for the year 2010 was 1,561, as reported by the U.S. Census Bureau. Out of the twelve townships in Manistee County, Norman Township had the fourth highest population that year, after Manistee Township at 4,084, Filer Charter Township at 2,325, and Bear Lake Township at 1,751. U.S. Census data also show that Norman Township experienced a 7.0% population decline over the past decade. Seasonal residents, visitors to private homes and rental cottages, and day tourists importantly add to the Township's population and economic base during summer months.

There is no incorporated village or city within the jurisdictional boundaries of Norman Township, but the unincorporated village of Wellston may be considered the Township's population center. The corners of M-55 Highway and Seaman Road, is likely the busiest four corners within Norman Township. Although historically a larger settlement, land uses now at and in the vicinity of the four corners include: convenience/party stores; auto repair shops; the Norman Township Hall/Library; a fly fishing outfitter/guide service; rental units/cabins; residences and vacant land.

Manistee and Filer Townships to the west surround the City of Manistee, 2010 population of 6,226. Vehicle traffic is carried north and south through the Township mainly by Seaman Road, and Hoxeyville Road exists as a significant east-west route along the southern portion of Norman Township. Notably, while there is significant federal land within Norman Township consisting of portions of the Manistee National Forest, there is little state or county-owned land within Norman Township.

Geographic Setting

Norman Township is located within the extreme southeastern corner of Manistee County. Manistee County exists at the base of the northwestern Lake Michigan within the northern portion of the lower peninsula of Michigan. Townships directly adjacent to Norman Township are Dickson Township to the north; Brown Township to the northwest; Stronach Township to the west; Lake County's Ek and Eden Townships to the south; and Wexford County's South Branch Township to the east and Slagle Township to

the northeast. The western boundary of Norman Township is approximately twelve miles east of the City of Manistee, Michigan.

A Brief History of Norman Township

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. Norman Township's history is intertwined with the rich cultural heritage of neighboring townships.¹

Following the recession of the glaciers about 10,000 years ago Native Americans came into and started living in northern Michigan. For the most part these people lived a nomadic life and depended on rivers for transportation. Consequently there were undoubtedly many seasonal occupation sites along the Manistee and Pine Rivers. It can be speculated larger occupation sites (villages) existed near the confluence of the rivers. These sites, although grown over and unidentifiable to the average person today, are important archaeological sites deserving of protection. Areas which are most likely to have archeological sites are corridors along the Manistee and Pine Rivers, a half mile to each side and, a mile from the two river's confluence. This may also be the case at the confluence of the Manistee Pine Creek, but not as likely. Prior to European settlement in the current State of Michigan, the Anishnabeg people, commonly referred to as the Ojibwa or the Chippewa Indians, inhabited the western half of the Lower Peninsula and the Upper Peninsula of Michigan. The Anishnabeg (speaking a common language which the French denominated "Algic" or "Algonquian," in an area from Labrador to the Carolinas between the Atlantic coast and the Rocky Mountains). Indians did not originally inhabit the Great Lakes region. Historic accounts indicate the Anishnabeg people migrated from the "Great Salt Sea" to the east, followed the northern and eastern shore of Lake Huron to Sault Saint Marie, and then traveled the western shore of Lake Huron.

The Federal Land Ordinance of 1785 instituted the geographic and political system of surveyed counties, townships, and sections. Between 1816 and 1856, Michigan was systematically surveyed by the federal General Land Office. Surveyed townships and section lines established the political boundaries of counties and townships throughout the state. Surveyors took detailed notes on the location, species and diameter of each tree used to mark section lines and corners. They also noted the locations of rivers, lakes, wetlands, agricultural potential of soils, and general quality of timber along each section line being measured. In addition they noted natural disturbances, and trails and settlements of North American Indians and early Europeans. Manistee County was established by the State of Michigan by the Public Acts of 1855.

Norman Township was heavily wooded with probably well over half of the land having good pine timber growing on it. Because of this timber crop, approximately 85% of the land was purchased by timber investors. By the early 1850's, high quality pine immediately adjacent to the rivers had been cut by timber pirates. The first bona-fide

¹ Source: Steve Harold, Manistee County Historical Society, 2007.
Norman Township Master Plan Update 2014
Chapter 2

timber investor was Roswell Canfield who purchased 160 acres of pine timber at the northwest corner of the Township on September 11, 1854. He was followed by the State of Michigan which selected over a thousand acres of pine timber lands at the eastern edge of the Township on January 24, 1855, as partial payment from the United States for construction of the first locks at Sault Sainte Marie. Although the land in the Township was "cruised" continuously by land-lookers seeking good pine timber investments, Charles Ruggles was still able to find and purchase over a thousand acres of good timber land from the federal government after he arrived on the scene in 1867. After his careful scrutiny, the good timberland was all in private hands by 1870. Logging activity became intense following the Civil War and lasted for about a quarter century. The actual logging operations were handled in the fall and winter from camps of 25 to 30 men which consisted of three or four buildings. There may be as many as 25 of these abandoned logging camps in Norman Township which are important archaeological sites deserving of protection. However, their locations are largely unknown and not easily determined.

Logging activity became intense in the 1870's and 1880's. The operations commenced near the rivers and reached several miles back from the rivers as timber became sparse. Finally, in order to penetrate even further inland (as will be noted later), railroads were built to transport timber that was too far from the rivers for practical sleighing.

The first non-water transportation route through the Township was an early road, undoubtedly built primarily by and for the use of the timber investors which ran in a due east and west line across the north edge of Norman Township between the first and second tier of sections (roughly today's Cedar Creek Road.) Early in 1878, the R. G. Peters Train Railway (the first steam railway in Manistee County) was built from the Manistee River south into the northwest corner of the Township (approximately following today's Huff Road.) In the next decade this railroad was extended via numerous spurs through most of the timber in the Udell Hills area. In 1888 construction was started by the Chicago & West Michigan Railroad, which entered the Township in Section 32 of east Norman and ran north to Section 2 of west Norman (more recently known as the Pere Marquette Railroad, following portions of Seaman Road.) This railroad and its construction initiated the first commercial activities in the Township. The C. & W. M. Railroad was primarily a through line between Traverse City and Grand Rapids providing freight and passenger service. Its first passenger service was provided on July 6, 1890, and continued until the line was taken up in the 1950's. A second line, the Manistee & Luther Railroad was built across the south edge of the Township by the R. G. Peters Salt & Lumber Company in the 1890's (approximately following today's Nine Mile Bridge Road.) This line was in reality a logging railroad although it also provided rudimentary freight and passenger service until its demise about 1912.

The fate of cut-over timber land is similar throughout much of northern Michigan, it was frequently retained by the original investors who were undoubtedly counting on future timber harvest as natural reforestation occurred. However, this rarely occurred since the timberland usually burned before the timber matured, and there was absolutely no means to control these forest fires. Almost all the land in Norman Township was retained by timber investors until the turn of the century. For all practical purposes, the control of the

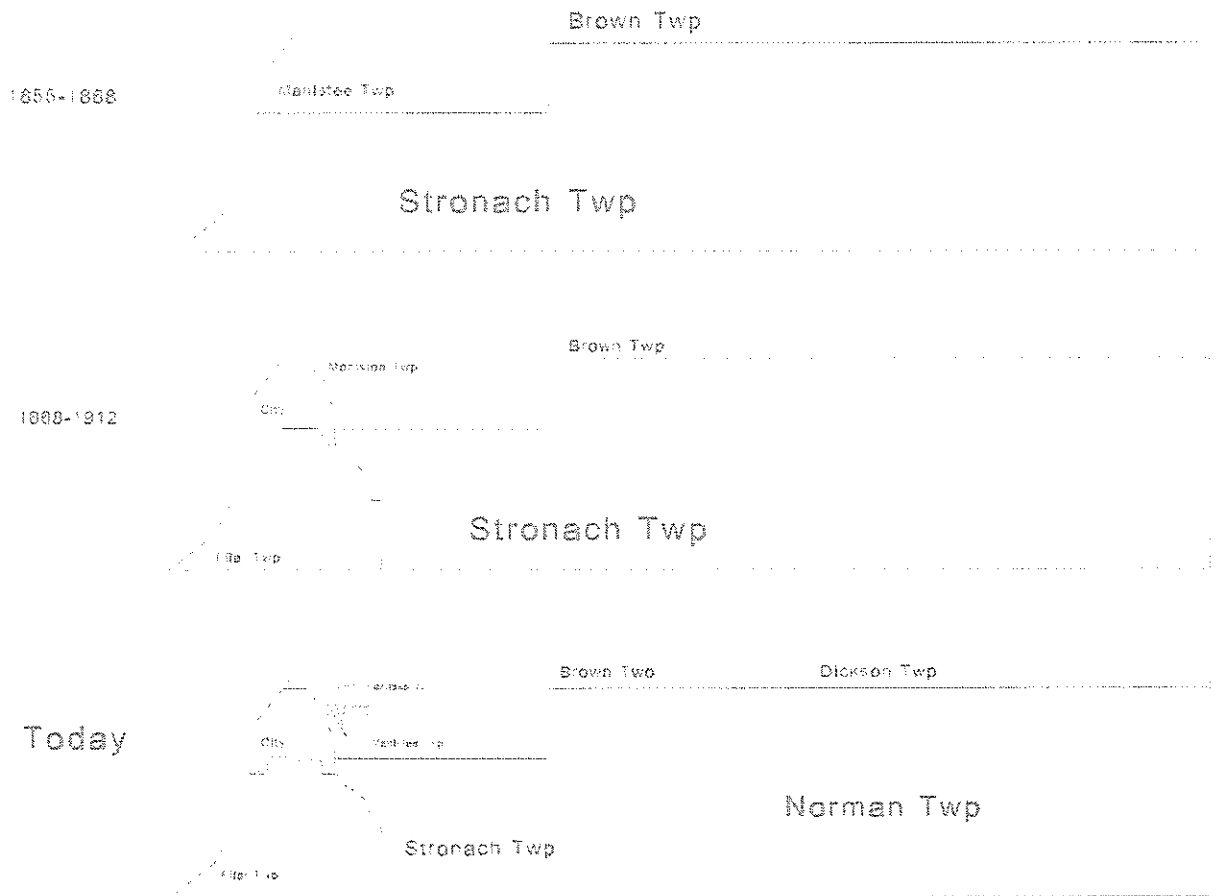
land and the quality of the soil eliminated any possibility of agriculture in Norman Township in the last century. Manistee lumbermen are thought to have maintained several farms where hay was grown and logging camp livestock were pastured through summers, with plans for further land sales by lumbermen. The first individual attempts at agriculture may have been by Ed Norman who settled in west Norman about 1897.

After the turn of the century the timber investors formed the New York National Land Company to market their cut over timberlands. This firm opened offices in several large cities, and began to advertise and promote the properties. An affiliated firm was the Swigart Land Company, which started in 1907, and centered their business in the village they laid out as Wellston the following year. The majority of the land was sold to first generation immigrants who lived in Chicago. Many of these purchasers moved to Norman Township where they built small homes and bravely attempted to establish farms. For the determined, these attempts lasted for a generation but the majority left in a much shorter time.

The first school in Norman Township is thought to have been built and donated by the Filers, and was located near the Norman home in Section 8 of west Norman Township (near the intersection of Pine Creek and Caberfae Highway.) A second school had been built by 1903, and was located in Section 31 of east Norman (near Dublin). Additional schools were built as settlers moved into the area. A community church was built in Wellston, and St. Raphael's Catholic Church in Dublin in the early 1900.

After the log drives were completed, property along the rivers were purchased by the forerunner of Consumers Power Company for electric power purposes. The first dam was Stronach Dam in Section 16 of east Norman on the Pine River. Built in 1912, it provided cheap electricity to the City of Manistee. Because of the constant buildup of sand in the reservoir behind Stronach Dam, operation of the hydroelectric plant became impractical and the dam was decommissioned in 1953. Dismantling of the dam began in 1996, and was completed in December 2003. This was followed by Junction Dam (today's Tippy Dam), built between 1916 and 1918. Both construction projects created extensive temporary and some permanent employment in Norman Township.

Dublin was the first commercial center in Norman Township. Activity in Dublin began when the C. & W. M. Railroad came through in 1888, and continues today. A second commercial center was developed as the community of Wellston by the Swigart Land Company, as noted above. This has continued until today, and has almost always had a strong group of determined merchants, including a chamber of commerce to bring people and business to the area.



Norman Township, as a political government unit was not created until 1912, when it was split off from Stronach Township. When Manistee County was first created in 1855, there were four townships: Manistee, Stronach, Brown and Wexford. In 1868 Filer Township was organized and split off from Stronach Township. In 1869 Wexford County was formed. Stronach Township included all the area of present day Stronach and Norman until 1912. Norman Township's political boundaries have remained unchanged from 1912 to today.

In 1933 the Manistee National Forest was established to promote commercial timber growth, forest fire prevention, wildlife habitat, and recreational opportunities. The U.S. Forest Service obtained jurisdiction of unsold state and federal land and thousands of acres of cut over timberland which had been abandoned after brief, unsuccessful attempts at agriculture. A regional service center and conifer nursery was developed at the Chittenden site, creating extensive employment opportunities. Today after 60 years the old timber lands are finally recovering after forest fires are no longer a destructive menace. The goal of promoting commercial forest management and extensive recreational opportunities has been met. Today the recovered forests have drawn more people to the area than ever known before, both as vacationers, sportsmen, and full-time

residents.

In the early 1980s the Manistee County Planning Department and Manistee County Historical Society surveyed the entire county to find structures and locations which remain today that have historic significance. The list below represents those locations in Norman Township. The ranking system for each listing is explained here.

9. On the National Historic Register
8. On the State of Michigan Register (nominated for the National Historic Register)
7. On the State Register
6. State Historic sign/marker
5. State Centennial Farm
4. On the Manistee County Historic list, nominated for the state register
3. On the Manistee County Historic list, recommended to be nominated for the state register
2. On the Manistee County Historic list
1. On a historic list maintained by a township, village or city

To qualify for the County Historic list (if not on the national or state register) a location must meet the following criteria:

- a 'first' event, if known and when it was significant.
- an event which is significant in altering the way of life, or an aspect of the way of life (such as land use, environment, culture, etc.) of Manistee County.
- a substantiated, documented historical event.
- an event that took place at a site which can be specified, regardless if the site is currently known or not, such as but not limited to birthplaces, graves, residences of historic personalities; a building or location, which is historically significant for its association with persons, events, of transcendent importance in the county's, state's or nation's history; a site of religious, ethnic, or racial community.
- a site designated to be primarily commemorative.
- places and structures of architectural or historic significance; i.e. meets 5 or more of the following points: 1) at least 50-years old; 2) original construction must be good design/architecture; 3) cannot have artificial (i.e. plastic, aluminum, clipboard) siding; 4) cannot have artificial window frames; 5) alternations and additions, if any, must respect the original construction, architectural theme; and/or 6) must be maintained in reasonable condition.

3. C.C.C. Chittenden (Agriculture: Nursery and CCC); 1103 Nursery Road (Parcel #51-10-018-200-01)

2. Cooley Bridge (Engineering: Bridge); Caberfae Hwy (Parcel #51-10-008-100-01)

2. First Rail Road (Economic: Rail Road); Huff Road

2. Clements (Abandoned Town); 12500 Nine Mile Bridge Road (Parcel #51-10-131-100-01)

- 2. Chittenden Nursery (Conservation); 1103 Nursery Road (Parcel #51-10-018-200-01)
- 2. CCC Camp Chittenden (Conservation); 1103 Nursery Road (Parcel #51-10-018-200-01)
- 2. USFS Arboretum (Conservation); 16555 Pine Lake Road (Parcel #51-10-123-100-01)
- 2. Indian Mound (Archeological Site: Sand Lake Area); Sand Lake Road (Parcel #51-10-031-150-01)
- 2. Pine River E-W Route (Transportation)

Summary of Findings

When considering the community description, the regional setting, and the cultural/historical heritage of Norman Township, certain land use patterns begin to emerge. The early European settler history of the Township is directly linked to the Township's abundant natural resources including fish/game and timber resources. Development pressures have continually increased along river banks, inland lake shorelines and along major road thoroughfares through time within Norman Township.

Maps – (maps can be found at www.normantownship.org/profile/maps)

B1 1 Plat map for west part of the township (property ownership) for 1840 (first purchasers of land)

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2001%20Wplat%201840.jpg>

B1 2 Plat map for east part of the township (property ownership) for 1840 (first purchasers of land)

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2002%20Eplat%201840.jpg>

B1 3 Plat map for west part of the township (property ownership) for 1903

<http://www.wellstonmichigan.org/normantwp/profile/maps/3.html>

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2003%20Wplat%201903.jpg>

B1 4 Plat map for east part of the township (property ownership) for 1903

<http://www.wellstonmichigan.org/normantwp/profile/maps/4.html>

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2004%20Eplat%201903.jpg>

B1 5 Plat map for west part of the township (property ownership) for 1915-20

<http://www.wellstonmichigan.org/normantwp/profile/maps/5.html>

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1-05Wplat1915-20.jpg>

B1 6 Plat map for east part of the township (property ownership) for 1915-20

<http://www.wellstonmichigan.org/normantwp/profile/maps/6.html>

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2006%20Eplat%201915-20.jpg>

B1 7 Plat map for west part of the township (property ownership) for 1925-30

<http://www.wellstonmichigan.org/normantwp/profile/maps/7.html>

<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2007%20Wplat%201925-30.jpg>

B1 8 Plat map for east part of the township (property ownership) for 1925-30
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2008%20Eplat%201925-30.jpg>

B1 9 Plat map for west part of the township (property ownership) for 1966
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2009%20Wplat%201966.jpg>

B1 10 Plat map for east part of the township (property ownership) for 1966
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2010%20Eplat%201966.jpg>

B1 11 Plat map for west part of the township (property ownership) for 1977
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2011%20Wplat%201977.jpg>

B1 12 Plat map for east part of the township (property ownership) for 1977
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2012%20Eplat%201977.jpg>

B1 13 Plat map for west part of the township (property ownership) for 1991
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2013%20Wplat%201991.jpg>

B1 14 Plat map for east part of the township (property ownership) for 1991
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2014%20Eplat%201991.jpg>

B1 15 Base map of Norman Township showing 2007 parcels
<http://www.wellstonmichigan.org/normantwp/profile/maps/B1%2015%20BaseParcels2007.jpg>

Chapter 3: COMMUNITY DEMOGRAPHICS

Population and Housing

This section providing information about Norman Township's historic and existing population and housing, and to project future population and housing needs and the resultant demands placed on the Township.

Existing and Historic Population

Below is a table presenting past U.S. Census figures for Norman Township. Data from 1940 to present was used for population projection(s).

POPULATION								
	1940	1950	1960	1970	1980	1990	2000	2010
Manistee County.	18477	18524	19042	20393	23019	21265	24527	24733
Norman	399	447	491	678	944	1189	1676	1561
Dickson	571	505	483	627	777	735	929	993
Stronach	315	382	527	513	826	688	804	821
% of county								
Norman	2.2	2.4	2.6	3.3	4.1	6.0	6.8	6.3
Dickson	3.0	2.7	2.5	3.1	3.4	3.5	3.8	4.0
Stronach	1.7	2.1	2.8	2.5	3.6	3.2	3.3	3.3
% change								
	1940-1950	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-2010	
Norman	12.0	9.8	38.1	39.2	26.0	41.0	-7.0	
Dickson	-11.6	-4.4	29.8	24.0	-5.4	26.4	6.5	
Stronach	21.3	38.0	-2.7	61.0	-16.7	16.9	2.0	

Norman Township is experiencing a population decrease, as shown by the table above. The rest of Manistee County has experienced slight population growth, much like the rest of Michigan. Even neighboring double-sized townships (*presented in this chapter for comparison*) have experienced population growth rates, unlike the population loss in Norman Township

A decline of rural population (*a national trend due to migration to metropolitan areas*) from 1940 through the 1960s follows an expected pattern. This has not been the case for Manistee County and Norman Township in the recent past, perhaps due to the county's industrial job base, providing similar jobs which attract people to urban areas, and/or the in-migration of retirees. Beginning about 1970 people began to move away from large cities and toward "rural living", but secondary reasons included moves as a result of marriage, marital dissolution, seeking larger or less expensive housing, leaving school or the armed forces, and desire for a change of climate.

MANISTEE COUNTY

Norman Township had one of the highest population increases in Manistee County from 1990 to 2004, but lost population from 2000 to 2010. This loss may be attributed to the decline of in-migration of retirees and/or a leveling off or loss of employment opportunities. A lack of new job availability in local manufacturing and industrial sectors has been a factor which has restrained the rate of growth in Manistee County from the 1980s to the present.

Norman Township's recent loss of growth from residents moving into the area for reasons of retirement has a negative ripple effect on the area's tax base and economy, such as service industries and government services. Retirees also buy cars, maintain houses, go shopping, and so on -- all of which contribute to the volume of business in service and retail businesses, which in turn can lead to additional, or retained, employment opportunities.

U.S. Census data show that Norman Township has become both a retirement community and a "bedroom community" – from which residents travel for work in the Manistee and Cadillac areas. This trend is expected to continue during the next decade. As a result of the decline of manufacturing jobs in the City of Manistee, Norman Township should expect its near-term future population to be based more heavily upon the in-migration of retirees rather than as a "bedroom" to Manistee.

Although it has likely declined since 2008, another reason for population growth in Manistee County and northern Michigan is a desire to get away from the city; not necessarily a desire for rural or country living. Thus, there is often an expectation for urban level of services while residing in a rural area. Of continued concern in Norman Township is the potential for such individuals to locate next to a forest management area. In such an instance, it is not uncommon to hear complaints about dust, noise from machinery in operation in timber harvesting, and so on. The timber industry also complains about fractionalization of land (*division into parcels too large for single family homes and too small to economically harvest trees*), inability to harvest due to ownership by landowners with no knowledge of timber management practices and scattered homes in the forest.

Such residents are also often not accustomed to having private water well or septic system, their proper care, or the fact that permits are needed; and the necessarily longer policeman, ambulance or fire truck response time. *To avoid such conflicts in land use and to make it more practical and financially feasible to provide urban levels of government services, new residential development should be concentrated within the Township.* Condensed development allows for more efficient provision of government services, less infrastructure construction and maintenance to serve a greater number of homes and businesses, and can avoid traffic problems associated with lineal strip development along major roadways.

Population Projections

Manistee County's population is concentrated in its southwestern corner, in and around the City of Manistee. This area includes Manistee, Filer and Stronach Townships and accounts for nearly 55% of the county's total residents. According to the 2010 census, the City of Manistee has a

current population of 6,226. The second-largest township is Manistee, with a current population estimate of 4,084. For comparison, the smallest populations estimates are found in Marilla (393 persons) and Arcadia (639 persons) Townships. Norman Township’s 2010 population stands at 1,561.

According to the U.S. Census most of the population change in Manistee County between 2000 and 2010 came from youth, career-aged residents and retiree age groups. Specifically, the fastest-growing age group during this period in Manistee County was persons between the ages of 35 and 44 years, increasing 3.9%; ages 25 to 34 years increasing 1.5%; and youth aged 10 to 14 years which increased 1.3% - accounting for just over 33% of the county’s total population. The decrease in Manistee County population between 2000 and 2010 was primarily observed in residents aged 55 to 59 years at 2.8%; followed by ages 60 to 64 years, decreasing 2.3%; and 65 to 74 years declining 1.6%. This elder group represents 21% of the total Manistee County population.

Norman Township age distribution data show that the Township significantly “grayed” during the period of 2000 to 2010. Specifically, the 60 to 84 age group increased by 9.3%, while the new born to 19 year old age group declined by 8.2% in Norman Township from 2000 to 2010. The career-aged 25 to 44 age group also declined in Norman Township by 4.1% during this period. The following table presents the 2010 population of Manistee County, Norman, Dickson and Stronach Townships by age:

NORMAN TOWNSHIP BY AGE 2010													
Political Sub-division	0-5 Years	5-9 Years	10-14 Years	15-19 Years	20-24 Years	25-34 Years	35-44 Years	45-54 Years	55-59 Years	60-64 Years	65-74 Years	75-84 Years	85+ Years
Manistee County	1075 4.6%	1365 5.0%	1376 6.0%	1414 6.2%	1253 5.1%	2366 9.4%	2791 11.4%	3903 16.0%	2152 8.1%	1930 7.8%	2811 11.1%	1669 6.6%	628 2.6%
Norman Twp.	42 2.7%	16 1.0%	131 8.4%	81 5.2%	68 4.4%	121 7.8%	200 12.8%	293 18.8%	121 7.8%	112 7.2%	202 12.9%	160 10.2%	14 0.9%
Dickson Twp.	19 2.4%	16 2.0%	29 3.6%	44 5.5%	31 3.9%	49 6.1%	77 9.7%	169 21.2%	64 8.0%	40 5.0%	173 21.7%	65 8.2%	21 2.6%
Stronach Twp.	26 3.2%	40 4.9%	43 5.2%	54 6.6%	27 3.3%	70 7.3%	87 10.6%	148 18.1%	97 11.8%	81 9.9%	88 9.3%	54 6.6%	16 1.9%
Norman Twp. (2000)	91 5.4%	99 5.9%	123 7.3%	116 6.9%	54 3.2%	152 9.1%	262 15.6%	265 15.8%	137 8.2%	91 5.4%	200 11.9%	62 3.7%	24 1.4%

Norman Township’s population age distribution generally mirrors Manistee County's relatively high and increasing proportion of senior citizens. The median age of residents in Norman Township in 2010 was 49.3 years as compared to 42.8 years in 2000. The average age in the United States was 37.2 in 2010, and Manistee County’s median age is 45.0 for that same period.

Using a linear projection of population trends observed between 2000 and 2010, the projected future population for Manistee County is projected to increase by about 0.8% or about 200 persons per decade. A population projection for Norman Township during the same period is to lose another 1.7% or about 25 persons per decade. It is assumed events occurring anywhere in Manistee County which impact the area's population may have a correspondingly proportional impact on Norman Township's growth.

Norman Township Population Projection	
Year 2010	1,561
Year 2020	1,536
Year 2030	1,511
Year 2040	1,486

Political Subdivision	Permanent Population	Total Housing	Permanent Housing	Vacant and Seasonal Housing	Average Population Household	Seasonal Population	Peak Permanent and Seasonal Population
2010							
Manistee County	24733	15694	10308	3902	2.27	8858	33591
Norman Twp.	1561	1681	760	921	1.98	1824	3385
Dickson Twp.	993	434	756	322	2.72	876	1869
Stronach Twp.	821	581	354	227	2.31	524	1345

Existing Population Characteristics

Norman Township's population is dominantly rural. Norman Township primary population center is the unincorporated hamlet of Wellston. The Wellston community is bisected by M-55, bounded by Cooley Bridge to the east and Udell Hills to the west. There are other lesser residential centers in Dublin, in the Airport Road area, and around Pine Lake.

The settlement patter within Norman Township can be described as generally disbursed and this population distribution pattern increases the cost (and thereby taxes) to provide a high level of public services such as door-to-door solid waste/recycling pickup, police, fire, ambulance, road construction and maintenance, public water and sewer, etc. It is considerably more expensive to provide a physical service, such as public water, sewer, roads, etc., or location-response service such as police, fire, ambulance, when the customers are spread out. It means more miles travelled to provide the service than it would if population were more compact.

The result is the community need to provide more emergency services and/or slower response time from existing emergency services. This higher cost can also delay the community's ability to provide a given level of service as higher costs increase the threshold a community must attain before the service is cost effective.

The proportion of sexes is shown here:

MALE/FEMALE PROPORTIONS			
	Total Pop	Male	Female
Manistee County	24733	12806	11927
Norman Twp.	1561	824	737
Dickson Twp.	993	513	480
Stronach Twp.	821	421	400

Education levels in Norman Township are slightly lower than in Manistee County and Stronach Township but comparable to Dickson Township. Norman Township can be characterized as being typified by an older population, with education levels typical of their generation.

2010 EDUCATIONAL ATTAINMENT STATISTICS										
	25 Yrs. and Over	Less than 9th Grade Attained	9th-12th No Diploma	High School Graduate	Some College No Degree Attained	Associate Degree	Bachelors Degree	Graduate or Profess. Degree	% High School Graduate or Higher	% Bachelor Degree or Higher
Manistee County	18169	675	1667	6829	4211	1591	1946	1250	87.1%	17.6%
Norman Township	1233	80	142	519	284	100	67	31	81.8%	8.0%
Dickson Township	658	42	102	254	130	70	44	16	78.1%	9.1%
Stronach Township	610	9	86	214	175	63	43	23	84.9%	10.0%

2010 INCOME MEASURES			
	Household Income/Year	Family Income/Year	Per Capita Income
Manistee County	\$41,169	\$52,211	\$22,258
Norman Township	\$33,068	\$39,349	\$18,112
Dickson Township	\$36,250	\$39,150	\$19,848
Stronach Township	\$39,167	\$46,354	\$22,100

Housing Data

The Census tracks the types of structures that are available for residential use in an area. Data for Manistee County show a number of interesting trends. First, the most common owner-occupied unit is a composed of a single-family structure. The only significant difference from this pattern occurred in the City of Manistee, where about 4.5% of the owner stock was composed of structures with two to four units.

Second, the most common type of rental unit in the county was also included in single-family structures. Only two areas varied significantly from this pattern. One was the City of Manistee, which had about 22% of its renter stock in structures of 10 or more units. Onkama and Stronach Townships also had a larger-than-average share of rental units in larger structures. Third, the prevalence of manufactured housing as an alternative is widespread in terms of both the owner and renter stock in the area. Countywide, approximately 10% of the owner and rental housing stock is comprised of manufactured housing. In comparison, Norman Township, as well as Marilla and Springdale have approximately 25% of their owner stock in mobile homes. Norman, as well as Cleon, Dickson and Marilla, have approximately 35% of rental stock in mobile homes.

Norman Township has several major problems in the area of housing. First is the Township has a much higher percentage of mobile home and trailer housing units than any place else in the county. Only Springdale Township (an unzoned township except along the Betsie River) and Dickson Township come close to having the same percentage of mobile home/trailer housing units as Norman. Others are all less than 25 percent, and the county average is 10 percent.

Living in a mobile home, in itself, is not bad. Mobile homes sold today are capable of being constructed to the same standard and appear the same as a site or stick built home. However, Norman Township has a high proportion of old mobile homes and trailers, i.e. units not built for permanent living but rather for short-term vacations and pulled by an automobile.

Approximately 88.9% of homes in Norman Township have three or more bedrooms, and 11.1% have two bedrooms or less. The average for Manistee County is similar with owner-occupied three-bedroom or more housing at 89.4%.

The age of homeowner houses in Norman Township differ somewhat from Manistee County. Specifically, 29% of the housing stock in Norman Township was built before 1960; 44.8% was built between 1960 and 1989; and 26.1% was built from 1990 to 2010. This compares to 39.6% of the homes in Manistee County being built prior to 1960, 36.5% built between 1960 and 1990, and 23.9% having been built from 1990 to 2010.

In general, owner-occupied housing units countywide increased rapidly in value during the 2000-2010 period. In Manistee County the median value of owner-occupied housing was \$120,000 in 2010. This figure is 87.4% of the state's median value of \$137,300.

The values of approximately 50.7% of the homes in Norman Township fall between less than \$50,000 and \$99,000. The mean value of a single-family residence in Norman Township is

approximately \$98,900.

Based on U.S. Census Bureau 2007-2011 American Community Survey 5-Year Estimates, rental rates in Norman Township are relatively high, averaging \$779.00/month in 2010, up from \$493.00/month in 2000. The median for Manistee County is \$657.00/month, up from \$424 in 2000. Norman Township planners suggest that these estimated mean monthly rental rates may be overstated.

In terms of household types (family, single female, etc.), Norman Township is within norms.

HOUSEHOLDS BY TYPE 2010/2000						
	Total Households	Total Family Households	Married-couple	Female Householder no Husband	Non-family House holds	Householder living alone
Manistee County	10745	6914	5543	927	3831	3093
Norman Twp.	760 (681 in 2000)	517 (494 in 2000)	361 (409 in 2000)	94 (52 in 2000)	243 (187 in 2000)	183 (151 in 2000)
Dickson Twp.	434	272	212	39	162	135
Stronach Twp.	386	246	198	20	140	124

HOUSEHOLDS 2010	Householder 65+ yrs	Households w/ individuals <18 yrs	Households w/ individuals 65+ yrs	Average household size	Average family size
Manistee County	1404	2677	3650	2.18	2.66
Norman Twp.	100 (61 in 2000)	197 (207 in 2000)	278 (200 in 2000)	2.05 (2.46 in 2000)	2.35 (2.82 in 2000)
Dickson Twp.	56	98	159	2.29	2.81
Stronach Twp.	42	75	11	2.32	2.72

VACANT AND SEASONAL HOUSING						
	1990 Total Vacant Housing	1990 Vacant for Seasonal Housing	2000 Total Vacant Housing	2000 Vacant for Seasonal Housing	2010 Total Vacant Housing	2010 Vacant for Seasonal Housing
Manistee County	4750	3196	4412	3488	5386	3902
Norman Twp.	1072	897	951	870	920	803
Dickson Twp.	334	262	296	266	322	261
Stronach Twp.	242	188	202	171	227	184

Count of Housing Units										
	1970	1980	1990	2000	2010	2000-2010 change	2000 Total Vacant Housing	2000 Vacant for Seasonal Housing	2010 Total Vacant Housing	2010 Vacant for Seasonal Housing
Manistee County	9462	12235	13330	14272	15694	+9.06%	4412	3488	5386	3902
Norman Twp.	618	1240	1542	1632	1681	+2.91%	951	870	920	803
Dickson Twp.	348	513	634	660	756	+20.63%	296	266	322	261
Stronach Twp	157	506	523	549	581	+5.50%	202	171	227	184

Norman Township has the highest concentration of seasonal housing stock in Manistee County. Currently, 50.1% of the housing stock in Norman is seasonal housing. In as much as Norman Township is a vacation and sportsman's paradise, this tends to support the second reason.

EMPLOYMENT MEASURES

The following presents 2010 census regarding Norman Township residents' work in various sectors of the economy.

Residents' Industry of Employment – 2010 Estimates

Agriculture, Forestry, Fishing, Mining	11 (24 in 2000)
Construction	21 (37 in 2000)
Manufacturing	57 (129 in 2000)
Transportation, Communications, Utilities	39 (14 in 2000)
Wholesale Trade	11 (6 in 2000)
Retail Trade	119 (99 in 2000)
Finance, Insurance, Real estate	4 (8 in 2000)
Services (e.g. Business & Repair, Personal, Entertainment, Recreation, Professional, Services, Health & Education)	225 (280 in 2000)
Public Administration	51 (57 in 2000)
TOTAL EMPLOYED TOWNSHIP RESIDENTS	538 (654 in 2000)

The statistic 538 employed residents in Norman Township should not be confused with the number of jobs available in Norman Township. Not all of those employed who live in the Township necessarily have their place of employment in the Township. The following summarizes Norman Township's employers, and gives an estimate of how many jobs are located in the Township.

NORMAN TOWNSHIP BUSINESSES			
NUMBER OF BUSINESSES IN NORMAN TOWNSHIP			
	<u>1991</u>	<u>2002</u>	<u>2011 (*Wellston Zip Code Area)</u>
Agriculture and Forest	4	3	1
Mining	2	2	0
Construction	8	9	4
Manufacturing	7	3	0
Transportation & Utilities	1	1	2
Wholesale	0	0	0
Retail	28	14	10
Finance, Insurance & Real Estate	4	5	5
Services	41	48	12
Public Administration	1	3	0
TOTAL	96	88	34

The number of jobs in Norman Township* was estimated at 185 in 2011, 174 in 2002, and 182 in 1991. This suggests that about 66% percent of the labor force (i.e. 185 jobs in Township/538 employed workers in Norman Township) in the Norman Township commute to work outside the Township in 2011. This number was estimated at 73% in 2002, and it should be noted that all 185 jobs in Norman Township were filled by Township residents. The significant observed loss of retail employment and Services is an impact a rural community can experience due to the establishment big box retailers and/or new business/commercial centers located outside of the Township.

U. S. Census data provides some information as to where employed residents worked in 2010:

Total Employed residents of Norman Township:	538 (684 in 2000)
Total Employed that work in Manistee County:	428 (654 in 2000)
Total Employed that work outside Manistee County:	110 (30 in 2000)

There is no direct data to indicate where one goes within Manistee County for work. However, the 2010 census does provide statistics which provide evidence with which one can draw some conclusions.

2010 Census data indicates that 53 residents of Norman Township walked to work, and 0% of Township residents walked or bicycled to work. This suggests that at least 53 residents of Norman Township work in the Township.

The following table provides 2010 U.S. Census data on travel time to work.

TRAVEL TIME TO WORK IN NORMAN TOWNSHIP – 2010

TRAVEL TIME	NUMBER OF PEOPLE	PERCENT
Less than 10 minutes	141	26.2
10 to 14 minutes	68	12.7
15 to 19 minutes	56	10.5
20 to 24 minutes	59	11.0
25 to 29 minutes	37	6.8
30 to 34 minutes	38	7.0
35 to 44 minutes	46	8.6
45 to 59 minutes	55	10.3
60 or more minutes	38	7.0
Mean travel time to work	22.0 (32.5 in 2000)	

It can be assumed that a work trip more than 45 minutes includes commuter to the labor markets of Cadillac, Frankfort, Ludington, and Traverse City. However, work commutes of 15 minutes or less while outside Norman Township include Brethren and Kaleva within Manistee County. A 20 to 44 minute commute would bring most of Norman Township residents to the Manistee Lake area.

The above suggests that Norman Township is, at least in part, a bedroom community to the City of Manistee. The Norman Township area is also a strong retirement community. Further, data in the population section of this report indicates a strong seasonal influx. All three categories, bedroom community, retirement and seasonal residents contribute to Norman's economy. Residents buy food, gas, and local services, all of which could result in employment by service businesses in the Township. However, as indicated by the Census data, service businesses dramatically decreased in Norman Township since 2000.

There are an estimated 29 businesses in Norman Township which are dependent on tourism such as motels, hotels, campgrounds, etc., construction, retail, and services segments of Norman's economy.

The Wellston Area Tourist Association (WATA), formed in the late 1970's is still a major force promoting tourist growth in Norman Township with coordinated promotion, public access facilities, etc. The efforts of the Association have increased the length of the "tourist" season in Norman Township. Tourism is both an end in itself (i.e. more tourist-related jobs) and a means to an end (i.e. a way to promote an area for retirees and new businesses) as the rural character, recreational opportunities and aesthetics which attract tourists also attract retirees and people who start new businesses.

WATA has underlined the following concerns and problems:

1. Tourist/resort businesses are losing customers as a result of people buying their own summer homes in the Wellston Area.
2. This is aggravated further by inexpensive land and lack of land use controls so it is easy to divide property.
3. Most people come to Norman Township for the environment and outdoors activities. Unsightly development poses a danger to one of the area's largest sources of employment. Thus there should be greenbelts along major roads, no junk yards, dilapidated trailers, no clear-cutting visible from a road – each in an attempt to preserve a "clean" rural image.
4. Resort-type businesses should be allowed to be located in most areas of the Township, particularly rural residential locations.
5. There should be a definite, defined and consolidated commercial area, along Caberfae Highway (others confined a commercial area to just in the area of Wellston).

The three largest employers within Norman Township are retail (Dublin Store) and service enterprises.

TOP FIVE TOWNSHIP EMPLOYERS IN 2010

1. Dublin General Store, Ltd.	36
2. Fisher Tanks (MF Enterprises, Inc.)	44
3. Wellston Medical Center	14
4. Kozy Kitchen	7
5. Lake-Osceola State Bank	4

After fifth place, the number of full-time-employed people is at or below 5 for the remainder of the employers in the Township.

Of note is that the second largest employer in the Township in 2005 was the Wellston Elementary School facility (grades K through 5) in Norman Township, which contributed to the relatively high proportion of service jobs at that time. This changed during the fall of 2009 when the Wellston Elementary School was closed to consolidate Kaleva Norman Dickson elementary, middle and high schools within a central school campus in Brethren. This resulted in the loss of 12 full time teaching positions in Wellston.

Wellston does not have a public sewer system and as such is limited in its capability to accommodate intensive levels of growth such as dense residential development, heavy manufacturing, etc. Such development should only occur where it can be connected to a sewer.

It is noted that a large number of jobs enjoyed by Norman Township residents rely upon commuting in/out of the Township, and a number of businesses used by Township residents depend on customers, supplies, etc. outside of the Township.

For a community such as Wellston/Norman Township which depends on large part on tourist and vacation trade, it is of paramount importance to look and feel attractive as a community. In large part the community is selling its natural resources, its northwoods, rural character. It is fundamentally important to protect that appearance and perception. In short, to attract new and retain existing business, this area must be and remain attractive. To be attractive, a community must be willing to invest in high quality educational opportunities, public lands and public access to waterways and natural resources, incentives to promote land and natural resource conservation, land use and environmental protection (e.g. zoning), and economic development efforts such as the Manistee County Economic Development Office/Corporation, Manistee County Economic Development Council, the Manistee County Chamber of Commerce, and the Manistee Area-Wide Labor Management Council. Michigan State University Extension also plays a major role in Manistee County development and technical assistance in the agriculture and forestry industries. MSU Extension also provides technical assistance to local governments, in development of programs, surveys, administration, studies and tourism development.

Manistee County planning office provides economic, population and community data, and coordination between the above organizations and municipalities. This office also provides technical assistance in zoning and planning matters for municipalities, developers and the general public. The Manistee County Planning Commission also performs the long-term strategic planning and goal formation for economic development in the County. Manistee County is also a participating member of the Northwest Michigan Council of Governments (NWMCOG), in which provides the above services for a ten county region of northwest Michigan.

Chapter 4: LAND USE/LAND COVER

Introduction

The following discussion addresses changes in land use and land cover in Norman 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 documented from interpretation of aerial photographs. Some land cover categories include: agriculture (active), upland forest, upland field (inactive agricultural land), open water, wetland, barren, and urban (typically residential, but also consisting of the lack of other land cover categories).

Generally speaking, *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 sometimes there is overlap between the two when examining changes over time. When planning for the future, each land use and/or natural resource requires unique public services and special considerations. As an example: removal of trees and vegetation for a golf course or housing development will require storm water protection techniques. The cumulative effect of land use/land cover changes can be tracked and analyzed to project future needs. Below is an inventory and analysis of the use of the land, ownership of the land, and division of the land in Norman Township in the following parts: (1) a review of the ownership of land, (2) a review of the division or fractionalization of land including subdivisions and small parcels, and (3) the various classifications of the land use.

Land Ownership

Land in Norman Township is about half publicly-owned. Most of the privately held land in the Township is used as residences, is vacant, or for commercial purposes. The publicly-owned land is predominantly Manistee National Forest lands administered by the U.S. Forest Service. A second group is local government-owned land, with various holdings represented as township and village government facilities (parks, buildings, recreation, roads, etc.).

Map #1 Base Map with Property Lines is found at the Norman Township website (www.normantownship.org) and illustrates the landownership pattern within Norman Township, naming the larger parcel owners. This map also begins to illustrate the pattern of land fractionalization in the Township.

Land Fractionalization

Fractionalization of land is the manner in which a parent parcel is divided into smaller parcels. The most dense (i.e., small lots) land division is generally represented by the existence of housing subdivisions. When a landowner chooses to divide his land into more than four parcels, each 10 acres or smaller in size within a 10-year period, a formal plat must be drawn and approved as a subdivision. Other splitting of land is done as dividing property into smaller parcels.

A proposed plat (i.e., the drawing of lots) is subject to a lengthy review by township, county and state agencies before the land can actually be subdivided. The review and approvals are designed to provide government the opportunity to insure compliance with zoning, that there is adequate drainage, septic facilities, road access, open space, etc. The base map shows subdivisions, the areas within Norman Township where approved subdivisions exist. In general, subdivisions tend to be located in the center of the Township, the community of Wellston, Dublin area and north of Wellston, with the exception is Glenn Valance Subdivision on Warfield Road.

The Norman Township base map also shows areas not within subdivisions where parcel sizes have been reduced over the years, usually to 10 or 20 acres or smaller. The areas are found throughout the Township, and especially along Peter's Farm Road, around Lake-of-the-Woods, Caberfae Highway-Huff Road area, east of Chalker Road, and east of Warfield Road. In analyzing the base map and the equalized value tax map, one can observe that much of the fractionalized land is into parcels which are about 10 acres or smaller in size.

Fractionalization presents several problems:

1. Such parcels tend to have one home near a public road, and the remainder of the parcel is typically vacant. This land use arrangement creates a situation in which land not near a road is split up into different ownerships without clear or easy access, resulting in the remaining land being vacant and generally not accessible. Homes tend to be built along roads, resulting in a residential land use pattern in strips along both sides of a road, while property behind the homes remains vacant. Thus emerges a residential development along road corridors rather than the development filling-in behind existing homes.
2. Small parcels are often not as economically feasible for developers to subdivide. This is particularly true with development of a subdivision requiring road, drainage, or other development infrastructure.
3. The 20 acre parcel or smaller also plays havoc with any potential public effort to preserve farm or forest lands. Division of land into smaller parcels drives up the price of land and property taxes, which also adversely affects farms or forest lands. Also such small parcels are often not large enough for use as a farm or for commercial forestry.

In summary, land use patterns in Norman Township indicate a scattered residential land use pattern, mainly located along roadways. Norman Township has an adequate land base to accommodate additional growth with little infrastructure development assuming future residential development occurs through subdividing, rather than development of 10 acre parcels. The Township now has adequate subdivisions which have vacant lots suitable for on-site septic systems.

The primary buyer of timber in the Manistee region is Packaging Corporation of America (PCA), which uses wood chipping operations generally requiring a minimum of 40 acres of forest in single ownership for harvesting. Forty acres in Norman Township is not large enough for many farm operations. A possible solution to land fractionalization is to require large minimum parcel sizes (i.e., 30 or 40 acres) in rural zoning districts. However, this approach is often politically not popular and subject to legal challenge²⁶. A regulation requiring all new parcels to have road frontage is common. Also, regulating a maximum width to depth (3:1 or 4:1 for example) avoids long narrow parcels and may help to discourage unwanted land fractionalization. Norman Township may also choose to promote future residential development via subdivisions. Zoning regulations to accomplish agricultural and forest preservation, as discussed earlier in this Plan, is also an effective tool. However, most of Norman Township is zoned Rural Residential, and has a 2.5 acre minimum lot size. See Map #10 Zoning Map.

Land Use

Map #11 Land Use /Land Cover illustrates the location and extent of the various types of land uses in Norman Township, and a discussion of each land use follows.

Wetlands:

Wetlands in Norman Township are mainly south of M-55, along Seaman Road and in the vicinity of Pine Lake. Wetlands which are within 500 feet of surface water bodies (i.e., lakes, streams, creeks, etc.) are regulated by Michigan Wetland Protection Act, Part 303 of P.A. 451 of 1994, as amended.

Forests:

As shown on the Land Use Map, forestland is the dominant land use in Norman Township. Forested areas, along with the rangeland category, illustrate the undeveloped area of the Township, and exist as areas in the Township which have not seen much residential, agricultural, commercial, or industrial development.

Rangeland:

Rangeland refers to open fields of grass and grassy fields with shrubs. Often these areas are former farms. Distribution of rangeland in Norman Township is sparse, as most remains as forest.

²⁶In *Marilla Township v. Dale Robinson et.al.*, (19th Michigan Circuit Court for the County of Manistee, file no. 86-4962-CZ, Judge Charles D. Corwin; Sept. 25, 1991) a 40 acre minimum parcel size in zoning was upheld for non-farm/forestry uses in an agriculture/forestry preservation area when the intent was to preserve large parcel sizes for possible future use for agriculture or timber harvesting. The court also ruled the 40 acre minimum could not be applied to forest and agriculture land uses because by their very existence the existing parcel (no matter what size) was large enough.

Agriculture:

Land actually used for agricultural purposes in Norman Township tends to be along Peter's Farm Road in the south west part of the Township. A comparison of the agricultural map with the soils map illustrates a relatively high correlation between better soils and agricultural activity.

Open and Other:

The land use category "open and other" in Norman Township includes two categories: outdoor recreation such as parks, golf courses, track; and cemeteries. Due to the map scale used in this report, only the larger facilities and cemeteries are easily discernible.

Industrial:

The predominance of industrial and extractive activity in Norman Township is found in Wellston, such as the former Buda Family Saw Mill.

Commercial and Services:

Commercial activity in Norman Township is almost entirely in Wellston and along Caberfae Highway (M-55) north of Wellston.

Residential:

The State Equalized Value Map and the Base Map illustrate the distribution of dense residential land uses in Norman Township. Dense residential uses tend to concentrate around Wellston, Dublin, north of Wellston, Pine Lake, Pine Creek at Caberfae Highway (M-55). Less dense residential development exists in lineal patterns along many county roads. The distribution of the residential land use also illustrates the areas of the Township which are subdivided versus those areas which are divided into parcels and result in homes along existing county roads.

Extractive:

Gravel pits are the main extractive activity in Norman Township.

Barren Lands:

Barren lands include beaches and sandy bluffs along shorelines -- not found in Norman Township except thin strips of open soil along rivers.

Maps

B7 1 Land Use and Land Cover map for 1993

<http://www.wellstonmichigan.org/normantwp/profile/maps/B7%201%20LandUse1993.jpg>

B7 2 Parcels in the township showing the State Equalized Evaluation (SEV)

<http://www.wellstonmichigan.org/normantwp/profile/maps/B7%202%20Tax%20SEV.jpg>

B7 3 Parcels in the township showing the SEV per acre

<http://www.wellstonmichigan.org/normantwp/profile/maps/B7%203%20Tax%20SEVperAcre.jpg>

Chapter 5: NATURAL RESOURCES

General Characteristics

Norman Township is 72 square miles in size, consisting of two typical Michigan townships sharing an east-west boundary. Its natural resource base is comprised of beautiful hardwood forests and hillsides; plentiful wetlands, river, streams/springs and seeps; numerous inland lakes; and some productive farmland. This natural resource base is central to the definition of the quality of life within Norman Township, and the identity of its residents. Residents of Norman Township are attracted to these areas, yet over-development and/or inappropriate development may erode or degrade this natural resource base.

Regionally and throughout the State of Michigan, population within cities is decreasing and rural areas are growing - at least partly because "baby boomer" residents are nearing or enjoying retirement and want to be closer to nature, avoid noise and congestion, enjoy a slower pace of life, and/or reside within safe communities. Some argue that we are bringing urban problems with us, as we "love rural communities to death." Population migration to Manistee County was at a significant overall rate of 15% between 1990 and 2000, reflecting such trends. The fastest growing areas in Manistee during this period were located along waterways, near national forest lands and along lakeshores within Springdale (46.6% growth), Pleasanton Township (42.6% growth), Norman Township (41.0% growth), Marilla Township (35.1% growth), Cleon Township (30.7% growth), and Dickson Township (26.4% growth) according to the 2008 Manistee County Master Plan. As population grows, conflicts between people and the issues regarding potential impact to Norman Township's rural character are likely to increase. These trends, in turn, threaten Norman Township's natural resource base, including its rural character and high quality natural resources such as woodlands, wetlands and water resources.

Norman Township conducted a survey of property owners to gather ideas to inform Master Planning in 2007. Results of that survey overwhelmingly indicate that Township respondents place a high degree of importance on the protection of natural resources including: steep slopes, wetlands, streams, forests, and wildlife. Concerning other related natural resources questions, survey results from respondents were typified by:

- ❖ The top five issues identified by respondents included the need to preserve forestland; protect the Manistee River and other streams and lakes; and protecting drinking water quality and groundwater supply.
- ❖ Residents identified that the quiet, clean environment is the best thing to be found within the Township, and its vision for the future should be keeping the Township natural, rural, and clean.
- ❖ When asked what the Township should purchase, if able to purchase lands for natural resources protection, residents identified the public acquisition and use of lands along lakes, stream and rivers as the highest priority.
- ❖ Most strongly agreed or agreed that Norman Township should protecting the rural character of the Township by preserving open space when properties are developed; protecting wetlands and other natural resources, and addressing junk yards, rundown trailers and homes, unkempt businesses, and forest and farm

preservation.

The natural resource base of Norman Township is discussed below to document location, quality, and importance. A summary of perceived threats to Norman Township's resource base is provided for each category.

High quality forest and natural areas not only provide us with economic and recreational opportunities, they are also home to fish, wildlife, and a wide variety of plants, shrubs, and trees. These areas also provide us with clean air to breathe and pure water to drink, and leisure enjoyment. These resources are thereby important economic resources within Norman Township. Specifically, natural areas are used for economic pursuits such as farming, forestry, and recreation. Retention of an intact resource base within Norman Township is necessary for the protection of the public health, safety, and general welfare. Future development of the landscape should not be conducted at the expense of the Township's natural resource base identified in this chapter. This plan identifies: 1) features that should be protected; 2) areas that exhibit limitations for development; and 3) land that is or may be appropriate for guided development.

Surface Water Resources

Norman Township is blessed with numerous lakes, rivers, streams and wetlands. The Township possesses over twenty inland lakes/impoundments, and many miles of rivers and streams – including the regionally significant Manistee/Pine River. Lakefront and riverfront property within Norman Township is highly valued for its scenic beauty, location for home sites, and recreational opportunities.

The Manistee River watershed is the major drainage pattern in Norman Township and extends into eleven other counties. This watershed can be further divided between Pine River, Pine Creek, Peterson/Sand Creek, drainage direct into the Manistee and the Little Manistee River. *See Map #3 Major Watersheds Map.* The watershed of the Manistee River is not typical of Michigan Rivers as the lower Manistee, just north of Norman Township, follows a wide, one to two mile river valley. The valley floor is mostly wetland and/or flood plain. The river corridor (and also Pine River in Norman Township) is for the most part publicly owned. While this has caused concern for loss of tax base it has also played a major role in the development of the area's economy. The river is a major attraction for the area's tourist industry. It was nationally highlighted by receiving designation as a National Wild and Scenic River on March 3, 1992 in the Michigan Rivers Bill.

The banks of Pine Creek, the Pine River and the Manistee River have steep slopes with significant increases in grade and elevations. These waterways offer excellent fishing and outstanding scenery. The Little Manistee River's watershed encompasses parts of the southwest part of Norman Township. It includes the relatively flat swamp area (Hopper Swamp) which surrounds Lake-of-the-Woods. The river, drains into Manistee Lake, which drains into the Manistee River and finally into Lake Michigan. The Little Manistee is currently being studied as an addition to the National Wild and Scenic Rivers system.

Lakes and streams within Norman Township include:

LAKES:

Tippy Dam Pond; (part) Sections 5 & 8 E. Norman
Pine Lake; Sections 22 & 27 W. Norman
Lake-of-the-Woods; Sections 31 & 32 W. Norman
Timmerman Lake; Section 23 W. Norman
Sand Lake; (part) Section 31 E. Norman
Chittenden Lake; Section 13 W. Norman, Section 19 E. Norman
(a.k.a. Round Lake or Government Lake)
Dorner Lake; Section 19 E. Norman
Crystal Lake; Section 13 W. Norman
Cranberry Lake; Section 13 W. Norman
unnamed lake; Section 13 W. Norman
Star Lake; Section 14 W. Norman
Lost Lake; Section 24 W. Norman
Mud Lake (intermittent); Section 36 W. Norman
Sylvan Pond; Section 6 W. Norman
unnamed pond (backwater); Section 33 E. Norman
unnamed pond; Section 25 W. Norman
unnamed pond; Section 24 W. Norman
unnamed pond; Section 15 W. Norman
unnamed pond; Section 29 W. Norman
unnamed pond; Section 33 W. Norman
unnamed lake; Section 21 W. Norman
unnamed pond; Section 27 E. Norman
three intermittent ponds, unnamed; Section 3 E. Norman

RIVERS AND STREAMS: (The Section number is where the river's mouth is found or where the river exits Norman Township)

Pine River; Section 8 E. Norman
Peterson Creek; Section 1 E. Norman
Cool Creek (to Little Manistee); Section 34 W. Norman
Pine Creek; Section 6 W. Norman
Sylvan Creek; Section 6 W. Norman
unnamed creek (goes though Wellston drains into Pine Creek); Section 23-14 W. Norman
unnamed creek (drain Pine Lake to Pine Creek); Section 16 W. Norman
unnamed creek; Section 4 E. Norman
unnamed creek (drain within Wildcat Swamp); Section 22 E. Norman
unnamed creek (drain within Wildcat Swamp); Section 21 E. Norman
Mud Lake County Drain (manmade, intermediate); Section 8 W. Norman

It is important for a community to protect water quality in lakes and streams. Lakes such as Pine, Chittenden, Lake-of-the-Woods, etc. should be monitored closely for weed or

alga growth. The Township may wish to initiate an inland lakes self-help program (a Michigan Department of Natural Resources program) for periodic water quality testing.

Specific elements within such monitoring programs should, in most cases, include:

1. Establishment of bench marks as references to identify future trends in water quality.
2. Sampling of water throughout all areas of lakes as well as specific existing and anticipated problem areas; also, sampling along all tributaries entering a lake.
3. Monitoring groundwater quality upwelling into a lake, i.e. the groundwater surface water interface through interstitial sediment monitoring.
4. Determining the nutrient loading levels from such sampling, especially total daily maximum loads (TDMLs) of phosphorous.
5. Consistency in replicated sample locations and depths.
6. Sampling should be conducted during calm weather and after stormy weather.

It is reasonable to expect nutrient loading of aquatic systems as development around lakes and rivers in Norman Township's porous sandy soils become more intense. Most of the increased nutrient loading is caused by humans. This type of pollution can be reduced by preventative measures which cost little and have little impact on one's lifestyle or a community's economic livelihood. Specifically, nutrients from septic tanks and lawn fertilization can be reduced. Education of lake-front owners is the first step, and might include:

1. Importance of a maintenance schedule for all on-site sewage disposal systems, including specialized maintenance and clean-out schedules for all systems within the critical peripheral shoreline zone as determined by the local or state health departments.
2. Careful use or non-use of lawn fertilizers to avoid excessive fertilizer passing through the lawn area and into the surface or groundwater. Recommendations on lawn fertilizing techniques and scheduling are available from several sources, including MSU/Manistee County Extension. Through a homeowner's use of soil testing (through Michigan State University Extension), one can identify the exact amount of fertilizer needed. To place more fertilizer on a lawn simply means the nutrients are not used by turf, and start to travel to the water where it becomes nutrient pollution in the water.

A second preventative measure is the requirement of a greenbelt along the edges of surface water. Lawn fertilization and septic nutrients travel relatively close to the surface toward a water body. Woody plant material (trees, bushes, and other plants with a wood trunk or leader) are most effective at growing roots into the nutrient's zone of travel and using those nutrients by removing them from the soil before they reach the water.

The term “Riparian Buffer” has many definitions in the literature. A theme common to the majority of definitions is that it represents an area adjacent and connected to the shoreline of a lake, stream, river, or wetland that separates the water body from development, and acts to mitigate the potential negative impacts of the adjacent land use, however, not all buffers have the same positive benefits. A highly manicured grassed area that is mowed short and fertilized will not have the same benefits as an area of native vegetation, an area of tall grass, or an area with trees and shrubs. Less disturbed areas will provide greater reduction in Non-point (NPS) pollution, and provide better habitat. Factors influencing the effectiveness of a riparian buffer include types of vegetation, soil type, width of buffer, and maintenance activities. Multiple benefits can be derived from riparian buffers. They reduce impacts of NPS pollution, create aquatic and terrestrial habitat, stabilize shoreline, and provide visual diversity. The benefit of a buffer is dependent upon slope, soils, and vegetation.

Riparian buffers reduce NPS pollution by slowing runoff and associated pollutants thus allowing them to settle or be adsorbed prior to reaching the water body. Undisturbed riparian areas attract a vast diversity of species, including birds, fish, reptiles, invertebrates, and mammals for feeding, nesting, cover, and breeding. Riparian buffers also hold soil in place and stabilize shoreline areas. Scientific studies show that wider buffers are better at providing NPS pollution control and enhancing habitat, while narrow buffers are suitable for stabilizing shoreline.¹

The width of a riparian buffer is one factor that local planning and zoning commissions may have control over through a structure setback rule, or buffer ordinance. The literature suggests that wider buffers reduce NPS pollution and provide better and more habitat for wildlife. Studies of riparian buffers have shown that the optimal buffer width is dependent on its purpose (i.e. whether the buffer is for nitrogen, phosphorus, or sediment removal; habitat enhancement; bank stabilization; or shoreline aesthetics. The table below includes recommended buffer widths for each use.

¹ Vegetated Buffers in the Coastal Zone A Summary Review and Bibliography by Alan Desbonnet, Pamela Pogue, Virginia Lee, and Nicholas Wolff of the Coastal Resource Center Rhode Island Sea Grant, University of Rhode Island (1994); A Review of the Scientific Literature on Riparian Buffer Width, Extent, and Vegetation by Seth Wegner of the University of Georgia (1999); Effectiveness of Shoreland Zoning Standards to Meet Statutory Objectives: A Literature Review with Policy Implications by Thomas W. Bernthal of the Wisconsin Department of Natural Resources (1997); and Mitigating the Adverse Impacts of Urbanization on Streams: A Comprehensive Strategy for Local Government by Thomas R. Schueler of Metropolitan Council of Governments (1992).

Buffer widths reported in select scientific literature.

Pollutant/Purpose	Buffer width (ft) recommended by each source		
	University of Rhode Island (<i>Desbonnet et al.</i>)	University of Georgia (<i>S. Wegner</i>)	Wisconsin DNR (<i>T.W. Bernthal</i>)
Shoreline Stabilization	6.5	< 30	35 ft no-cutting buffer, and 75 ft structure adequate for water quality protection.
Sediment	82	30	
TSS	197	Not addressed	
Nitrogen	197	50	
Phosphorus	279	50 ft – 100 ft for short term control; long-term control not provided by buffers	
Habitat	50 (wider is better)	50 (wider is better)	35 ft minimum for protecting physical habitat of water body, terrestrial habitat dependent on quality of buffer.
Aesthetics	No quantitative value provided.		

As the above table indicates, the minimum buffer width suitable for controlling NPS pollution is 30 feet. Greater buffer widths in excess of 100 feet will increase NPS pollutant removal and are better for habitat considerations. Shorter buffers may be adequate for shoreline stabilization.

The literature review by Desbonnet (1994) analyzed numerous scientific studies. The analysis resulted in buffer widths being related to percent removal of pollutants. Quantitative relationships between buffer width and nitrogen and phosphorus removal were created. The table below reports the results of these relationships at various buffer widths. As the table shows the relationship between width and percent removal is not linear.

Percent removal as function of buffer width

Buffer Width		Percent Removal	
(ft)	(m)	Total Nitrogen	Total Phosphorus
0	0.0	0%	0%
2	0.6	32%	29%
5	1.5	42%	38%
8	2.4	47%	43%
10	3.0	49%	46%
15	4.6	53%	50%
20	6.1	56%	53%

25	7.6	59%	55%
30	9.1	61%	57%
40	12.2	64%	60%
50	15.2	66%	62%
60	18.3	68%	64%
70	21.3	70%	66%
80	24.4	71%	67%
100	30.5	73%	69%
300	91.5	85%	81%

Buffer widths were not quantitatively linked to percent sediment removal in the same fashion as nitrogen and phosphorus. However, Wegner (1999) reported that there is “a positive correlation between a buffers width and ability to trap sediments.” Buffers may provide improved habitat, depending on the vegetation present in the riparian setback area. Other benefits of buffers, such as, aesthetics, and nonpoint source control could be enhanced by certain vegetation; however, some benefit will be derived even with manicured turf grass. It also should be noted that buffers are just one method of controlling nonpoint source pollution. Other methods of treating stormwater include infiltration basins, stormwater wetlands, rain gardens, and detention/retention basins.

A third important consideration are various controls of runoff laden with pollutants including oil, grease, gasoline, etc. While it is evident people are aware of negative forces affecting lake water quality, the value of a public awareness program to educate the public on the dynamics of lake water quality is immeasurable in modifying the public's practices. Specific information to be included should cover, at a minimum, the following topics:

1. How an efficient septic system operates and the results of a non-operational system.
2. Dynamics of weed and algae growth in relationship to nutrient loading.
3. Relationship between lake water quality and real estate values.
4. Escalating nature of poor water quality once initial pollutants are introduced.
5. The value of water conservation in relation to septic tank operations.
6. The effect of lawn fertilization and other chemicals upon lake water quality.

There are areas in Norman Township, based on soil types, where it is not likely that homeowner sewage disposal systems -- septic tank with a drain field or dry well -- would be permitted, as they would not percolate or “perc.” Areas shown as wetlands on maps presented in this report and areas where the health code required 100 foot setback from water or wetlands, are also areas where septic systems would not be allowed. *See Map # 7.* Areas where soil maps also show a dominance of clay or clay loam soils are also suspected to be locations where a septic tank would be denied due to the area's failure to perc when tested. Such areas may be acceptable for low density development where there

is room for special designs or larger drain fields (10 acres per living unit.)

The remainders of Norman Township are areas where a drain field or drywell will "function" in that the effluent will drain away from the system. However because the dominate soil type in Norman Township is a porous sand, the probability for pollution of groundwater from a dry well and drain field is much higher than in other parts of Michigan --particularly southern Michigan. The Manistee County Health Code attempts to compensate for this by requiring a relatively larger drain field size. Drain fields are also permitted, but do not function to avoid pollution at all.

Threats to Surface Water Resources

The disturbance of trees, shrubs and other shoreline vegetation can increase the potential to for soil erosion and deposition in lakes and streams. Specifically, surface waters and shoreline areas can be degraded by: 1) soil and vegetation deposition from erosion; 2) algae growth enhanced by nutrients from leaching septic systems and/or from over application of fertilizers and pesticides; and 3) increased impervious or sealed surfaces, roof tops, driveways, parking areas, and/or manipulated landscapes.

Threats to surface water should be addressed through Low Impact Development (LID) techniques. LID is a set of approaches to stormwater management that are designed more like how nature handles stormwater than highly engineered and constructed systems. LID approaches tend to be much less expensive for developers and public agencies, do more to purify stormwater, protect groundwater and surface sources of water for domestic use, reduce the temperature of stormwater to protect fisheries, and contribute to a natural or rural scenic quality than hard stormwater systems. LID approaches include the reduction of hard or impervious surfaces, the use of vegetation to filter runoff from developed or cleared areas, natural swales to convey and filter stormwater and simultaneously allow it to soak into the ground.

Historically there have been relatively fewer year-round homes constructed along shorelines and waterfronts within Norman Township, and current trends indicate new home construction and the conversion of vacation homes to full-time residences on waterfront parcels within the Township. Homes being built today are generally larger than the seasonal cottages originally built in the area. Homes constructed in these areas must be properly designed and constructed to protect the Township's water resource base over the long-term.

Geologic and Topographic Setting

Topography refers to the elevations, relief features, and surface conditions of a geographic area. For the purpose of this chapter, subsurface "hydrogeology" is defined as the science of how water is distributed throughout the soil and rocks under the Earth's surface. The dynamics of these natural forces working together form sensitive natural systems along shoreline properties within Norman Township.

Norman Township also has noteworthy topographic features, and Norman Township residents and visitors alike have experienced the exhilaration of the steep banks along the

Manistee/Pine River. These slopes contribute to the striking rolling rural character, pleasant rural views, and rich recreational opportunities. They are also sensitive features which can be damaged by development, unless good planning principles are undertaken and adhered to. The topography of the remainder of the Township rolls from hill to valley to hill and forest.

Threats to Other Topographic Township Features

Topographic features such as those found in Norman Township can often be restrictive to development. Generally speaking, level or moderately sloping sites are preferred for home sites and septic drain fields, as well as agricultural uses. Commercial and industrial uses and their driveways and parking lots require flat or nearly level surfaces. Development that occurs on steeper slopes adds to construction costs due to requirements for storm water and erosion control measures, grading, and possible specialized engineering design.

The following represent a summary of threats to natural, economic, and scenic resources when hillsides are developed without consideration of topographic features:

- ❖ Disturbance of hillsides can result in the loss of slope and 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 may impair surface water quality and wetlands as a result of subsequent siltation. Spring thaws and strong rains on bare or unstable slopes can produce mass movements, such as landslides, slumps, and flaws.
- ❖ Disturbance of hillsides can increase the rate of storm water runoff. Development may alter the natural drainage pattern of hillsides, changing runoff and causing erosion. Removal of vegetative cover and the construction of impervious surfaces, such as roads and building roofs, decrease the 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 may also contribute to flooding hazards.
- ❖ Disturbance of hillsides can also impair a community's scenic resources. Denuded slopes; significant alteration of site topography; and damage to surface waters, ground waters, and wetlands can result in the loss of valued Township resources and rural character.

Inactive sand and gravel mining operations can leave behind very steep, non-vegetated slopes susceptible to erosion and/or slumps. Norman 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.

Wetland Resources

Norman Township possesses other important water resources, including wetlands. 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 seven large wetland areas located in Norman Township, some of which have intermittent streams running through them, and others comprise large wetlands within river corridors in Norman Township, often existing along creeks, streams and rivers as "riparian" wetlands. These important resources provide wildlife habitat, protect groundwater/drinking water, filter pollutants from surface water runoff, possess recreational value, and help in the prevention of flooding. Wetlands are biologically rich and diverse places to observe plants and animals in their natural habitat.

Large wetland areas within Norman Township include: (* indicates wetlands of particular significance)

- *Hopper's Swamp (including Lake-of-the-Woods, Timmerman Lake and west/south Pine Lake areas)

- Wildcat Swamp

- Wellston/Pine Creek and feeders network of wetlands, pot-hole like features; Sections 19, 18, E. Norman; 13, 24, 25, 23, 26, 27, 22 W. Norman Township

- Sylvan Creek Cedar Swamp

- Lower Pine River Valley

- three pothole lakes in Section 3 E. Norman Township

- Pine Creek headwaters (Section 32 & 33 E. Norman Township)

Other small, but extremely important wetlands exist throughout Norman Township.

Hopper's Swamp is considered major because of several factors, including size, association with large or important surface water bodies, values for wildlife habitat, and surface water cleaning and protection.

It is important to note that some of the wetlands in Norman Township are considered to be a high priority for protection on a countywide or statewide basis, and should be protected and receive special regulatory attention. There are many wetlands in Manistee County and in Michigan which are considered --rated by the Michigan Natural Features Inventory -- which merit more protection and attention than those in Norman Township. A number of wetlands or parts of wetlands in Norman Township are contained in the Michigan Natural Features Inventory. This is an inventory of areas which are still in a pre-European settlement condition or have significantly recovered that they are in a pre-European settlement-like condition. Those areas include:

Hopper's Swamp, west and north of Lake-of-the-Woods; mainly in Section 31 W. Norman Township.

Timmerman Lake, west and north of the lake, Section 29 W. Norman Township.

A wetland/pond (part of the larger Hopper's Swamp) along Nine Mile Bridge Road, Section 32 W. Norman Township.

Wetland area west of Dorner Lake, Section 19 E. Norman Township.

If it is Norman Township's desire to not allow development in wetlands, and to take special protective measures, then such protection should be in addition to --not instead of-- state wetland regulatory protection measures. Wetlands are highly complex natural systems in the ecological balance of nature. Wetlands provide the most productive areas for breeding, nesting and rearing of birds, mammals, fish and reptiles. From that cycle of nature comes the wildlife for enjoyment, hunting, fishing and trapping, which in turn provides an important contribution to the tourist industry in Michigan. A traditional use of wetlands -- bogs -- is for the production of cash crops such as cranberries, blueberries and timber (though not currently found in Norman Township). Wetlands play an important role in sediment control and waste water treatment. Particularly with the wetlands in and around Wellston, the wetlands act as a major sediment filter. Also, the wetlands play an important role in maintaining, even improving the water quality of a lake. The wetlands provide an "oxygen factory" which replaces oxygen in the lake used in the process of material decaying on the lake bottom. The wetland also provides a natural system which uses, thus removes, nutrients from the lake water.

This function of wetlands is particularly critical when on a lake with a large amount of homes depending on septic tanks near the lake and lawns (with no greenbelt) adjacent to a lake.

All wetlands, regardless of location in Norman Township, provide the above positive attributes. Also, wetlands provide a storage, or buffer, for floodwater and other water runoff. A wetland area is able to absorb large quantities of water, in effect storing the water, and letting it drain slowly rather than having water draining all at once, resulting in floods or erosion from runoff. Wetlands are considered by many as rich areas of natural beauty, within otherwise rapidly changing landscapes within northern Michigan. Such wetland resources are sensitive habitats in which minor changes in water level or chemistry could dramatically alter plant communities and area hydrology.

Threats to Wetland Resources

Impacts from human activity and development can threaten complex wetland ecosystems. There must be taken to ensure an adequate balance of water inputs and natural buffers to wetland environments. Even subtle changes in water level or chemistry can irreversibly change wetland features. Development of land near wetlands should utilize best management practices, such as ensuring adequate groundwater and surface water supply and quality by encouraging on-site storm water treatment techniques utilizing green technologies such as vegetated storm water treatment and infiltration structures, etc.

Groundwater Resources

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

There are many locations in Norman Township where the aquifers of choice that supply drinking water are very shallow to relatively deep, i.e. 30 to 220 feet below the ground surface. Groundwater wells with Norman Township possess static water levels or evidence a water table at about 20 feet below ground surface in shallower wells and at 100 feet below ground surface in deeper wells. Shallower ground water wells in Norman Township likely extract ground water lying or “perched” above layers of sand and/or gravel above low permeability clays or till. Wells within these perched aquifers are especially susceptible to contamination from activities at the land surface.

Threats to Ground Water Resources

Septic systems at homes and businesses can be a source of contamination to groundwater, and must be sufficiently separated from drinking water sources. 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 Norman Township. Land uses such as auto repair, salvage yards, and wood treatment are examples of businesses that are potentially hazardous to groundwater because of the chemicals that are routinely used and potentially spilled to the ground surface and/or disposed of within septic systems. Special care must be taken to prevent accidental spills or the mishandling of chemicals at businesses that are serviced by private wells and septic systems.

Golf courses, if to be constructed within Norman Township, can threaten groundwater due to the use of large quantities of chemical inputs. The over-application of fertilizers (especially during course construction), fungicides, pesticides, and herbicides represents the potential for groundwater and surface water pollution. Due to these facts and the hydrogeologic setting of Norman Township, integrated turf grass management, chemical storage and application management, wildlife management, and groundwater and surface water study and monitoring practices are strongly encouraged at golf courses within Norman Township. Significant tree removal, large areas of soil disturbance, and construction (including septic systems) on slopes are similarly discouraged in Norman 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, lubricating fluids, and many household cleaners. Auto and equipment maintenance can also cause unnoticed pollution and groundwater contamination. Norman 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,

composting/manure fertilization, and integrated pest management, as well as non-toxic household products to prevent groundwater and surface water contamination problems before they occur. Residents may call Manistee County to find out when household hazardous waste collection days are scheduled, and for tips on proper disposal.

While acknowledging that farmers have significant economic incentives to properly apply fertilizers, pesticides and other chemical inputs, farms may also be sources of groundwater contamination. Growers within the Township possess the responsibility to properly handle products in accordance with labeling, and to safely dispose of unused, unapproved, or outdated agricultural chemicals. Township farmers are encouraged to use Generally Accepted Management Practices (GAAMPs) as defined by the Michigan Department of Agriculture concerning irrigation/water conservation; manure management; and integrated pest management to prevent groundwater and surface water contamination problems before they occur.

Increasingly communities within Michigan are facing groundwater disputes between landowners and/or proposals for large quantity groundwater extraction operations, e.g. irrigation systems, and/or mineral extraction. Norman 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 statement, site plan review, etc.) should be required prior to the approval of large quantity groundwater extraction or any subsurface injection 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.).

Watersheds and Subwatersheds

People usually identify the place they live based on political jurisdictions, such as villages, cities, or townships. Natural features, however, extend beyond political boundaries. Viewsheds, productive farmland, rivers, stream, lakes, and wetlands may cross many political jurisdictions. Planner and residents should consider such natural features and boundaries when making land use decisions in order to protect our natural resource base within Norman 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. 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 Tittabawassee River watershed is comprised of thousands of acres across several counties and numerous townships, 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, clear waters of lakes, rivers and streams within Norman Township contribute significantly to the economy of Norman Township and other nearby municipalities in Manistee County. Consequently, watershed protection is necessary not just for the health and environmental quality of Norman Township, but also for its economic well-being.

Other Threats to Water Resources

One of the greatest threats to groundwater and surface water is non-point source pollution. Unlike pollution point sources 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, rooftops, and parking lots; lawn chemicals; and soil erosion and sedimentation.

Norman Township's surface and groundwater are 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 Manistee County household hazardous waste collection events.
- 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. Construction should avoid sensitive areas such as slopes, wetlands, seeps and springs, streams and creek corridors, and groundwater recharge areas.
- Fluids, including battery acid, etc., from vehicle and 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 recycling center. Norman Township expresses its ongoing interest in promoting, supporting, and participating in Manistee County's hazardous materials, solid waste, and recycling programs and initiatives.
- Erosion control practices should be encouraged throughout the construction, maintenance, and closure of logging roads and skid trails.
- Drinking water sources should be identified and integrated into land use decision-making to protect drinking water for the long-term in Norman Township. Non-polluting alternative inputs and practices shall be explored, promoted, and supported by Norman Township, such as prescription fertilization and irrigation, integrated pest management, etc.
- Litter shall be prevented from washing into waterways from roads, home sites, beaches, boats, and recreational water activities. Nutrients from pet and other animal wastes, leaf and organic material composting and other debris, and storm water runoff shall be treated on-site, controlled and prevented from flowing directly into lakes, rivers, streams, wetlands, and groundwater recharge areas.

Soils

According to the *Manistee County Soil Survey*, there are a variety of soil associations within Norman Township. A soil association is a pattern of soils, normally consisting of a major and one or more minor soils type within an area, and is typically named for the major soil type. Each soil type has a characteristic slope, drainage characteristic, 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 Norman Township to provide information regarding soil suitability for various land uses. While many soil types are suitable for development, others limit development of various types, and others are best suited as conservation areas due to slope, wetness/ponding, flooding, high water table, and/or poor nutrient filtration capacity, etc.

Soil data is an important factor in determining prime forestlands and timber productivity rates, in identifying nationally unique agricultural areas and locally essential farmlands, and soil characteristics play a role in determining septic tank feasibility, housing development suitability, industrial disposal limitations, and so on. See Map #6 Soils and Basement/Septic Limitations and Map #7 Soils and Septic/Hydric Limitations.

Soils in this next section are divided into soil associations and labeled by a letter-number code. Discussion here, for summary purposes, will include the generalized categories with parentheses enclosing soil association codes. The following discussion will give a generalization as to where soil types are found in the Township.

Sandy soils including Grayling (sub-irrigated) (A-1s), Graycalm (sub-irrigated) (A-2s), Rubicon (B-1), Rubicon with unique characteristics 3-4 feet below the surface (B-2), and Rubicon (sub-irrigated) (B-2s) are found throughout Norman Township. These soils are the most prevalent in the Township, and are common in "poorer" soil glacial moraine areas, or kames, such as the southern extent of the Marilla Hills and the Udell Hills in the west part of the Township as well as other hill areas in Norman Township (B-1) and outwash plains (A-2). These soils are characterized as infertile and not well suited for agricultural purposes. The sandy texture contributes to the draughty, well-drained nature of the area. Water seldom forms in puddles, but soaks into the soil rapidly. Irrigation efforts must be extensive, and these soils tend to be stable in that they do not heave or shift upon freezing. This characteristic allows for excellent building sites, road beds, etc. which may not require as large a foundation or base as would be required in other soil types. The rapid permeability of the soil also allows pollution, mainly in the form of septic nutrients, to move relatively rapidly through the soil. While a septic tank will "work" in that it does not plug up, concern comes with the rapid movement of effluent and poor filtration ability of the soil. This can be countered by requiring larger drain fields, relatively large parcels, and discouraging use of drywells (use a drain field instead).

SUMMARY OF SOIL GROUPS – NORMAN TOWNSHIP				
Soil Description	Soil Type	Acres	Square miles	Percent of Norman Township
Excessively drained sandy soils	A1	490	0.761	1%
Excessively to somewhat excessively drained sandy soils	A2	22,129	34.5	48%
Somewhat excessively drained sandy soils	B1	11,272	17.6	24.4%
Somewhat excessively to well drained sandy soils	B-2	881.5	1.4	2%
Somewhat excessively to moderately well drained sandy soils	B-2s	47.5	0.074	0.1%
Well drained sandy soils	C-8	218.9	0.32	0.47%
Moderately well drained sandy soils	D-2	1,096.6	1.73	2.37%
Moderately well drained and somewhat excessively drained sandy soils	D-3	116	0.181	0.25%
Somewhat poorly drained sandy soils	E-4	1,429.2	2.23	3.0%
Somewhat poorly and moderately well drained sandy soils	E-6	1,271.3	1.9	2.75%
Somewhat poorly and poorly drained sandy soils	E-7	813.8	1.27	1.76%
Poorly drained mineral soils	F-2	491.8	0.77	1%
Poorly drained mineral and very poorly drained organic soils	F-4	3,749.7	5.85	8.1%
Very poorly drained organic soils	G-1	770.2	1.2	1.67%
Very poorly drained organic soils without trees	G-2	189.6	0.3	0.4%
Gravel pits	H-7	22.4	0.035	0.05%

Soil Limitations

Soils within Norman Township with slopes of 18% (~8°) and higher are considered relatively susceptible to erosion. If vegetative cover is removed, erosion may result in the deposition of soil and debris within waterways and/or onto adjacent lands. Soil erosion and sedimentation to 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 to avoid degradation of steep slopes within the Township as development occurs.

The Grayling, Graycalm, Rubicon, Crowell, Kalkaska, and Montcalm soil series are generally suited for recreation and development, as well as pastureland. These are also highly productive soils for growing hardwood forests. Only soils with associated slopes of 18% (~8°) or greater present some limitations for development.

Soils of the Au Gres, Finch, Begland, Roscommon sand, Tawas, Loxley and Lupton wetland soil series are likely unsuitable for development, due to high organic content, low permeability, and excessively wetness. These soils are most appropriately managed as conservation areas, woodlands, and wildlife habitat.

Fish and Wildlife

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

The lawful hunting, trapping, and the viewing of wildlife are important components of the quality of life in Norman Township. There are several protected species within Manistee County, and current federal and state status follows:²

Protected Species in Manistee County		
Common Name	State Status	Federal Status
Plants		
Alleghany or sloe plum	Special Concern	
Pitcher's thistle	Threatened	Listed Threatened
Broomrape	Threatened	
Hill's thistle	Special Concern	
Ginseng	Threatened	
Eastern pipistrelle	Special Concern	
Round pigtoe	Special Concern	
Brown walker	Special Concern	
Wild rice	Threatened	
Dwarf bulrush	Special Concern	
Animals/Fish		

² County Elements List – Manistee County, Michigan Natural Features Inventory, Michigan State University Extension, November 26, 2013.

Lake sturgeon	Threatened	
Spotted turtle	Threatened	
Lake herring or Cisco	Threatened	
Shortjaw cisco	Threatened	
Blanding's turtle	Special Concern	
Wood turtle	Special Concern	
Woodland vole	Special Concern	
Indiana bat	Endangered	Listed Endangered
Pugnose shiner	Endangered	
Eastern massasauga	Special Concern	Listed of Concern
Eastern box turtle	Special Concern	
Kiyi (freshwater whitefish)	Special Concern	
Bigmouth shiner	Special Concern	
Birds		
Northern goshawk	Special Concern	
Grasshopper sparrow	Special Concern	
American bittern	Special Concern	
Red-shouldered hawk	Threatened	
Piping plover	Endangered	Listed Endangered
Northern harrier	Special Concern	
Marsh wren	Special Concern	
Trumpeter swan	Threatened	
Cerulean warbler	Threatened	
Common loon	Threatened	
Bald eagle	Special Concern	
Least bittern	Threatened	
Migrant loggerhead shrike	Endangered	
Osprey	Threatened	
Insects		
Lake Huron locust	Threatened	

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. This category includes rare species. Protection now is prudent before they reach dangerously low population levels, and to prevent listing as Threatened or Endangered.

Threats to Fish and Wildlife

The biggest threat to fish and wildlife within Norman Township is the loss and fractionalization of habitat. As rural areas of Norman Township are converted to residential and other uses, habitat loss and fractionalization are inevitable. Conservation planning must include inventorying and mapping of existing natural resources, including wildlife habitat. Retaining large and connected tracts of contiguous open spaces and forests will help to retain wildlife habitat as Norman 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, scenic values and community character, year-round recreational opportunities, noise buffering, climate moderation, and the reduction of air pollution.

According to the 1993 Norman Township Land Use/Land Cover Analysis, more than 90% of Norman Township's land base is forested. It is also noted that more than 50% of the Township's total land base is owned by the federal government and these forested lands are managed for multiple uses (e.g. timber, recreation, wildlife habitat, resource extraction, recreation, etc.) by the U.S. Forest Service.

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 other 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 also lead to soil erosion and sedimentation to neighboring lands, streams and wetlands; fragmentation of wildlife habitat and migration corridors; flooding of adjacent parcels and public ways; a decrease in nearby land values; and negative scenic 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 must include inventorying and mapping of existing forest resources. Conserving large and connected tracts of contiguous forestland will help to retain economic, environmental and scenic values as Norman Township continues to grow.

Farmland

The agricultural lands map, draws its conclusions from two sources. First, the nationally unique fruit sites are delineated in the Red Tart Cherry Site Inventory³ for Benzie and Manistee Counties, Michigan. Second, locally essential farmlands are those areas in which clay, loamy-clay, and loamy soils are found. The map is not intended to indicate where farming takes place; it is attempting to present a general idea what areas of the Township are best suited for a particular type of agricultural activity.

Manistee County does not have any prime farmland. Soils and climate simply do not provide the combination of factors which create the conditions for top of the line farm areas. Norman Township does not have any federally designated Unique Farmland. Geoclimatic conditions for favorable fruit growing sites also do not exist in the Township. Those conditions are rolling, hilly terrain, proximity to the climate moderating effect of Lake Michigan and sandy soils allowing nutrients to travel (soak into the

³Red Tart Cherry Site Inventory for Benzie and Manistee Counties, Michigan, U.S. Department of Agriculture, Soil Conservation Service 1975.

ground) more effectively to reach root zones of woody plant material (trees).

For purposes of this Plan, the following definition is used for locally exceptional farmlands:

"*Locally exceptional farmlands*" - Areas which are not nationally prime farmland or unique farmland, but which have Nester, Kent, clayey soils; Emmet, McBride, Menominee, Newaygo or Ubyly loamy soils; above clayey or loamy soils in complex with Blue Lake, East Lake, Kalkaska, Karlin, Leelanau, Mancelona or Montcalm sandy soils, or in complex with Emmet, Menominee and Newaygo loamy soils as shown and coded in the Manistee County Third Level Soil Association Report as C-1, C-2, C-3 and C-5. Further, such areas are relatively flat, few rocks, free from urban development, not excessively eroded, not saturated with water, available irrigation water, all in such a manner to accommodate common farming practices in Manistee County.

Preservation of farmland is a widely endorsed concept, being endorsed by The Regional Science Research Institute (working for the U.S. Department of Agriculture)⁴, Michigan Farm Bureau⁵, MSU Extension⁶, MSU Center for Rural Manpower and Public Affairs⁷, Division of Land Resource Programs of the Michigan Department of Natural Resources⁸, Rockefeller Brothers Fund⁹, Manistee County Planning Commission¹⁰, American Planning Association¹¹, Michigan Planning Association¹², formal United States

⁴Coughlin, Robert E. *et al.*; *National Agricultural Lands Study, The Protection of Farmlands: A Reference Guidebook for State and Local Government*. Regional Science Research Institute. U.S. Government Printing Office, p. 13+.

⁵*Use of Zoning to Retain Essential Agricultural Lands*, Michigan Farm Bureau, MSU Cooperative Extension, MSU Center for Rural Manpower and Public Affairs, Division of Land Resource Programs Michigan Department of Natural Resources. 1976; and

various position papers and various lobbying statements presented to the Michigan Legislature.

⁶*Use of Zoning to Retain Essential Agricultural Lands*, Michigan Farm Bureau, MSU Cooperative Extension, MSU Center for Rural Manpower and Public Affairs, Division of Land Resource Programs Michigan Department of Natural Resources. 1976; and various Extension Service bulletins.

⁷*Use of Zoning to Retain Essential Agricultural Lands*, Michigan Farm Bureau, MSU Cooperative Extension, MSU Center for Rural Manpower and Public Affairs, Division of Land Resource Programs Michigan Department of Natural Resources. 1976.

⁸*Use of Zoning to Retain Essential Agricultural Lands*, Michigan Farm Bureau, MSU Cooperative Extension, MSU Center for Rural Manpower and Public Affairs, Division of Land Resource Programs Michigan Department of Natural Resources. 1976.

⁹Crowell, Thomas Y. *The Use of Land: A Citizens Policy Guide to Urban Growth: Task Force Report*. The Rockefeller Brothers Fund. 1973.

¹⁰Manistee County Planning Commission. *Manistee County Land Use Plan*, 1984.

¹¹Toner, William; "Zoning Alone won't Save our Farmland", *Planning*, January 1979, p 13+. and Aradas, Steve *et al.*; "Farmland Protection: Knowing What to Protect" *PAS Memo*, June 1982, 82-6. and several other pamphlets and position papers.

Government policy¹³, Natural Resources Conservation Service¹⁴, formal State of Michigan policy¹⁵, and American Farmland Trust¹⁶.

While current literature and political thinking is that agricultural related business is a potential for Michigan economic expansion and diversification, this move is not likely to increase the need for additional farmland. Farmland exists either in use or laying fallow. The issue in Manistee County tends to be retention of unique and locally exceptional farmlands for agricultural purposes, as once reverted out of that use (developed), they can virtually never be returned to agricultural purposes.

Discussion by Onekama Township in the issue of farmland preservation has resulted in quite a lot of study on the subject. Onekama Planning Commission concluded¹⁷ the best thing to accomplish agricultural land preservation is a strong and healthy agricultural economy. The second thing centers on land management, and seemingly is contradictory:

1. Do not limit the farmer in terms of what he can do with his land. This is both in terms of not limiting the type of farm operation, farm practices or types of crops (i.e. a broad definition of what is a farm), and for what uses the land may be sold for.
2. Protect the farmer, so incompatible land uses do not start up next to him and so land development in the agricultural area does not drive up the value of land.

It is noted that the better farm sites in Norman Township are not located advantageously to farm economically, i.e. Peter's Farm Road area is not near other agriculture activities, infrastructure, markets, and not located where economies of scale might allow multiple parcel farm operations.

For purposes of agriculture zoning Norman Township should use as broad a definition of "farm" or "agriculture" as possible. The idea is to allow the fullest scope of activities possible while still being a farm or agricultural operation. The definition, or qualification, of a farm under the administrative rules promulgated under the Michigan Farmland and Open Space Preservation Act¹⁸ is an example.

¹²"MSPO Adopts Farmland Policy", *Michigan Planner*; Summer, 1986; Vol. 6 No. 3 Pg. 10.

¹³Title 7 - Agriculture Chapter 73, Section 4201 et seq. (United States Code).

¹⁴"Farmland Preservation" position paper, July 11, 1983, East Lansing 4574B.

¹⁵"Governor Blanchard Signs Farmland Protection Policy", *Planning and Zoning News*, October 1986, p. 6.

¹⁶American Farmland Trust; *Planning & Zoning for Farmland Protection: A Community Based Approach* 1987.

¹⁷Onekama Township Planning Commission; *Onekama Township Comprehensive Plan*, 1990.

¹⁸P.A. 116 of 1974, as amended, being MCL 554.701 et seq.

If farm preservation is desired the area should only have farms/agricultural and forestry uses in an Agriculture District. Things such as the farmer's home, farm labor's housing, barns, tool and repair shops, storage, should be considered accessory uses to the principle farm use. There are certain uses which are okay, in terms of compatible and not resulting in being detrimental to the agricultural economy (land values). Those uses should be allowed only under certain conditions. Thus, uses like a single family home on a parcel, a small neighborhood retail enterprise, sawmill, and some manufacturing enterprises should be acceptable.

Such uses would be subject to conditions or standards including:

1. From a single parcel of farm land, a maximum of four new parcels can be created. This is to coincide with the state Subdivision Control Act requirement that only four parcels, which are 10 acres or smaller in size, may be created without making a subdivision. (The idea is not to allow residential subdivisions in agricultural areas.)
2. That a special use permit is only issued with the proviso the applicant sign a statement they understand agricultural uses and practices will continue in the area even though they may be inconvenient or a nuisance.
3. That the proposed use utilizes land which is the poorer (in terms of agricultural suitability) areas of a farm, such as a sand blowout, ditches, gullies, dips, etc., or existing buildings.
4. That the proposed use is found to be compatible as a neighbor to agricultural uses.

Concerns the above principles are trying to deal with include mainly compatibility to avoid uses which are going to experience problems being located next to a farm, or which will be a problem for the farm that may be next door. Examples include: (1) an industry (warehousing, retailer) which handles hazardous, toxic or other liquid wastes which may result in groundwater contamination, air pollution which reduces or eliminates crop growth. Such a situation is not compatible to a farm dependent on groundwater. (2) A housing development (i.e. more than a single family home that is only allowed with the above proviso) will not be compatible with farm operations running large equipment at night, manure smell, crop spray blowing onto or into a house, etc. and drives neighboring farm land values up. (3) A large or major retail or service enterprise (i.e. more than a small neighborhood retailer who is only allowed with the above proviso) will not be compatible with farm operations where spray coats merchandise, customers' cars, or where there is high volume traffic on a road, also used by large slow farm equipment, and drives neighboring farm land values up.

Finally, a concern expressed is farm preservation should not be a zoning district which encompasses any more area than justified. Such a district should include only those areas which are both recognized as nationally unique or locally exceptional farmlands and areas which currently and historically have an agriculture land use. The areas which do not qualify under the conditions given here should be considered rural residential.

Threats to Farmlands

Empirical study in Michigan and elsewhere in the Midwest has documented the significant increase in local tax burdens to support rising costs of services 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 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 on-set 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 the U.S. as leading to the permanent loss/conversion of farmland to residential, commercial, institutional, and other 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 views and/or intact forestlands face additional development pressure. Moreover, the average age of Michigan farmers has never been higher, new farm starts have never been fewer, and the price for farm products has never been lower within the State. Finally, Michigan remains the only state in the U.S. that taxes agricultural land at its development value. Needed change in Michigan’s tax structure regarding farmland will require a new State constitutional amendment, and therefore is unlikely to change in the foreseeable future. Meanwhile, Edwards Township supports the exploration and establishment of voluntary farmland preservation tools in Ogemaw County, and regionally, such as the purchase of development rights, transfer and leasing of development rights, farmland conservation easements, well-connected conservation/farmland conservation developments, and improved local markets for locally-grown agricultural products.

Special/Unique Environments & Historic Resources

Special and unique environments were identified on a county-wide basis by conducting a survey of known natural, unique and significant features and areas that might warrant special attention in the county. Much of that survey material is not reiterated here, nor a matter of public record. Sites, such as those for endangered species, or archaeological sites, are intentionally omitted from specific listing in order to protect the areas from the curious, vandals, and so on.

The survey included archaeological sites, historical sites, historical structures, scenic overlooks, scenic roads, scenic areas, rare geological features, glacial or other geological formations, areas of endangered, threatened or special concern species, unique forestlands, unique non-forested lands, and unique water features, wetlands and other areas. After conducting an inventory of the above, the location(s) of each was plotted on a map. The locations of the plots provided evidence that most locations tended to congregate along some land feature. Thus, areas in Norman Township, each with attributes listed above, can be defined with a boundary. Obviously, all items inventoried are not included within areas of special and unique environments.

It is not the intent to list each feature. Rather, the intent is to designate special and unique environments. This is taken to imply "areas" where several attributes are found, rather than "points" representing a feature.

Manistee River (including Pine River)

- Archeological sites
- Historical sites
- Bayous and wetlands associated with the river
- Dominant public land ownership
- Limited motor vehicle access
- Scenic area
- "U" valley glacial geological formation
- Habitat for rare, endangered and threatened species of plant and animal life
- Unique water features (springs, bayous, old meanders, oxbows, waterfalls)
- Nominated as a Federal Wild and Scenic River

Udell Hills (part)

- Hills of disputed origin (part of a moraine or a kame) likely three associated kames
- Public ownership block
- U.S. Forest Service Experimental Forest
- First downhill ski area in the county - good ski terrain
- Better than "normal" soils within the Manistee National Forest
- Few roads and utilities
- Scenic overlooks, area
- Historic U.S.F.S. Fire Tower
- Lowlands, bog and kettle hole swamps

Huff Road

- Scenic roads
- Aesthetic bridge crossing Pine Creek

Hopper's Swamp (Lake-of-the-Woods, Timmerman and Pine Lake Wetlands.)

- Public ownership block
- Limited motor vehicle access
- Unique wetlands

Arboretum, U.S. Forest Service

- Unique forestlands (planted)
- Scenic area

Chittenden

- Former C.C.C. camp and historical buildings
- Former U.S. Forest Service nursery infrastructure
- Historic site

Threats to Cultural & Historic Resources

Historic structures and locations such as cemeteries, schoolhouses, and other historically significant properties, structures, and features can be lost or irreparably altered by private-ownership uninformed of or uninterested in preserving or enhancing cultural or historic values. Norman Township supports the exploration and establishment of voluntary historic preservation tools in the Township, Manistee 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

Norman Township is endowed with rich natural, scenic, and cultural resources. However, Norman Township residents are aware that, lacking voluntary protection, natural resources and historic structures within private ownership are vulnerable to significant alteration or destruction. Further, absent well-crafted, enforced, and fairly applied regulation, scenic resources are also at long-term risk.

It is the position of Norman Township and its residents that the quality of life, economic welfare and environmental well-being of the Township are tied to the identification, use, and maintenance of public and voluntary private conservation and preservation tools to these important resources.

Chapter 6: PUBLIC FACILITIES/INFRASTRUCTURE

Introduction

Inventorizing existing public facilities and lands is an important step in the planning process. Public facilities within Norman Township include state, county, and township-owned facilities.

Public Properties/Recreation Facilities

Norman Township presently owns twenty-five (25) parcels. These public parcels include: the Norman Township Community Center (3.2 acres); the Fernwood Cemetery (a.k.a. Dublin Cemetery 4 acres); the Restful Forest Cemetery (a.k.a. Chalker Cemetery 1 acre); the Wellston Cemetery and 1964 addition (2.4 acres); Little Crystal Lake Park¹ (22.7 acres); Norman Township Fire Station (approximately 0.5 acres); and the Norman Township Solid Waste Transfer Station (approximately 1 acre). Please refer to the table below for locations of public lands and recreational facilities within Norman Township.

NORMAN TOWNSHIP LANDS	
Norman Township Public Land/ Facility	Public Land Acres
Township Community Center	3.2
Fernwood Cemetery	4.0
Restful Forest Cemetery	1.0
Wellston Cemetery	2.4
Little Crystal Lake Park	22.7
Fire Station	0.5
Transfer Station	1.0
Vacant Parcels	16.3
Total	51.1

The Norman Township Hall/Community Center is located on S. Seaman Road, just south of its intersection with M-55 Highway (i.e., Caberfae Highway). The Manistee County Branch Library is also located within the Community Center. The Norman Township Hall is a large modern structure with kitchen, office, restroom and large meeting and elections facilities. The Norman Township Community Center was constructed in 1999.

¹ Little Crystal Lake Park is a year-round public park known as the “central park” of Norman Township. Little Crystal Lake Park was identified by Township residents during a July 25, 2013 community visioning session as being exemplary of the *place* known as Norman Township, and identified the most important resource in the Township to protect, maintain and improve.

The Township Hall’s parking lot is paved and designed to accommodate up to 96 cars. The Norman Township Fire Station is located south of the Norman Township Community Center on Seaman Road in Wellston. The existing Norman Township Fire Station was built in 1974, and is planned for replacement in 2014.

The Wellston Cemetery is located at the corner of Baker Road and Sixth Street in Wellston. Based on sales and not “occupancy,” 90% of the plots within the Wellston Cemetery have been sold. Norman Township purchased an additional approximately 0.4 acres, located immediately west of the Township Cemetery in 1964. The Fernwood Cemetery is located on the northside of Hoxeyville Road west of the Dublin Store, approximately three miles south of M-55 Highway. Based on sales only, the Fernwood Cemetery at this time is 75% sold. The Restful Forest Cemetery is on Chalker Road in the southeastern portion of Norman Township. Based on sales only, the Chalker cemetery at this time is 90% sold. Township residents are allowed to purchase cemetery plots at \$200/lot, and non-residents are able to purchase them at \$400/lot.

Recreational Facilities in Norman Township

The table below summarizes existing recreational facilities within Norman Township.

EXISTING RECREATIONAL FACILITIES NORMAN TOWNSHIP		
Facility	Description	Location
Little Crystal Lake Park	Inland lake with beach, picnic area with shelter, lighted swim area, 25 picnic tables, 7 cooking facilities, 1/3 mile accessible for shoreline fishing/access, carry-in boat launching, men’s and women’s pit toilets, two water wells, playground, volleyball court, tennis court, basketball court/ice rink, fishing pier, and a gazebo.	Little Crystal Lake, Section 13, T21N, R14W, Sixth, Main, Second and Oak Streets.
Randell Tennis Courts	Two regulation public tennis courts	Located on Spring St. in Wellston, between Elm St. and Stronach Dam Rd.
Robinson Backwater public access	Township owned public access to the Tippy Dam pond/impoundment with	Tippy Dam Pond, Section 5, T21N, R13W, 19040

	picnic area, boat launch/parking and pit toilets.	Robinson Road off of S. Tower Line Road. 4 acres
U.S. Forest Service Sand Lake Recreation Area	Open to public, federally-owned, operated by private franchisee under supervision of U.S. Forest Service. Use fee for 45 site campground, swim beach, paved boat launch with 30 parking spaces, carry-in boat launch, shoreline fishing, picnic area, and sanitary facilities	Sand Lake, Section 31, T21N, R13W, Sand Lake and 12 Mile Roads one-mile south of Dublin. 62 acres.
U.S. Forest Service Pine Lake Campground	Open to public, federally-owned. Use fee for 12 rustic site campground, gravel boat launch with 6 parking spaces, shoreline fishing, picnic area, and pit toilets	Pine Lake, Sections 22, 27 and 28, T21N, R14W, Pine Lake and 9 Mile Bridge Roads three-miles southwest of Wellston. 168 acres.
U.S. Forest Service Dorner Lake Campground	Open to public for day use only, federally-owned. Use fee for gravel boat launch with 6 parking spaces, lake, shoreline fishing, picnic area, and pit toilets	Dorner Lake, Section 19, T21N, R13W, Snyder Road one and one-half miles southeast of Wellston. 20 acres.
M.D.O.T. Cooley Bridge Roadside Park	Open to public, federally-owned Manistee County Road Commission maintained. Trails/stairs to Pine River, picnic area, parking and pit toilets	Pine River at M-55 Highway southeast of the crossing, Section 8, T21N, R13W, three-miles east of Wellston. 13 acres.
U.S. Forest Service Aboretum	Forestland, open to public. Winter snowshoeing.	Section 23, T21N, R14W, Pine Lake and Bosschem Roads. One-half mile west, southwest of Wellston.
Kaleva Norman Dickson School District	Vacant/forest land	25.7 acres in Section 30, T21N, R13W, two miles southeast of Wellston. 25.7 acres.

Manistee National Forest	Forestland and associated features open year-round to the public for recreation, managed by U.S. Forest Service with multiple use goals.	11,426 acres are located in East and 13,470 acres in West Norman Township, i.e. T21N, R13W and T21N, R14W, respectively. 24,896 total acres.
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Recreational facilities not located within Norman Township, but nearby and used by Township residents and visitors include: Tunk-Hole Manistee River Access; Udell Hills Cross-country Ski and Mountain Bike Trails; Tippy Dam Pond/Manistee River access owned by Consumers Power Company); Blacksmith Bayou, U.S. Forest Service owned campground with access/boat launch to the Manistee River; High Bridge access to the Big Manistee River; and the Peterson Bridge Campground on M-37 Highway just south of M-55 Highway.

Educational Facilities

There are no public or private school facilities within the political boundaries of Norman Township. School age children within Norman Township are included within the Kaleva Norman Dickson (KND) School District. The Wellston Elementary School facility (grades K through 5) was closed during the fall of 2009 to consolidate KND elementary, middle and high schools within a central school campus in Brethren. School-aged children within Norman Township take KND District school buses to public schools located within the Village of Brethren approximately five miles to the north of Norman Township’s northern boundary.

KND Schools is a K-12 school district covering 350 square miles, serving 625 students located in the eastern half of Manistee County, and is approximately 25 miles east of the City of Manistee and 35 miles west of Cadillac. The Brethren High School received a bronze rating by the U.S. News in 2013 with a 20 to 1 student to teacher ratio.

The KND Elementary serves 280 students in K-5 grades and the Brethren Middle/High School serves 135/210 students, respectively, in grades 6-12, all within one school campus at 4400 North High Bridge Road within the incorporated limits of the Village of Brethren. The KND School’s Brethren campus possesses an auditorium, library, playgrounds, three ball fields, two gymnasiums, bus garage/transportation facility, and a nature trail.

The 4-STAR Preschool is located at the KND campus in Brethren, and serves the KND and Bear Lake School Districts. 4-Star offers preschool instruction for income eligible 4 year old students Monday through Thursday. All 4-Star pupils must be at least four years old by December 1 of the current year.

Emergency Services

Norman Township is covered by Manistee County's 911 services and its central dispatch unit contacts appropriate agencies to respond to emergency calls. Emergency medical services are provided by the Norman Township Volunteer Fire Department, West Shore Medical Center, Manistee County ambulance service, federal-county cooperative emergency services planning for the event of natural disaster or war, and the surrounding Township fire departments.

Norman Township receives police protection from three agencies, all headquartered outside Norman Township and about 15 miles (20 to 35 minutes) from the Township's western border. The Manistee County Sheriff's Department provides police, jail, civil service, animal control, detective, marine patrol, canine and other court services. The Michigan State Police Post (Post #77) provides police, specialized investigation and canine services, and the Michigan Department of Natural Resources (MDNR) Conservation Officers are dispatched from the state police post.

Norman Township operates a volunteer fire department. It is staffed by twenty (20) members. The department currently has the following equipment:

- 1995 GMC Tanker
- 2006 Ford 450 Ambulance
- 1980 Mac Tanker Truck
- 1967 Diamond REO DNR Truck
- 2000 Argo Multipurpose Rescue Truck
- 2003 International 4400 Fire Truck
- 1992 Ford F350 JAWS Rescue
- Neoteric Hover Craft

The maximum height the above equipment is capable of fire fighting is 40 feet. A depreciation schedule for each piece of equipment which is intended to be replaced should have an anticipated life assigned to it. The purpose is to also set aside a sinking fund, where general fund and/or fire department fees are placed to build up a cash reserve to have to be able to pay for large capital purchases. This system should be used for all major items of equipment, not just fire trucks. Norman Township also participates in a county-wide mutual aid agreement which provides backup and multiple alarm assistance to Norman Township in return for the Township providing the same services to other municipalities.

Norman Township also provides a volunteer ambulance service in conjunction with the fire department. Nine (9) volunteers are qualified as Emergency Medical Technicians (EMT). The Township employs one part-time caretaker to maintain cemeteries, parks, buildings, and other Township property from April through September, and then part time from October through March. Norman Township owns a 1995 Ford F150 Pickup truck for caretaker use. The caretakers also use a 1991 Chevy ¾ ton pick-up truck for plowing snow, and other maintenance equipment includes a John Deer 210 Tractor with

plow and front loader, a snow blower and lawn tractors.

Solid Waste Disposal and Recycling

Norman Township does not provide any door-to-door solid waste services. Residents that desire door-to-door pickup of garbage contract with a private hauler, usually Republic/Harland's Trucking (affiliated with Republic's/Harland's Landfill, Manistee.) Door-to-door service can be provided on a bill-back basis or by purchasing specially marked garbage bags which collection and disposal costs included in the price of the bag.

Norman Township provides a central solid waste collection point at a site south of the Community Building on Seaman Road in Wellston. Each Saturday a compactor garbage truck parks for a given number of hours, usually from 9:00 am to noon, where residents can bring solid waste for disposal. Spring and Fall clean-up is provided by the Township each year at which time residents can dispose of out-of-the ordinary refuse such as old appliances, etc. Solid waste is hauled to and disposed at Republic Waste Services/Harland's Landfill in compliance with the Manistee County Solid Waste Management Plan. Every Saturday the Township provides a mobile recycling collection station at the same time solid waste is collected. Norman Township brings it to Republic Waste Services/Harland's for processing. Any resident of Manistee County can bring pre-sorted recycled materials to the mobile recycling collection center. Harland's processes the material, sends to a processing center (Quinn's Trucking in Scottville) or markets the material direct to an industrial user. The recycling service, for Norman Township, is part of a contractual obligation Harland's Landfill, Inc. has with the County of Manistee to provide a minimum level of recycling throughout the county. An annual waste cleanup day is also held in Norman Township.

Solid Waste generated in Norman Township breaks to 4.2 pounds of solid waste generated by each person in the Township each day, and more than 6 pounds per person per day during the Summer months accounting for seasonal population variation.

Roads and Transportation

The main emphasis of transportation planning in Norman Township is road construction and maintenance. Manistee County Transportation, Inc. (Dial-A-Ride bus services) also provides transportation services within the Township. Road construction is one of the most powerful tools government has to influence the development, or lack thereof, in a given area. Planning and routing of roads has more social impact than most other planning activities. New homes, businesses, etc. tend to be built along existing roads. Land speculators tend to develop property in areas which already have roads, or have a short distance to existing roads. Consequently, a clear statement of transportation and land development policy at the township level is important. Equally important is that this policy indicates new roads that will be built, and new roads will not be built in areas where development is not encouraged.

Currently there are five (5) types of roads in Norman Township. First is the state/federal highway which is maintained by the Michigan Department of Transportation MDOT).² Driveway, sign and drainage regulation is handled by the MDOT's Cadillac office. Caberfae Highway (M-55) is the only MDOT road in Norman Township, and is the primary east-west artery through Norman Township and along the south edge of Manistee County. The highway supports commercial development in Norman Township in the Wellston area. Strip development along the highway has occurred, mainly east of Wellston, but has not progressed to the point where it cannot be controlled. From a transportation point-of-view allowing commercial development throughout the length of a highway is poor land use planning, a counter-productive economic development strategy (encouraging sprawling out of commercial activity instead of the economically advantageous consolidation into a defined trade area), and adversely affects a highway's traffic carrying capacity as well as increasing incidence of traffic accidents. Potential solutions being explored by Norman Township planners include carefully guiding highway corridor commercial development through zoning changes; planning for a potential future commercial town center with a shared access south from M-55 Highway in Wellston; and working closely with MDOT to calm traffic and establish a sense of place in Wellston along the M-55 Highway corridor.

The second type of road in Norman Township is the county primary road. These county-owned roads are under the jurisdiction of the Manistee County Road Commission and their construction/maintenance is funded entirely by state and federal gasoline taxes. Primary roads are main arteries, or through-fares and High Bridge Road, Bosschem Road (County Route 669); Udell Hills Road; Seaman Road (south of M-55); Tippy Dam Road (north of M-55); Warfield Road (north of M-55); and Hoxeyville Road are the Manistee County primary roads located within Norman Township. The major through-routes in the Township are predominantly north-south except for Caberfae Highway and Hoxeyville Roads.

The third type of road that exists in Norman Township is the county local road. County local roads (formerly known as township roads) are also under the jurisdiction of the Manistee County Road Commission, and their construction is financed by state gasoline tax and Township general funds. Maintenance of county local roads is financed by state and federal gasoline tax revenues, and are generally considered neighborhood service roads of varying degrees. Some have a seasonal status and do not receive year-round maintenance (i.e., no snow removal). Road surfaces vary from paved, gravel, graded sand or two-track.

The fourth type of road is the recognized private road. Private roads generally are built, maintained, and the responsibility of a land developer or the landowners. Private roads can be constructed in conjunction with a subdivision of land, an easement across private property to otherwise landlocked land, or private land roads. A major concern to Norman Township is that private roads have and will continue to become candidates to be made

² Day-to-day maintenance is contracted out to the Manistee County Road Commission in Norman Township.

into public roads. This does not happen until the roads are constructed to county-public road standards. This reconstruction of a private road is expensive or impossible if inadequate right-of-way has been reserved.

Norman Township has adopted a land division ordinance which includes road access standards to avoid this issue in the future, however many existing private roads are still in existence from past development practices. One approach the Township can use is to adopt a policy when landowners in a past development wish their road upgraded to a public road, it be done by use of a special tax assessment to pay the cost of upgrading, if upgrading is possible

A map showing number of addresses per road segment can be useful to plan for and prioritize road maintenance and upgrading. This map, in conjunction with known average daily traffic data, should be used remembering that while road segments with a high number of potential resident users (i.e., addresses) may need improvement/upgrading, connecting roads to equal value roads or county primary roads are also important. Road improvements must accommodate traffic to/from the high resident segments. No pending projects or work order listings are currently listed by the Manistee County Road Commission in Norman Township for 2013-2014.

The Norman Township Planning Commission has established the following categories and priorities of road improvement over the next ten years.

- I. Upgraded (i.e., additional gravel, grading, etc.)
 - A. Cedar Creek Road
 - B. Airport Road East of Fawn Crest Road, and Fawn Crest Road
 - C. Michigan Avenue

- II. Resurfaced with new pavement
 - A. Hoxeyville Road
 - B. Snyder Road
 - C. Wellston Streets (especially Oak Street between Pine Lake Rd. and Second Street; Maple Street (south); Second Street (west); Fifth Street; Fourth Street; Third Street; and Sixth Street)

- III. Upgraded and paved with asphalt
 - A. 8th Street between Seaman and Spruce Streets
 - B. Pine Lake Road (Seaman Road to Bosschem Road)
 - C. Snyder Road (north)
 - D. Baker Road (south) and Stronach Dam Road (from M-55 to Snyder Road)
 - E. Baker Road (north & south) (north of M-55)
 - F. Old House Road (Baker Road to Snyder Road)
 - G. Moss Road

An objective system of ranking roads for improvement and/or maintenance can also be established using one or more of the following factors:

- * Number of addresses along a road segment
- * Average daily traffic count
- * Existing surface condition
- * Citizen financial support (e.g., special assessment district)
- * Whether the road is a through-route
- * Zoning district it is located in (e.g. residential, commercial, industrial)
- * Last time construction work was completed on the road.

The following is a ranking of roads with priority based upon number of addresses along the road:

1. Highest rank, first priority.
 - A. Baker Road (Caberfae Highway to Cedar Creek Road)
 - B. Snyder Road
 - C. Airport Road east of Fawn Crest Road and Fawn Crest Road
 - D. Warfield Road (Caberfae Highway to one mile north)
 - E. Moss Road and east Moss Road
 - F. Hoxeyville Road (Seaman Road to Snyder Road)
 - G. Tippy Dam Road (north of Caberfae Highway)

2. Next rank, second priority.
 - A. Pine Lake Road (west of Bosschem Road)
 - B. Hoxeyville Road (Snyder Road to Chalker Road)
 - C. Seaman Road (Hoxeyville Road to Twelve Mile Road)

3. Third Rank, priority.
 - A. Michigan Avenue
 - B. Jacobson Road
 - C. Twelve Mile Road (Chalker Road to one mile west)
 - D. Snyder Road
 - E. Prunksi Road

4. Fourth rank, priority.
 - A. Steinberg Road (Udell Rd. to High Bridge Rd.)
 - B. Baker Road (north of Cedar Creek Rd.)
 - C. Husier Road (west of Moss Road) and Oak Road
 - D. Husier Road (Warfield Road to ½ mile west)
 - E. Twelve Mile Road (Bosschem Road east)
 - F. Stronach Dam Road (Baker Road to ¼ mile east of Snyder Road)

Complete Streets

Norman Township embraces the application and implementation of the complete streets concept in the planning, construction, maintenance and use of the public road infrastructure within the Township. Complete streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists,

motorists and transit riders of all ages and abilities. Complete streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.

Creating complete streets means transportation agencies adopt a complete streets policy, direct their transportation planners and engineers and fund road projects to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project makes the street network better and safer for drivers, transit users, pedestrians, and bicyclists – making Norman Township a better place to live.

Bus Transit

Manistee County Transportation is a federal/state subsidized public transportation system which services all of Norman Township. Service includes handicapped and senior citizen transportation, dial-a-ride (i.e., door-to-door or demand response) service, bus route in and around Manistee City and worker commuter service from Norman Township to employment locations in the Manistee Lake area and for community college students going to West Shore Community College. The bus transit system also provides door-to-door pick up during scheduled rural service times in Norman Township.

Transportation Trends

Many Township roads are unpaved and seasonal. Development trends are currently increasing the demands for road improvements, potentially ultimately changing the character of rural areas of Norman Township and using up limited state and local highway dollars. At the same time an increase in private roads, driveways and other access points along Norman Township roads has the potential for increasing the number of hazardous stops and turning patterns. Unregulated private road development and road access can lead to dangerous conditions and increased stop and go traffic, which in turn leads to congestion and the reduces the carrying capacity of roads and public safety.

Utilities

Electricity in Norman Township is provided by a private company and a public utility: Consumers Power Company of Jackson, Michigan and a rural cooperative, Great Lakes Energy of Scottville, Michigan. Consumers Power provides multiple phase service to most of its service area. The Wellston area of the Township already has an electrical distribution system in place to accommodate large-demand users. Great Lakes Energy services an area about 2 miles wide along the south border of the Township.

Norman Township is serviced by Kaleva Telephone Company, via the Wellston 848- and Dublin 859- exchanges and Michigan Bell Telephone Company via the Manistee 723-exchange and Ace Telephone Company, via the Hoxeyville 862- exchange. Placing a call between each of these exchanges are subject to long distance tolls. Calls between Kaleva, Wellston and Irons are local calls, while calls to Hoxeyville, Irons, Manistee are long distance tolls.

The more densely populated areas near Wellston are serviced by Charter Communications Cable Television. A central CATV reception tower is located on Seaman Road just south of Pine Lake Road to service cable TV systems in the Wellston area.

There are two cell phone towers located in Norman Township, one on the northside of M-55 Highway 0.4 mile west of N. Warfield Road, and another on the northside of M-55 Highway just west of its intersection with Seaman Road.

Summary of Findings

It is anticipated that future residential and commercial development within Norman Township will necessarily translate into more vehicle trips on primary roads in Norman Township resulting in requests to resurface, straighten curves, build deceleration and passing lanes, erecting more signage or even traffic lights at some locations, etc. Norman Township is committed to **the concept of complete streets and** working closing with Manistee County Road Commission and staff, MDOT personnel and Township residents to address future transportation needs.

Chapter 7: LOCAL PLANS AND REGULATIONS

Local Master Plans

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

Norman Township prepared and adopted a Master Plan in May of 2008 (as amended through June 9, 2009) and a Comprehensive Plan Revision Fact Book, dated September 2007, pursuant to the Michigan Planning Enabling Act, P.A. 33 of 2008, as amended (formerly known as the Michigan Township Planning Act, P.A. 168 of 1959, as amended) [MCL 125.3801, *et seq.*]. Norman Township undertakes its own zoning regulation in accordance with the Michigan Zoning Enabling Act, P.A. 110 of 2006, as amended (formerly known as the Michigan Township Zoning Act, P.A. 184 of 1943) [MCL 125.3101, *et seq.*].¹ This updated Norman Township Master Plan was prepared and adopted pursuant to the Michigan Planning Enabling Act, P.A. 33 of 2008, as amended [MCL 125.3801, *et seq.*]. Manistee County lacks zoning regulations, but adopted a county-wide master plan on January 20, 2009, utilizing recent and ongoing research and surveys.

Of all its neighboring townships, Norman Township is recognized as a county-wide and regional leader in the implementation of planning, zoning and other local measures to protect property values, natural resources, and the public health, safety and general welfare. Norman Township abuts Dickson Township, Manistee County along its entire northern boundary; Stronach Township, Manistee County to the east; Lake County's Elk and portions of Eden Townships to the south; and Wexford County's South Branch Township to the east.

The following is a review of the planning and/or zoning in place within these neighboring jurisdictions to examine similarities and differences, especially along Norman Township's boundaries, and to explore opportunities for increased coordination and cooperation between adjoining jurisdictions facing similar land use challenges and visions for the future.

Summary of Plans and Regulations

All townships, villages and cities within Manistee County are planned and zoned with the exception of Springdale Township and the Village of Bear Lake. Dickson Township is located directly north and Stronach Township is located directly west of Norman Township. Both of these communities are currently planned and zoned at the Township level. The Dickson County Planning Commission meets quarterly, and the Stronach Township Planning Commission meets the first Tuesday of each month.

The area along Dickson Township's boundary with Norman Township is entirely designated by zoning as Agricultural/Residential (A/R) and Forest Preservation (FP). The

¹ Norman Township Zoning Ordinance,
Norman Township Master Plan Update 2014
Chapter 7

A/R zoning category is designed to “provide for neighborhoods of rural character with a mix of forestry practices, agriculture, residential uses, resort-residential uses, small retail and service businesses in a...manner that will at the same time discouraging manufacturing; wholesale; major retail and service businesses, etc., and other major institutional or community services.”² The A/R district intends to accommodate agriculture, forestry, construction, lumber & wood products, hotels/lodging, beauty/barber shops, single and two family dwellings, public parks and other recreational uses, home occupations, sign, licensed day care and adulated extended care facilities, and associated accessory buildings as uses by right. Special land uses within the A/R district requiring additional review for approval include agricultural services, fishing/hunting/trapping, communication towers, mining, oil and gas central production and sweetening facilities, trucking/warehousing, retail, laundries, clothing/shoe repair, funeral services/crematories, miscellaneous personal and other services, motion pictures, amusement and recreational services, health services, legal services, educational services, social services, membership organizations, apartments, mobile home parks, campgrounds, groceries and related product retail, whole sale farm products/raw materials, and licensed group day care. The A/R requires an allowable maximum density of one unit per 60,000 square feet or approximately 1.5 acre. The A/R district also requires a 45 foot front yard setback, 50 foot rear yard setback and 30 foot side yard setback; and a minimum lot width of 150 feet.

The Dickson Township Forest Preservation (FP) zoning category is designed to “preserve large areas of forest for recreation and forestry purposes, to prevent spot development within these areas, to prevent the need to construct or upgrade roads, to encourage landowners to retain large acreage parcels of land...to preserve special and unique environment of the Marilla Hills...to provide a natural resource for forestry industry, recreation, and compatibility with land management programs of the U.S. Forest Service.”³ The FP district intends to accommodate single family dwellings, forestry, agriculture, lumber & wood products, fishing/hunting/trapping, public parks and other recreational uses, home occupations, and associated accessory buildings as uses by right. Special land uses within the FP district requiring additional review for approval include campgrounds, and associated accessory buildings. The FP requires an allowable maximum density of one unit per 10 acres and minimum 15,000 square foot buildable area (excluding wetlands, soils unsuited for on-site septic, existing public utility easements, and public right of ways). The FP district also requires a 45 foot front yard setback, 50 foot rear yard setback and 25 foot side yard setback; and a minimum lot width of 330 feet.

Stronach Township bounds the entirety of Norman Township’s western border. Stronach Township’s 2013 Master Plan emphasizes the concentration of future residential development in existing unincorporated communities including Stronach, Star Corners, and Udell; supporting only minor service businesses within each; and directing future industry to Manistee Lake, north of Stronach. The balance of the Township is planned to remain low density residential and forestry and related uses. Portions of Stronach

² Dickson Township Zoning Ordinance, adopted March 1987, as amended through June 13, 2007, p. 38.

³ Dickson Township Zoning Ordinance, adopted March 1987, as amended through June 13, 2007, p. 38.

Township abutting Norman Township are zoned Forest Preservation (FP) along the majority of the boundary with the southwestern portion of Norman Township and along both sides of M-55 Highway. The northern portion of this boundary is zoned Residential Forest (RF) within the Stronach Township Zoning Ordinance.

Stronach Township's Forest Preservation (FP) district purpose is "to preserve large areas of forest for recreation and forestry purposes, to prevent spot development within these areas, to prevent the need to construct or upgrade roads, to encourage landowners to retain large acreage parcels of land for cost effective forest management purposes, to preserve special and unique environment of the Udell Hills, to preserve the special and unique environment of large blocks of undeveloped land in the Udell Hills and the area of predominant public ownership of land on both sides of the Little Manistee River Corridor District, while at the same time providing for limited residential use of land along existing public roads, to provide a natural resource for forest industry, recreation and compatibility with land management programs of the United States Forest Service (USFS)."⁴ The FP district intends to allow for a rural or low and medium density single family land use in harmony with the National Forest Service and/or Michigan Department of natural Resources. Single family dwellings with frontage on an existing year-round road, forestry, fishing/hunting/trapping, home occupations, and animals/livestock, and associated accessory buildings as uses by right. Special land uses within the FP district requiring additional review for approval include agricultural production, outdoor recreation parks, single family dwelling not fronting an existing year-round road, and associated accessory buildings. The FP requires an allowable maximum density of one unit per 40 acres in low density areas and 20 acres in medium density areas, and minimum 600 building floor area, and 500 feet minimum parcel width (low density areas) and 250 feet minimum parcel width (medium density areas). The FP district does not specify front, rear or side yard setbacks.

The intent of Stronach Township's Residential Forest District (RF) is to "provide for neighborhoods of a rural character with a mix of forestry practices, agricultural practices, residential uses, resort-residential uses in a homogeneous manner while at the same time discouraging retail, manufacturing, wholesale, service, business, etc. and other major industrial or community services."⁵ The RF district intends to provide a rural medium-density zoning district accommodating mixed uses, including forestry, agricultural and residential uses. Uses by right and special land uses within the RF district are not specified. The RF district requires an allowable maximum density of one unit per 5 acres, minimum lot width of 300 feet, and dwellings of not less than 600 square feet. The RF district does not specify front, rear, and side yard setbacks.

Notably, the 2012 Stronach Township Future Land Use Map plan wetland conservation within an extensive wetland area immediate southeast of the Udell Hills area and along the southwest boundary with Norman Township.

⁴ 2013 Stronach Township Master Plan and 5-year Park and Recreation Plan, adopted January 9, 2013, pp. 80-81. Refer to Stronach Township Zoning Ordinance, as amended and effective October 8, 2001.

⁵ *Ibid.*, p. 81.

South Branch Township is located directly east of Norman Township within Wexford County. South Branch Township currently relies upon Wexford County planning and zoning. The Wexford County Master Plan envisions the western portion of the county to develop in a very low density residential uses, areas of natural resources protection and low intensity tourism at the Hodenpyl Dam Backwater, and along tributaries to the Manistee and Pine Rivers.⁶ The Wexford County Master Plan specifically envisions rural residential development with environmental protection along the Pine River at its border with Norman Township. The Wexford County Zoning Ordinance⁷ designates most of the area north immediately east of Norman Township and south of M-55 Highway as Resort Residential (RR), with an allowable maximum density of one dwelling unit per 20,000 square feet or approximately ½ acre. The RR district also requires a 40 foot front yard setback, 35 foot rear yard setback and 15 foot side yard setback; maximum height of 35 feet; and a minimum lot width of 100 feet. Permitted uses within the RR district include single family residential, parks and playgrounds, family day care, and associated accessory structures. Special land uses within the RR district include home occupations, duplexes and multifamily dwellings, assisted living, recreational facilities, motels/resorts, restaurants, new merchandise retail/dealerships, boat/canoe rental, bait/tackle shops, and the additional of one single family dwelling unit on any existing parcel. An area at the intersection of M-55 and M-37 Highways is designated as Light Commercial (C-1) at the location of the Corner Express gas station and convenience store at 11252 W. M-55 Highway, Wellston. The C-1 requires an allowable maximum density of one dwelling unit per 25,000 square feet or approximately ½ acre. The C-1 district also requires a 30 foot front yard setback, 60 foot rear yard setback and 20 foot side yard setback; maximum height of 35 feet; and a minimum lot width of 150 feet. This C-1 district allows a wide variety of retail and merchandise; restaurants of less than 2,000 square feet floor space; offices; and mini storage facilities as uses by right. Special land uses within the C-1 include restaurants greater than 2,000 square feet floor space; lodging/motels; hospitals; commercial recreational facilities; and auto service stations. This area also represents the closest adjoining commercial area to Norman Township. A third area immediately south of M-55 Highway and adjacent to Norman Township includes a Forest Recreation zoning district (FR). FR requires an allowable maximum density of one dwelling unit per acre. The FR district also requires a 50 foot front yard setback, 50 foot rear yard setback and 30 foot side yard setback; maximum height of 35 feet; and a minimum lot width of 165 feet. Permitted uses within the FR district include single family residential, hobby farms, parks and playgrounds, and associated accessory structures. Special land uses within the FR district include home occupations, day care, duplexes, motels, restaurants, new merchandise retail, boat/canoe liveries, outdoor recreational facilities, saw mills, campgrounds/cabins, greenhouses, riding stables, private landing strips, kennels, convenience stores/gas stations, public buildings, and sand and gravel extraction/mining.

Elk and Eden Townships within Lake County are located directly to the south of Norman Township. Both Townships and Lake County itself remain un-zoned. However Lake

⁶ Wexford County 2004 Master Plan, adopted May 19, 2004.

⁷ Wexford County Zoning Ordinance #5, adopted February 15, 1995 and amended through September 12, 2013.

County updated its 1998 Land Use Plan through the enactment of an updated Master Plan in 2012⁸ The portions of Elk and Eden Townships bordering Norman Township are therefore currently un-zoned, and according to the 2012 Lake County Master Plan, currently unplanned. Land ownership alone is recognized within the 2012 Lake County Future Land Use Map as “private” and “U.S Forest Service” along Lake County’s boundary with Norman Township. The 2103 future land use plan for Lake County merely plans for future medium and high density development surrounding the unincorporated villages and population density areas of Luther and Baldwin.

Manistee County Master Plan

The Manistee County Master Plan 2008⁹ summarizes demographics, natural resources, and trends related to economics, physical characteristics/natural resource base, recreation, education, housing, and transportation resources within Manistee County. The 2008 Manistee County Master Plan designates future land uses within Norman Township a “Low Density Residential, Agriculture & Forestry” with the exception of an approximately one-mile radius surrounding the community as Wellston which is designated as “Medium & High Density Urban Development, Commercial & Industrial.”¹⁰ Low Density Residential, Agricultural & Forestry is not specifically defined in the Manistee County Master Plan, but is stated as being “intended to give local governments the flexibility to prepare more detailed natural resource protection and management programs.” Similarly, “Medium & High Density Urban Development, Commercial & Industrial” is not specifically defined, but is described as “having been carefully crafted to respect the current plans of local government within the county, which is generally to direct future growth to areas already experiencing development.”

Zoning Regulations

Land use within Norman Township is regulated under Norman Township’s Zoning Ordinance.¹¹ The Developed Residential zoning district, comprising less than 1% of the Township’s land base, seeks to guide future residential development within areas that have historically developed with small lots and road frontages. The Developed Residential zoning district is intended to provide for more densely developed neighborhoods that have already been subdivided in the unincorporated hamlets of Wellston and Dublin for residential and neighborhood scale retail and services, to promote the compatible arrangement of land uses for residences and neighborhoods. Permitted uses include for single-family dwellings (including home occupations); duplexes; apartments; parks and associated accessory buildings and signs. Special uses in the Developed Residential District include construction, beauty and barber shops, education and social services, membership organizations, miscellaneous services, mobile home parks, and accessory buildings to these special uses.

The Residential zoning district, comprising approximately 3% of the Township’s land

⁸ *Lake County Master Plan*, adopted (undated) 2012.

⁹ *Manistee County Master Plan 2008*, adopted by the Manistee County Board of Commissioners on January 20, 2009.

¹⁰ *Manistee County Future Land Use Map*, 2008.

¹¹ *Norman Township Zoning Ordinance*, April 8, 1993, annotated and effective June 22, 2010; and *Norman Township Zoning Map*, May 13, 2008, as amend through June 9, 2009.

base, seeks to guide future residential development within areas that have historically developed surrounding the existing Developed Residential area of Wellston. The Residential zoning district is intended to provide for more densely developed neighborhoods and controlled retail and services, to promote the compatible arrangement of land uses for residences and neighborhoods. Permitted uses include for single-family dwellings (including home occupations); duplexes; campgrounds; apartments; parks; tax preparation; and accessory buildings to the above. Special uses within the Residential District include tire repair, construction, retail trade, cabinet work, restaurant, gift shops, real estate, beauty and barber shops, auto repair shops, educational services, cottage industry, mobile home parks and accessory buildings associated with the above.

The Rural Residential zoning district comprises 63.5% of the Township's land base and is established to provide neighborhoods of a rural character with a mix of forestry, agricultural practices, resort/residential uses, etc. while discouraging retail, manufacturing, wholesale, service businesses, and the like. Permitted uses within the Rural Residential include single-family dwellings (including home occupations); parks and playgrounds; riding stables (commercial and private); agriculture, forestry and fishing (and associated farm housing, warehousing, storage and markets); custom cabinet work; restaurants; gift shops; real estate; hotels and lodging; beauty and barber shops; tax preparation; small engine repair; health and educational services; membership organizations and clubs; golf courses; and associated signs and accessory buildings to the above. Special uses within the Rural Residential District include communication towers; campgrounds; anemometer towers over 125 feet high; commercial WECS; and non-commercial WECS over 125 feet high; mobile home parks; tire repair; agricultural services; mining; special trade contractors; preserved fruit and vegetable manufacturing; saw and planing mills; farm product warehousing/storage; communication services; refuse systems; wholesale grocery and farm products; farm markets; auto repair; cottage industries; and accessory buildings associated with the above.

A small Commercial zoning district comprising less than 0.5% of the Township is designated along the east side of Seaman Road, south of M-55 Highway and north of the Norman Township Hall. The Commercial district is intended to accommodate wholesale businesses (i.e. scrap and waste materials, farm-product raw materials, and chemical and allied products); retail; finance, insurance and real estate services; other services; public administration; commercial on-site cleaning, refurbishing/sand blasting and powder coatings; signs and accessory buildings associated with the above. Special uses within the Commercial District include single-family dwellings (including home occupations); ice cream and frozen dessert manufacturing; bread and bakeries; ice manufacturing; and accessory buildings associated with the above.

A small Highway Commercial zoning district comprising less than 1% of the Township is designated along the north side of M-55 Highway, east and west of the intersection of M-55 Highway and Seaman Road. The Highway Commercial district zone is intended to accommodate general building contractors; special trade contractors; transportation and public utilities; wholesale trade; retail; saw mills and millwork; finance, insurance and real estate services; other services; public administration; commercial on-site cleaning,

refurbishing/sand blasting and powder coatings; signs and accessory buildings associated with the above. Special uses within the Highway Commercial District include single-family dwellings (including home occupations); apartments; sexually oriented businesses; ice cream and frozen dessert manufacturing; bread and bakeries; and accessory buildings associated with the above.

Notably, there is no land area within Norman Township designated as a Manufacturing/Industrial District, nor is language provided within the Norman Township Zoning ordinance to guide and regulate typical manufacturing and industrial land uses.

The Big Manistee River Corridor District regulates land uses within parcels riparian to either side of the banks of the Big Manistee within Norman Township. The land area subject to these requirements is approximately 9% of the total Norman Township land base. Permitted uses within this district are forestry and outdoor recreation/parks. Special uses include campgrounds; single-family dwellings (including home occupations); and accessory buildings associated with the above.

The Natural Area District regulates land uses within parcels riparian to either side of the banks of the Pine Creek within Norman Township, excluding areas within the Wetland Conservation District, and on either side of an unnamed creek east of Huff Road and north of Chicago Avenue in the vicinity of Brown's Bayou. The land area subject to these requirements is approximately 1.5% of the total Norman Township land base. Permitted uses within this district are single-family dwellings (including home occupations) and parks. Special uses include forestry.

The Wetland Conservation District regulates land uses within large area of Norman Township: a very large area within the southwest portion of the Township extending from south of Wellston to the Udell Hills area; at the headwaters of Pine Creek between Peacock and Kropel Roads; along portions of the Sylvan Creek in the northwestern portion of the Township; and a small area east of the Tippy Dam Pond. The land area subject to these requirements is approximately 17% of the total Norman Township land base. Permitted uses within this district are wetland/water dependant game operations; public game areas; open space and individual recreation areas. Special uses include parks, boat launches, and associate parking.

The Forest Preservation zoning district, comprising approximately 3.5% of the Township's land base, seeks to preserve large areas of forest for recreation and forestry, and preserve special and unique environments such as at Udell Hills, and provide compatibility with US Forest Service lands. Permitted uses include for single-family dwellings (including home occupations); forestry; lumber and wood products; fishing, hunting and trapping; parks/outdoor recreation; and accessory buildings to the above. Special uses within the Forest Preservation District include campgrounds; anemometer towers over 125 feet high; commercial WECS; and non-commercial WECS over 125 feet high; mining; and accessory buildings associated with the above.

Noise, junkyard and blight, and civil infraction ordinances have also been enacted by the Norman Township Board of Trustees.

Summary of Findings

The Norman Township Master Plan's future land use map generally matches well with plans and zoning regulations within Norman Township and surrounding municipalities - as they currently exist. A review of Norman Township's existing zoning ordinance as a part of the Master Plan update process has revealed the following recommendations:

- Consider the replacement of the use of Standard Industrial Code (SIC) numbers to describe regulated land uses with typical zoning descriptions of mixed, residential, commercial, industrial, agricultural/forestry, natural resource development/conservation and other land uses within zoning districts. This would simplify zoning language and clarify zoning ordinance applications to the many, many typical land uses associated with the above that are not described or well-specified by SIC codes.
- Norman Township's current zoning ordinance possesses three (3) residential districts. The majority of the Township's land base, i.e. 63.5%, is currently designed as being within the Rural Residential District. It is recommended that this the Township explore the simplifying, streamlining and/or combining District the Rural Residential with existing Big Manistee River Corridor, Natural Area, Wetland Conservation Districts to comprise a new Agriculture/Forestry District allowing among other uses low density residential development.
- Consider combining the Big Manistee River Corridor, Natural Area and Wetland Conservation Districts and replace them with a waterfront/wetland overlay district. This would simplify and streamline zoning language, clarify the applicant of standards to within 100 feet or other acceptable distance on either side of these resources, and clarify the reliance on underlying zoning district regulations, i.e. Agriculture/Forestry District described above, for land uses and structure development with little or no impact to water quality and associated ecological values.
- Consider combining and simplifying Commercial and Highway Commercial Zoning Districts. Plan for a new Commercial District based on planned future rather than existing or recent land uses. Both areas are very small in geographic size, and Highway Commercial varies little from the Commercial District, except for the allowance of sexually oriented businesses as Special Land Uses. Importantly, more broadly define commercial activities in zoning by eliminating use of SIC codes.
- Consider replacing Developed Residential with Village Business, and Residential with Village Residential Districts to encourage, enhance and preserve a small town character within Wellston and Dublin.

- Discourage highway, strip commercial development through the consideration of developing a compact, rural town center with a unique identity and fostering a mix of neighborhood scale commercial, institutional, recreation and residential land uses.
- Explore establishing a Manufacturing/Industrial District with accompanying language to encourage, guide and appropriately regulate light industrial and manufacturing operations in Norman Township.
- Separate out minimum lot width and boats/docks per parcel standards from various district language in the Norman Township Zoning Ordinance and address these standards within the new Waterfront Overlay.
- Consider applying a new Waterfront Overlay to creeks, streams, ponds, wetlands and lakes. Current approach regulates waterfront areas (and beyond) for the Big Manistee River, Pine River and Pine Creek only.
- Move all federally-owned U.S Forest Service, State-owned, if any, and unique and special resource areas to the Forest Preservation Zoning District.
- Encourage the establishment of small scale, non-commercial WECS throughout the Township. To protect and promote the rural, forested character of Norman Township and the wildlife and scenic resources within it, carefully review and consider the appropriateness of any future construction of large scale commercial WECS in the Township
- Work with the U.S. Forest Service, Michigan Department of Natural Resources, tribes and local units of government to guide Off Road Vehicle (ORV) use of public roads and right of ways in the township.
- Consider the removal any reference to “fishing, hunting and trapping” from the Norman Township zoning permitted uses language as those activities are regulated by state licensing and not typically considered a “land use.” Hunt clubs, hunting preserve and/or put and take commercial hunting operations and similar operations and associated infrastructure/buildings are typically regulated by zoning.

As is typical, an ongoing need exists to enhance and build meaningful coordination and opportunities for cooperation with surrounding townships, counties, tribes and Manistee County. Of the tools available to Norman Township to guide future land use within its borders and along its boundaries with other communities, Norman Township encourages the use of combination of flexible methods including but not limited to voluntary farmland, forestland, and open space preservation.

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

For the purposes of this Master Plan, goals, recommended actions, and policies have been identified by the Norman Township Planning Commission and other participants in the Master Planning process concerning a number of interest areas within the Township.

“Policies” are guidelines to assist local decision-makers in implementing recommendations. “Goals” are defined here as broad-based statements of community policy interest and intent. “Actions” are stated means by which Norman Township may reach its goals.

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 Norman Township could be in the year 2033, 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 Norman Township. Based on this Master Plan and the policy recommendations and goals detailed below, a Future Land Use Map is located in Appendix A.

General Policy Statements

Township planning is based upon and undertaken for the overall protection of the public health, safety, and welfare of residents of Norman Township.

The Township will enforce the principles of this plan as codified within Norman Township zoning and other ordinance(s).

The Township will seek to manage and guide growth to maintain and enhance the rural quality of life for Norman Township residents through the implementation of this Master Plan.

Within Norman Township the long-term quality and conservation of natural resources, and the sustainability of the environment shall be considered of significant importance when making land use decisions.

When considering land use decisions, Township decision-makers shall 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.

The Township will work with residents and others to promote and provide continuous

opportunity to inform residents and landowners, gather public opinion and foster meaningful public participation in the community planning process.

General Goals

In order to achieve the above policies, Norman Township shall:

Retain rural character or “up north feel” by promoting the preservation of small communities, intact forests, high quality water resources, and recreational resources, as well as minimizing negative impacts from junk yards, improper waste management and unguided growth.

Plan for and guide future growth consistent with this community-created Master Plan.

Maintain a current Township Master Plan by reviewing this Master Plan every five years and updating when appropriate.

Improve and maintain a website for the public to obtain copies of the Master Plan, Zoning Ordinance, application forms, post the final decisions, and meeting times and dates, and other community activities. Streamline and simplify the zoning process through the creation of explanatory pamphlets and checklists.

Retain existing development densities, i.e., minimum lot sizes in Norman Township zoning districts.

Explore the creation of light industrial or manufacturing district in zoning regulations.

Explore and consider the creation of a planned, commercial town center with shared access from and parallel to M-55 Highway in the vicinity of Forester and Steinberg Roads in Wellston. Such a commercial center will be established in accordance to a community-derived plan promoting a unique community identity or “brand.”

Support the continued commercial development of Dublin and Wellston on a small-town, compact community scale.

Use public input from this Master Plan when making land use decisions and/or promulgating Township regulations.

Post and promote community events at the Norman Township Hall and other locations to encourage residents and others to engage in community activities and events. Post a map of Norman Township at such locations.

Support the establishment of and/or efforts by government, land

and/or historic preservation conservancies to protect historic buildings and places and important natural areas and significant farms in Norman Township.

Adopt and implement the concepts of community “placemaking” **and complete streets** in future planning and development within Norman Township.

Recognize the appropriate role of zoning in guiding the future development of Norman Township in compliance with the requirements of the federal Religious Land Use and Institutionalized Persons Act of 2000.

ACTIONS

1) Forest and Farm

To promote the maintenance and enhancement of productive farms and forests within Norman Township, the Township shall:

- a) Promote the establishment and operation of farm stands, farmers markets and small-scale farming operations and specialty farms in Norman Township.
- b) Support and promote voluntary efforts to preserve active farm and forestlands, such as conservation easements, the State of Michigan’s purchase and leasing of development rights program (P.A. 116), etc.
- c) 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, transfer of development rights, and explore the provision of providing density bonuses for development that voluntarily preserves natural and/or cultural resources.
 - Use and promote conservation design and low impact development techniques that allow development to occur while protecting and linking resources.
 - Explore, in conjunction with Manistee County and other Townships, the creation of a farmland conservation task force to guide township decision-making.
- d) 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.

- e) 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; private and community foundations; and/or a local millage - if supported by resident opinion surveys and ballot measure(s).
- f) Support the exploration and establishment of voluntary farmland preservation tools in Manistee County and regionally, such as the purchase of development rights, transfer of development rights, agricultural overlay district, well-connected conservation/farmland conservation developments, the promotion of specialty/valued-added agriculture, and improved local markets for locally-grown agricultural products.
- g) Support a State constitutional amendment to tax farmland appropriately, i.e., not based on development market value.
- h) Partner with local, regional, and state governmental and nonprofit agencies and landowners to protect farm and forestlands.
- i) Recognize the importance of healthy, intact forests in providing wildlife habitat, erosion control, groundwater recharge, recreational uses such as hunting, recreational vehicle travel and other enjoyment.
- j) Encourage forestland owners to enter into sustainable forest management and conservation plans.
- k) Encourage reforestation on steep, sandy, wet, and other fragile soils.

2) Community

To maintain and enhance community well-being within Norman Township, the Township shall:

- a) Promote the Township, new and existing community events (for all ages) and businesses through a variety of traditional and new media. Consider hiring a community events coordinator, and make such promotion a part of the way Norman Township “does business.”
- b) Enhance and promote community identity through “branding” Norman Township, and establishing a presence along the M-55 Highway corridor through “welcome” signage, events promotion/posting, etc. Work with MDOT and other existing agencies and businesses to achieve the enhancement and promotion of community identity.

- c) Explore ways to reach out to and welcome new landowners, residents and businesses within the Township.
- d) Work closely with existing and re-invigorate past community organizations, especially for youths and seniors, to undertake, complete and/or participate in community events and projects. Encourage inter-generational activities, events and projects within the Township.
- e) Make available existing and/or improve Township facilities for youth and senior activities.
- f) Organize and support a community watch program to protect properties within the Township.
- g) Encourage and support entertainment opportunities within the Township.
- h) Encourage landowners, mineral rights owners and developers; i.e. sand and gravel, wind electric generation, communication towers and infrastructure, and oil and gas exploration and production firms; to comply with state regulation and relevant local ordinances in the production and abandonment of mines, towers, wells, production facilities, and associated infrastructure, and site restoration.

3) Environment

To maintain and enhance environmental quality within Norman Township, the Township shall:

- a) Promote the protection of sensitive environmental resources including but not limited to steep slopes, wetlands, wildlife habitat, springs/seeps, waterways and shorelines.
- b) Encourage mineral rights owners and developers, i.e. oil and gas exploration and production firms, to comply with state regulation and relevant local ordinances in the production and abandonment of oil and gas wells, production facility maintenance and testing, and site restoration.
- c) Encourage the restoration, re-contouring, replanting and require the establishment of safe conditions at inactive or abandoned sand and gravel extraction sites.
- d) Utilize best management practices, including but not limited to promoting the use of native plants, on-site treatment and disposal of storm water, soil conservation, sustainable forest yields, and the restoration of damaged lands.
- e) Identify and preserve important wildlife habitat, migration corridors and natural buffer areas within the Township.

- f) Utilize an inventory of the Township's natural resource base for on-going development and land conservation decisions
- g) Protect groundwater, representing 100% of the Township's drinking water source, and surface waters from contamination, depletion and/or degradation.
- h) Recognize the importance of and promote the protection of wetlands in maintaining and improving water quality and sustaining diverse wildlife populations, and thereby recreation/tourism, within the Township.
- i) Promote the protection of wetlands, springs, and ground water recharge areas by requiring efficient water use and septic treatment/disposal, and promote water resource protection in any plans.
- j) Recognize and protect quiet and air quality as essential components of the protection of public health, safety and general welfare, and to minimize the potential for public or private nuisance.

4) **Economy**

The Township recognizes that its rural/forested 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 Norman Township, the Township shall:

- a) Balance residential, commercial and industrial development, and promote the voluntary protection of natural resources, including productive forest and active farmland.
- b) Assist willing landowners in the voluntary conservation of active farms, forest lands and farmland.
- c) Encourage growers' diversification of products, including increasing value-added agriculture, farm stands, agriculture-based tourism, etc.
- d) Encourage improved local markets for agricultural products for growers to sell directly to customers.
- e) Explore and promote opportunities for agricultural tourism within Norman Township.
- f) Support and guide home occupations and cottage industries as increasingly important and viable economic activities within the Township.

- g) Protect and enhance existing natural and cultural resources within the Township.

5) **Public Facilities, Infrastructure & Utilities**

To promote and maintain the rural character within Norman Township, the Township shall:

- a) Consider the establishment of appropriate public infrastructure and municipal services that keep pace with the Township's needs.
- b) Continue to pursue and support the construction of a new fire barn.
- c) Maintain and promote existing EMS and fire protection services within the Township.
- d) Encourage the location of future electric power, communication, oil and gas development, and utility infrastructure in a manner that will not negatively impact rural character or fragment farmland or natural ecosystems.
- e) Encourage the underground installation of all utilities at future housing developments, and strongly encourage underground utility placement at single parcel residential developments.
- f) Encourage appropriate sewage/manure treatment, fertilizer use management, and water protection techniques for planned unit developments, animal feed lots, golf courses, etc.
- g) Encourage the clustering of utilities such as electrical substations, transmitter towers, cell phone or other towers, etc.
- h) Co-location on existing and future communication towers will be required. Co-location of emergency service communications on existing structures shall also be strongly encouraged.
- i) Require private road development in conformance with Township and County regulations.
- j) **Work closely with the Manistee County Road Commission, MDOT and private developers to implement complete streets.**

6) **Residential Development**

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

Township shall:

- a) Consider the housing needs of all income levels and ages, including first time home buyers, elder housing and/or assisted care facilities.
- b) Encourage and provide incentives for the construction of conventionally-built single family homes and cottages. Welcome but guide the placement of campers or temporary dwellings and manufactured homes or trailers.
- c) Encourage and provide incentives for the use of conservation design and low impact development standards for all new housing developments. Promote new housing developments having a minimum of 50% open space after excluding non-buildable areas. Non-buildable areas include but are not limited to slopes over 25%, wetlands, roadways, streams, and seeps/springs. Explore density bonuses for conservation developments that exceed these requirements and permanently protect natural and/or cultural resources.
- d) Guide the appropriate development of future special land uses such as mobile home parks and other multi-family housing, if any, within the Township. The Township seeks to ensure that such development adequately provides infrastructure (water, sewer, utilities, roads, etc.) to residents, and are appropriate in location, scale, density, design, screening, lighting, traffic patterns, etc.
- e) Require the appropriate construction and maintenance of private roads and support the efficient layout of public facilities within housing developments.
- f) Support programs to encourage home renovation and rehabilitation through obtaining grants for old water well abandonment, alternative energy, water conservation, home exterior upgrades, the demolition and removal of abandoned structures, blight control, and home insulation, etc.
- g) Seek to protect existing natural resources, especially productive forest and active farmland.

7) Waterfront Areas

To promote the maintenance and enhancement of water quality and property values within Norman Township, the Township shall promote the following actions:

- a) Protect the water quality and near shore environment of lakes, ponds, streams, creeks, wetlands, etc. from degradation, siltation, pollution, and other human impacts.

- b) Protect existing native vegetation, water resources, fisheries, wildlife habitat, and unbroken forest canopy on shorelines and banks.
- c) Support the enforcement of existing federal, state, and local laws that protect waterfront resources and the environment.
- d) Support the distribution of existing brochures and other materials to educate property owners on waterfront properties. Distribute these materials through MSU Extension, county and township agencies and departments, real estate offices, code enforcement officials, lake and property owners associations, etc. Explore and apply for grants from state, federal agencies and other sources to implement this effort.

8) Commercial Town Center/Commercial Development

To guide the future commercial development of Norman Township, the Township shall:

- a) Foster the future development of Wellston and Dublin as attractive, diverse and compact communities.
- b) Explore the creation of light industrial or manufacturing district in zoning regulations.
- c) Explore and consider the creation of a planned, commercial town center with shared access from and parallel to M-55 Highway in the vicinity of Forester and Steinberg Roads in Wellston. Such a commercial center will be established in accordance to a community-derived plan promoting a unique community identity or “brand.”
- d) Support the continued commercial development of Dublin and Wellston on a small-town, compact community scale.
- e) Encourage mixed land uses, such as residential and commercial developments that are connected by walk ways, use shared parking and accesses, possess well-defined and slowed traffic flow, are safe for pedestrians including children, utilize signage appropriate with community character, are well-screened, and support and advance park maintenance and improvement at Crystal Lake.
- f) Encourage conventionally-built residential dwellings and of diverse price ranges, when constructed in the Township, especially in the existing community centers of Dublin or Wellston.
- g) Study the feasibility of sewer and water services for these areas.

- h) Consider design concepts and architectural styles that reflect community history, image, vision, and values.
- i) Encourage the participation and contribution of landowners, business owners, and residents of Norman Township and adjacent communities in planning for a commercial town center.
- j) Incorporate best management practices and low impact development techniques to reduce amounts of impermeable surfaces, storm water runoff, and require on-site natural treatment of storm water.
- k) Discourage low density and strip development along M-55 Highway and County roads to minimize potential public costs.

9) Recreation

To promote recreational resource development, the Township shall:

- a) Recognize that recreation within the Township relies very heavily upon public lands (i.e., national forest and State lands within the Township), and plan for a variety of recreational needs and preferences.
- b) Support and promote the State or local acquisition/development of unique natural and/or cultural resources as public recreation lands (i.e., lake accesses, unique natural features, wildlife and fish habitat, etc.)
- c) Manage land within the Township for the conservation of natural resources as balanced with recreational uses, including Township-owned lands.
- d) Encourage communication and cooperate with the Michigan Department of Natural Resources to restock fish in Township ponds and lakes, improve/maintain deer and other game populations, and guide hunting policy as it affects the Township.
- e) Cooperate with the County in considering allowing off road vehicle (ORV) use of public roads, and enhancing four season ORV recreational opportunities within the Township.
- f) Consider the development and linkage of non-motorized pedestrian trail(s), especially along but separated from State or County road right of ways.

- g) Consider the goals of the *Manistee County Recreation Plan*.
- h) Consider the development of a Norman Township Recreation Plan, to be reviewed and approved by the MDNR to enable the Township to apply for and access State funds, i.e., Michigan Natural Resources Trust Fund, to acquire, develop and maintain recreational resources within the Township.

10) Transportation

To promote the maintenance and enhancement of transportation infrastructure within Norman Township, the Township shall:

- a) Adopt and apply the concepts and procedures of “complete streets” in future transportation planning within Norman Township.
- b) Engage the Michigan Department of Transportation to explore methods and resources to slow and calm traffic on M-55 Highway through Wellston, enhance the sense of place, and promote Wellston and Dublin businesses and community events through appropriate signage. Retain and enhance the M-55 Highway corridor as the major east-west traffic route within the Township, and inform State and County transportation decision-makers of Township plans to promote and enhance community character and events..
- c) Guide the flexible design and development of private roads within the Township to enhance road safety, visibility, lighting, maintenance, and efficiency in traffic flow, and ensure future development in accordance with this Master Plan.
- d) Encourage the County-wide formulation of an access management plan for roads and highways.
- e) Minimize congestion on roads and highways by using well-designed access points and intersections, and by minimizing accesses along county and state thoroughfares.
- f) Establish and maintain good communication with the Michigan Department of Transportation and Manistee County Road Commission to ensure efficient transportation policy, and future transportation improvement projects in accordance with the vision of this Master Plan.
- g) Address parking needs by facilitating shared parking when appropriate.
- h) Maintain a local road network that is safe (especially with paved roadways, without obstructed vision, with sufficient pedestrian/vehicle separation, and appropriately lighted) for vehicles, pedestrians (including children), and bicyclists.

- i) **The Township is committed to work closely with the Manistee County Road Commission, MDOT and private developers to implement complete streets.**

11) Regional Planning

To support regional planning, the Township shall:

- a) Recognize that Norman Township's natural resources and community are connected to and an important part of much larger systems, and that both often cross other boundaries and can impact other natural and human communities.
- b) Be aware that decisions in one community may affect other nearby communities, encourage and promote cooperation among local governments on development decisions that affect more than one community.
- c) Enhance communication and cooperate with adjacent Townships and Counties on planning and other shared issues.
- d) Engage and fully utilize planning resources and assistance provided by the Manistee County Planning Department and regionally planning agency, the Northwest Michigan Council of Governments (NWMCOG)
- e) Support regional strategies to better protect and preserve forestlands, waterways, active farmland, and other natural features along Township boundaries.
- f) Support and promote consistency between this Master Plan, the *2008 Manistee County Master Plan* and adjacent townships' Master Plans.
- g) Encourage county-wide and regional transportation and access management planning, and coordinate with adjacent counties as well as state and federal agencies on transportation planning and implementation.
- h) Encourage county-wide trails planning, and coordinate with adjacent counties as well as state and federal agencies on recreational resource planning and implementation.
- i) Direct future appropriate commercial uses to established, commercially zoned areas within the Township (i.e., compact, rural town centers of Wellston and Dublin).
- j) Cooperate with regional, state and federal agencies to facilitate a range of housing choices.

- k) Enhance and support regional efforts to develop public and pedestrian-oriented transportation choices and facilities.

12) Zoning

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

- a) Retain existing development densities, i.e., minimum lot sizes in Norman Township zoning districts.
- b) Explore the creation of light industrial or manufacturing district in zoning regulations.
- c) Continue to plan and zone at the Township level, in accordance with Township residents' opinions.
- d) Review, identify and eliminate significant regulatory obstacles, if any, for new business start-ups and/or business retention within the present day economy of the Township.
- e) Encourage and support continual, consistent and fairly applied zoning enforcement.
- f) Consider the role of Township zonings in enhancing and encouraging economic activity within the new information-based economy.
- g) Retain rural roadside image by encouraging:
 - Maintenance of building setbacks;
 - Increased natural buffers;
 - Increased shared access drives;
 - Increased rear parking; and the
 - Placement of large loading doors and general construction staging areas to the side or rear yards,
 - Placement of earthen berms with native vegetation and other effective visual screening; and
 - Placement of scrap metal, junk vehicles, etc. in rear yards and/or otherwise effectively screened from public thoroughfares and right of ways.
- h) Explore and consider form-based zoning approaches, i.e. as an overlay within commercial district, to streamline local land use review for new and growing businesses within the Township.

- i) Encourage the use of zoning incentives to promote conservation design/low impact development and facilitate resource protection by methods including but not limited to: 1) streamlining the review process for conservation development; and 2) displaying design-based zoning regulations in a pictorial fashion to better illustrate development goals for this purpose.
- j) Consider and evaluate the use of density bonus incentives for future planned unit or site condominium housing projects to implement a conservation design and low impact development approach.
- k) Evaluate and potentially revise the Township's Blight, Noise & Nuisance Ordinance in conjunction with the Township's municipal civil infractions ordinance.
- l) Comply with the coordinated planning requirements of the Michigan Planning Enabling Act to enhance coordination with Manistee County and adjacent communities to advance the vision and goals stated in this Master Plan.

13) Future Land Use

To promote the Township's vision for future land uses, the Township shall:

- a) Encourage landowners to recognize the rural character and natural resource base of Norman Township, and work with them to fit future development within the Township's existing character.
- b) Explore the creation of light industrial or manufacturing district(s) in appropriate portion(s) of the Township.
- c) Explore and consider the creation of a planned, commercial town center with shared access from and parallel to M-55 Highway in the vicinity of Forester and Steinberg Roads in Wellston. Such a commercial center will be established in accordance to a community-derived plan promoting a unique community identity or "brand."
- d) Support the continued, appropriate-scale commercial development of Dublin and Wellston on a small-town, compact community scale.
- e) Direct residential and commercial development to existing community centers and away from narrow strip lots along roadways.
- f) Encourage new mixed-use construction and the redevelopment of the existing compact community centers of Wellston and Dublin, and

encourage new clustered rural residential development.

- g) Foster the retention and future development of compact rural community centers with distinct identities within Wellston and Dublin areas.
- h) Consider and implement Complete Streets planning processes and design concepts in guiding future growth, especially within the community centers of Wellston and Dublin.
- i) Identify large contiguous parcels currently in active forest and/or farm use, and work with landowners to encourage conservation, sustainable development, and the retention of rural character if divided or developed.
- j) Direct growth in such a manner as to discourage sprawling land uses.
- k) Preserve the high environmental quality, quiet and dark night sky through land use regulation and Township planning and zoning procedures.
- l) Work toward the improvement, enhancement and maintenance of the Crystal Lake Park within Norman Township.

Refer to Appendix B for a copy of the Norman Township 2014 Future Land Use map.

Appendix A: Plants Native to Manistee County		
	Scientific Name	Common Name
Evergreens	<i>Abies balsamea</i>	Balsam Fir
	<i>Picea glauca</i>	White Spruce
	<i>Picea mariana</i>	Black Spruce
	<i>Pinus resinosa</i>	Red Pine
	<i>Pinus strobus</i>	White Pine
	<i>Tsuga canadensis</i>	Hemlock
Narrow Evergreens	<i>Juniperus horizontalis</i>	Creeping Juniper
	<i>Thuja occidentalis</i>	White cedar
Large Deciduous Trees	<i>Acer rubrum</i>	Red Maple
	<i>Acer saccharum</i>	Sugar Maple
	<i>Betula alleghaniensis</i>	Yellow Birch
	<i>Betula nigra</i>	River Birch
	<i>Betula papyrifera</i>	White Birch
	<i>Fagus grandifolia</i>	Beech
	<i>Populus balsamifera</i>	Balsam Poplar; Hackmatack
	<i>Populus deltoides</i>	Cottonwood
	<i>Populus grandidentata</i>	Large-tooth or Bigtooth Aspen
	<i>Populus tremuloides</i>	Quaking Aspen
	<i>Quercus rubra</i>	Red Oak
	<i>Tilia americana</i>	Linden
	<i>Ulmus americana</i>	American or White Elm
	<i>Ulmus rubra</i>	Red Elm
	Small Deciduous Trees	<i>Amelanchier arborea</i>
<i>Ostrya virginiana</i>		Ironwood; Hop- hornbeam
<i>Prunus pensylvanica</i>		Pin or Fire Cherry
<i>Prunus serotina</i>		Cherry; Plum
Large Evergreen Shrubs	<i>Taxus canadensis</i>	Ground-hemlock; Yew
	<i>Larix laricina</i>	Tamarack
Small Evergreen Shrubs	<i>Juniperus communis</i>	Common or Ground Juniper
Large Deciduous Shrubs	<i>Acer spicatum</i>	Mountain Maple
	<i>Betula pumila</i>	Dwarf Birch
	<i>Cornus alternifolia</i>	Alternate-leaved Dogwood
	<i>Cornus amomum</i>	Silky Dogwood
	<i>Cornus racemosa</i>	Panicked Dogwood

	<i>Cornus stolonifera</i>	Red-oiser Dogwood		
	<i>Cornus stolonifera</i> var. <i>Baileyi</i>	Bailey's Dogwood		
	<i>Ilex verticillata</i>	Winterberry		
	<i>Lonicera canadensis</i>	Fly Honeysuckle		
	<i>Physocarpus opulifolius</i>	Ninebark		
	<i>Prunus virginiana</i>	Choke Cherry		
	<i>Rhamnus alnifolia</i>	Alder-leaved Buckthorn		
	<i>Rhus typhina</i>	Staghorn Sumac		
	<i>Sambucus canadensis</i>	Common Elder		
	<i>Sambucus racemosa</i>	Red-berried Elder		
	<i>Viburnum acerifolium</i>	Maple-leaved Viburnum		
	<i>Viburnum cassinoides</i>	Wild Raisin		
Small Deciduous Shrubs	<i>Alnus rugosa</i>	Speckled Alder		
	<i>Aronia prunifolia</i>	Red Chokeberry		
	<i>Caulophyllum thalictroides</i>	Blue Cohosh		
	<i>Corylus cornuta</i>	Beaked Hazelnut		
	<i>Hamamelis virginiana</i>	Witch Hazel		
	<i>Myrica gale</i>	Bayberry		
	<i>Nemopanthus mucronata</i>	Mountain Holly		
	<i>Polygala paucifolia</i>	Flowering Wintergreen		
	<i>Potentilla anserina</i>	Silverweed		
	<i>Potentilla argentea</i>	Silvery Cinquefoil		
	<i>Potentilla fruticosa</i>	Shrubby Cinquefoil		
	<i>Potentilla norvegica</i>	Rough Cinquefoil		
	<i>Potentilla palustris</i>	Marsh Cinquefoil		
	<i>Potentilla simplex</i>	Common Cinquefoil		
	<i>Prunus pumila</i>	Sand Cherry		
	<i>Salix Cordata</i>	Sand Dune Willow		
Ground Cover	<i>Pyrola elliptica</i>	Shinleaf		
	<i>Pyrola chlorantha</i>	Shinleaf		
	<i>Pyrola rotundifolia</i>	Shinleaf		
	<i>Pyrola asarifolia</i>	Shinleaf		
	<i>Chimaphilia</i>	Wintergreen		
	<i>Arctostaphylos uva-ursi</i>	Bearberry		

	Asarum canadense	Wild Ginger		
	Juniperus horizontalis	Creeping Juniper		
	Vaccinium oxycoccos	Small Cranberry		
	Vaccinium angustifolium	Low Sweet Blueberry		
	Ammophila breviligulata	Beach Grass		
	Eriophorum virginicum	Tawny Cotton-grass		
Vines	Lonicera dioica	Honeysuckle		
	Parthenocissus inserta	Virginia Creeper		