

# WATERLOO TOWNSHIP MASTER PLAN



Amended  
May 2019

## WATERLOO TOWNSHIP JACKSON COUNTY, MICHIGAN

# **WATERLOO TOWNSHIP MASTER PLAN**

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**May 2019**

Prepared and adopted by the  
**Waterloo Township Planning Commission**

Adopted by the  
**Waterloo Township Board of Trustees**

**WATERLOO TOWNSHIP  
JACKSON COUNTY, MICHIGAN**

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# Chapter One

# OVERVIEW

## Introduction

This Chapter provides an overview of the Master Plan, its role and importance, how it should be used, and the process followed in its preparation. It presents the framework for what follows by defining what the Master Plan is and what it is intended to accomplish. Understanding the fundamentals of the Waterloo Township Master Plan will enable the residents and officials of the Township to appreciate the role it plays in assuring the future welfare of the Township, its residents and its resources. Embracing this Plan as a policy guide in preserving and enhancing the public health, safety, and welfare of the Township is essential if this Plan is to be effective.

## What Is the Waterloo Township Master Plan?

### Purpose

Just as individuals and families plan for their future well-being, so must townships. Just as individuals may open savings accounts in order to purchase new farm equipment five years in the future or develop plans for a larger home for a growing family, townships must look to the future and take specific actions to address the current and future needs of the community.

The Waterloo Township Master Plan is a policy document which identifies how growth within the Township, and associated land development and public services, should be guided to best assure the future welfare of the township. The Master Plan can generally be described by the following key words and phrases:

***FUTURE ORIENTED:*** The plan concerns itself with long-range planning to guide and manage future growth and land use. The plan is not only a picture of the community today, but a guide to how the community should evolve over the next ten to twenty years in response to growth and community aspirations.

***GENERAL:*** The plan establishes broad principles and policies to address future growth, land use, and public services.

***COMPREHENSIVE:*** The Plan is comprehensive in that it addresses all principal types of land use and the practical geographic boundaries of each.

***A PLAN:*** The Plan is a specific tangible document which consists of both text and maps, a key portion of which presents and illustrates the Township's policies regarding its planned future land use pattern and delivery of public services.

***DYNAMIC:*** The Plan is intended to be continually evolving in light of the aspirations of local residents, changing conditions in the Township, and new strategies to manage growth, land use, and public services.

The Waterloo Township Master Plan was prepared by the Waterloo Township Planning Commission, under the authority of the Michigan Planning Enabling Act (PA 33 of 2008) and the Michigan Zoning Enabling Act (PA 110 of 2006). These acts describe the purpose and authority of a township's Planning Commission:

**“125.3201 Regulation of land development and establishment of districts; provisions; uniformity of regulations; designations; limitations.**

Sec. 201.

1) A local unit of government may provide by zoning ordinance for the regulation of land development and the establishment of 1 or more districts within its zoning jurisdiction which regulate the use of land and structures to meet the needs of the state's citizens for food, fiber, energy, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land, to ensure that use of the land is situated in appropriate locations and relationships, to limit the inappropriate overcrowding of land and congestion of population, transportation systems, and other public facilities, to facilitate adequate and efficient provision for transportation systems, sewage disposal, water, energy, education, recreation, and other public service and facility requirements, and to promote public health, safety, and welfare.”

**“125.3831 Master plan; preparation by planning commission; meetings with other governmental planning commissions or agency staff; powers.**

Sec. 31.

1) A planning commission shall make and approve a master plan as a guide for development within the planning jurisdiction subject to section 81 and the following:

2) In the preparation of a master plan, a planning commission shall do all of the following, as applicable:

a) Make careful and comprehensive surveys and studies of present conditions and future growth within the planning jurisdiction with due regard to its relation to neighboring jurisdictions.

b) Consult with representatives of adjacent local units of government, including the County Planning Commission in respect to their planning so that conflicts in master plans and zoning may be avoided.

c) Cooperate with all departments of the state and federal governments, public transportation agencies, and other public agencies concerned with programs for economic, social, and physical development within the planning jurisdiction and seek the maximum coordination of the local unit of government's programs with these agencies.

3) In the preparation of the master plan, the planning commission may meet with other governmental planning commissions or agency staff to deliberate.

4) In general, a planning commission has such lawful powers as may be necessary to enable it to promote local planning and otherwise carry out the purposes of this act.”

This Master Plan is not a regulatory document, but a *"policy plan"* to be implemented through regulatory tools. For example, though the Master Plan is not a zoning ordinance, the Master Plan's recommendations and policies will serve as a basis for updating the current Waterloo Township Zoning Ordinance. In fact, the Michigan Planning Enabling Act of 2008 and the Michigan Zoning Enabling Act of 2006 which provides Waterloo Township with the statutory authority to adopt zoning regulations, stipulates that a municipality's zoning ordinance "shall be based upon a plan..." This Master Plan has been prepared, in part, to more clearly meet this statutory requirement and maintain a strong legal foundation for the Township's zoning regulations.

## **Elements of the Master Plan**

In addition to this introductory chapter, the Waterloo Township Master Plan consists of four key components:

- 1) A discussion of important planning issues facing the Township today, and associated goals and objectives that address these issues (Chapter Two).
- 2) The planned future land use pattern for the Township (Chapter Three).
- 3) The planned future delivery of public services in the Township (Chapter Four).
- 4) Background information that provides a review of existing conditions and trends in the Township (Appendix).

## **Importance and Application of the Master Plan**

The importance and application of the Waterloo Township Master Plan are reflected in both the long term interests of the Township and the day-to-day administration of the Township's planning and zoning program.

### **Long Term Interests**

There are a number of interests shared by residents and officials of Waterloo Township today that can be expected to continue for years to come and be similarly shared by new future residents and Township officials. Some of these key interests include:

- Protecting open spaces, natural resources, and rural character.
- Retention of agricultural land.
- Acknowledgment of the Michigan Department of Natural Resource's Waterloo State Recreation Area.
- Assuring appropriate land use and adequate services to protect the public health, safety, and welfare of Township residents and visitors.

The Waterloo Township Master Plan supports these long-term interests by providing a future-oriented strategy which seeks to protect them. Intensive development without adequate public services to meet the demands of such development, as well as development which places excessive demands upon the Township's natural resources (on-site sewage disposal, potable water quality, etc.) can lead the Township into a future of social and environmental risks which will threaten the public's health, safety, and welfare. Chapters Three and Four establish specific future land use and public services strategies to secure these and other long-term interests.

### **Day-To-Day Administration**

The Waterloo Township Master Plan plays an equally important role in the day-to-day planning and zoning actions of the Township:

- Advisory Policies: The Plan is an official advisory policy statement which should be readily shared with existing and prospective landowners and developers to inform them of the long-term intentions of the Township regarding land use and public services and, thus, more closely integrate development proposals with the policies of the Plan.
- Regulatory Programs: The Plan establishes a practical basis for the Township to revise, update, or otherwise prepare regulatory programs intended to assure that the policies of the Plan are implemented, including zoning and land division regulations.
- Review of Rezoning Requests: Chapter Two includes a list of Township goals and objectives which should be considered in light of future proposed rezoning requests to further establish a record upon which the rezoning request can be evaluated. Equally important, Chapters Three and Four provide policies regarding the planned future land use pattern and public services in the Township. These Chapters also provide valuable reference points upon which such rezoning requests should be evaluated.

- Public Services Improvements: The cost-effective use of Waterloo Township's tax dollars requires the identification of a planned future land use pattern in order to locate future residential areas in the Township and areas planned for commercial and/or industrial growth. While some areas in the Township may require future improvements to public services and infrastructure, such as roads and fire protection, residential, and commercial and industrial areas typically require higher levels of public services. This Plan provides the Township with the ability to prepare ahead and better pinpoint areas of future need. Chapters Three and Four are invaluable in this regard. The land owned by the State within The Waterloo State Recreation Area is managed and serviced by the State. The Township is not responsible for providing any public services to State owned properties.
- Intergovernmental Coordination: This Plan provides the basis for Waterloo Township to communicate effectively with its neighbors regarding both the impact of neighboring planning and zoning issues and opportunities for mutual gain through coordinated efforts in the areas of land use and public services.

## Township Overview

Following is a brief overview of the Township. A more detailed discussion of existing conditions and trends in the Township can be found in the Appendices.

Waterloo Township is located in the northeast corner of Jackson County in the south-central area of Michigan. Regional access to Waterloo Township is provided primarily by Interstate 94 (I-94), M-52, and M-106. I-94 travels across the middle of Jackson County in an east-west direction linking Detroit to the east with Chicago to the west, and the numerous urban centers along this corridor including Ann Arbor, Jackson, Battle Creek and Kalamazoo. The interstate passes within 1.5 miles of Waterloo Township's southern border. (Map 7, page A-8)

Waterloo Township is geographically larger than most townships with approximately 49.5 square miles.

Waterloo Township's overall land use pattern reflects a very low level of development and expansive areas of open spaces. The vast majority of the Township is characterized by woodlands, wetlands, farmland, and other open spaces and water bodies. Much of the expansive open space is attributable to the Waterloo State Recreation Area which covers more than half of the Township area.

The Waterloo State Recreation Area includes Prospect Hill, the highest elevation (1,043 feet) in Jackson County. Wetlands represent the largest portion of the natural vegetation and account for approximately one third of the total Township area. Approximately 5% of the Township area has been developed for residential, commercial, industrial, and/or related urban uses. The township participated in a natural resources inventory in 2007.

The 2010 Census reported 1,360 housing units, of which 263 were vacant. This compares to 1,383 housing units reported in the 2000 Census, 300 of those being vacant. Most of these housing units are located around the two largest lakes in the township (Big Portage Lake, in the southwestern corner of the township, and Clear Lake, on the southeastern side).

Commercial and industrial development is limited. Except for the east side of Main Street in Munith and a convenience store in Waterloo Village, it is restricted to the M-52 and M-106 corridors. M-106, in and approaching Munith, includes such facilities as a convenience store, restaurant, beauty shop, specialty retail shop, and steel and metal fabricators. The east side of Main Street in Munith falls within the Township's limits and includes a bank and a food processing facility. Several commercial facilities are situated along M-52 including a motel, convenience store, seed processing facility, and propane gas supplier. There is a convenience store and a restaurant in the vicinity of Portage Lake and Seymour Roads. There are also two active commercial gravel operations and many seasonal campgrounds.

The Waterloo Area Historical Society maintains the Dewey School and Farm Museum complex.





There is an 18 hole golf course within Waterloo Township. Public facilities are limited. There is no public sewer or water service in the Township. Much of the road network is unpaved. Waterloo Township is served by four separate public school districts, (Map 10, page A-11) although there are no public school facilities within the Township. Police protection is provided by Jackson County Sheriff and Michigan State Police.

Ambulance service for the entire township of Waterloo is the primary responsibility of Stockbridge Area Emergency Services Authority (to be referred to for the remainder of this document as S.A.E.S.A.). The dispatch center has GPS tracking on all neighboring ambulances as well as S.A.E.S.A. ambulances. In the event of an ambulance call the GPS tracking will pick the closest ambulance to respond to said call. This is called the closest car concept. S.A.E.S.A. has mutual aid agreements with all the neighboring ambulance companies as required by state law.

Fire protection for the entire township of Waterloo is the primary responsibility of S.A.E.S.A. Fire Department. Any fire call that comes in for the Township, Chelsea Area Fire Authority (C.A.F.A.) and S.A.E.S.A. will be dispatched at the same time with the first department arriving calling an incident report for said call. S.A.E.S.A. has mutual aid agreements with all the neighboring fire departments including C.A.F.A., Grass Lake, and Henrietta Fire.

Waterloo Township's population rose from 908 in 1940 to 2,830 in 1990. The 2010 Census reported 2,856 residents compared to 3,069 residents in the 2000 Census. (Graph 1, page A-17)

## **Community Attitudes**

This Plan is based, in part, upon an opinion survey. Waterloo Township administered a mail survey in the summer of 2010 for the purposes of gaining information about the attitudes of local residents regarding land use and public services issues. Approximately 239 (approximately 20% of households) surveys were completed and returned. Generally, the majority of the respondents of the survey considered the Township to be rural in character and hope it maintains its current character in the years to come, including preservation of the Township's farmlands and other natural resources, dominance of single-family dwellings in future residential development, and limited commercial and industrial development.

Following is a general summary of the results of the survey. References to a "strong majority" means that at least 70% of the respondents shared the same attitude.

- A strong majority of respondents feel the Township is generally "rural" in character, that its current character is important in making the Township a desirable place to live, and that they would like to see its current character continue into the future.
- A strong majority of the respondents support land use regulations intended to control the amount of growth and development and protect the Township's natural resources.
- A strong majority of the respondents indicate that they encourage the preservation of land for agriculture use. Further, a strong majority responded that if an agricultural parcel were to be developed as residential, they would favor 10 acre lots rather than 2 acre lots.
- A strong majority responded that the township should encourage locally grown foods.
- A strong majority of the respondents feel that future residential dwellings should gain access from new interior roads rather than be lined up along the existing county road frontage.
- A strong majority of the respondents feel the number of commercial businesses in the Township today is about right for the community and any new future commercial businesses should be limited to one or two specific areas located in districts specified for commercial use.

- There was a strong majority that favored limiting high density residential areas to specific areas within the township.
- A majority of respondents felt that cell phone coverage is inadequate with the township and that high speed internet options should be made available in the township.
- The prevailing attitude among respondents is not to support an additional tax millage to improve roads. There was no appreciable support for additional community services.

### **Adjacent Jurisdictions**

Waterloo Township is adjacent to 7 townships in 3 counties. Nearly the entire north edge of the township abuts Stockbridge Township, with an extremely small edge with Unadilla Township in Livingston County; to the east Lyndon Township and Sylvan Township are in Washtenaw County; to the south Grass Lake Township and along the western edge Henrietta and Leoni townships are in Jackson County. Each of these and the County of Jackson have Master Plans that reflect their future land use policies. (See table 4, page A-16)

### **Township Participation in National or State Land Use Programs**

Waterloo Township participates in the National Flood Insurance Program and its Floodplain Management Requirements. (See maps 3 and 4, pages A-4, A-5). The Township also participates in the National Hazard Mitigation Plan, and the Jackson County Farmland Preservation Ordinance.

## Chapter Two

# PLANNING ISSUES, GOALS & OBJECTIVES

### Introduction

A fundamental purpose of this Plan is to establish a basis for future land use and public services in the Township. Waterloo Township wants to be actively involved in guiding and shaping future growth and development in the community and not allow the community to evolve merely by chance. To effectively plan for the Township's wellbeing with regard to future land use and public services, it is necessary to identify important planning issues facing the Township and clarify the long-term goals and objectives of the Township. Following is a presentation of these planning issues and related goals and objectives.

### Planning Issues, Goals & Objectives

A number of key planning issues are apparent today. These issues vary in scope and are clearly inter-related. The future quality of life and character of the Township will be largely shaped by the Township's strategy in dealing with these future land use and public services issues. Each planning issue presented in this Chapter is followed by a set of goal and objective statements. Planning goals are statements that express the Township's long-range desires. Each goal has accompanying objectives which are general strategies that the Township can pursue to attain the specified goal. For example, a family's goal may be a vacation in the Upper Peninsula while two of the family's objectives may be to make additional savings deposits for the trip and visit a travel agent for suggestions and information.

The goals and objectives presented in this Chapter are important for several reasons:

- The goals and objectives provide current and future residents of Waterloo Township with an overview of the intended future character of the Township.
- The goals and objectives identify and outline the basic parameters which should be used in guiding land use and public services policies in the Township.
- The goals and objectives serve as references upon which future rezoning and land development decisions can be evaluated.





### **Objectives, Goals and Policies of the Plan**

The planning issues, and associated goals and objectives, are divided into the following major categories:

- Growth Management
- Community Character and Environment
- Waterloo State Recreation Area
- Farmland Resources
- Local Food Production, Processing and Distribution
- Residential Development
- Roadway Network
- Commercial & Industrial Development
- Limited Public Services and Tax Base

The planning issues presented in the following pages are not intended to be all inclusive. Rather, they are presented as the primary issues that the community must address as it establishes a future for itself. These issues can be expected to evolve over time and, accordingly, should be reexamined periodically and appropriate modifications be made.

Advances in technology, changes in infrastructure, and governmental incentives have altered the potential land use impact of wind and solar electrical energy systems. With added height and turbine design, geographically practical wind system locations are expanding into areas like Waterloo Township. Commercial wind power structures are becoming practical on smaller footprints. There is an increase in interest in these clean energy systems for personal use. Generally private/onsite systems have minimal impact on the neighborhood and adjacent land use patterns. In contrast commercial wind and solar energy systems can have significant impacts. Large parcels that have access to roads and the electrical network may be suitable for commercial energy system developments. Distance from residential use could minimize potential quality of life issues with these commercial projects. The Township's Community Residential Areas are not suitable sites for these commercial solar or wind systems. These commercial projects are not suitable for high density areas such as commercial or industrial areas. There may be some agricultural parcels in the Township that would be attractive to commercial wind and solar energy development.

### **Growth Management**

Waterloo Township's population had been increasing up to the 2010 US Census. But the rate of growth peaked in the 1960's and has been steadily declining since. In the 2010 US Census the total population actually dropped for the first time in its history to 2,856. (See graph 1, page A-17). It is unknown if the total population of the Township will decline further or increase. The future character and quality of life in the Township will be impacted by the way the Township chooses to manage future growth and development, particularly in contrast to adjacent township's policies. The Township has significant natural resources and

farmland resources. It is important to acknowledge that the Township's policies have direct influence over only the portion that is privately owned. The land under State ownership and management within the Waterloo State Recreation Area by the Department of Natural Resources is almost completely influenced by the State's policies.

Waterloo Township wants to provide appropriate opportunities for growth and development. Policies in this Plan must address accommodating growth and development and provide a strategy for effectively shaping and guiding future growth and development in an appropriate manner, consistent with the feedback from the township survey and the opportunities and constraints presented by its natural and cultural characteristics. Individual properties and land uses exist within a network of adjoining and nearby properties and land uses. A township-wide land use pattern should strive to assure compatibility between land uses. This can be accomplished by recommendations regarding the location of new land uses, development densities, and buffering.

**GOAL:** *Manage future development in a manner which is consistent with the natural limitations of the land, the preservation of natural resources and rural character, the availability of necessary public facilities and services including road infrastructure and emergency services, and the cost-effective use of tax dollars.*

### **Objectives**

- 1) Preserve the Township's natural resources through a coordinated future land use strategy and related regulations which permit reasonable use of land while discouraging unnecessary destruction or loss of natural resources, including agricultural resources, wetlands, woodlands, lakes and streams.
- 2) The Township has no intention to introduce public sewer or water services.
- 3) Prohibit new growth and development that requires levels of public facilities and services unavailable in the Township, until the time such levels of services become available. Wherever legally permissible, local regulations should require new developments to pay for the direct and indirect public services costs to the Township associated with that development. These costs should not be imposed on existing residents. Exceptions should be made where public interests and benefits are substantial.
- 4) Discourage development in flood plain areas.
- 5) Provide regular opportunities for substantive public input on growth and development issues facing the Township and the future character of the Township.
- 6) Maintain effective land development review procedures to assure new land uses are designed to minimize negative impacts upon existing uses, protect important natural resources, and assure public health, safety, and welfare.

### **Community Character and the Environment**

Protection of the Township's rural character is extremely important to the residents of Waterloo Township. "Rural character" is a subjective quality but is typically associated with an overall perception of limited urban development, and open spaces comprised of farmland and/or other open landscapes including woodlands, wetlands, lakes, and fields. Not only are these elements important in shaping the character of the Township, but also provide vital environmental roles including wildlife habitats, flood control, water purification, groundwater recharge, and air quality. The Township has abundant natural resources and sensitive environmental features. Preservation of these resources can be difficult because the process of encroachment can occur slowly. Substantial damage to an entire ecosystem characteristically occurs over a long period of time.

Effective protection of rural character and natural resources does not require the prohibition of growth and development. Managed growth and development encourages the continuation of the Township's overall rural character. The preservation of rural character and natural resources in the face of growth and development, such as platted subdivisions, condominium subdivisions and non-residential development, is dependent upon site development practices which purposely incorporate the protection of open spaces, natural resources and environmental ecosystems into the development plan.

Increased environmental knowledge, awareness, and education, when incorporated into a comprehensive planning strategy, can minimize the potential for environmental degradation and ecosystem disruption.

Establishment and protection of interconnected systems of natural/environmental areas, including wetlands, lakes, woodlands, stream corridors, and open fields will provide a diverse and viable habitat for native wildlife and plants. Zoning regulations should encourage protection of the Township's natural resources and rural character.

**GOAL:** *Preserve the dominant rural character of Waterloo Township and its environmental resources and integrity.*

### **Objectives**

- 1) Assure that future land development be designed in scale with existing developed areas and respect the existing surroundings, through reasonable standards addressing density, building size, height, and other development features.
- 2) Encourage land development which actively strives to preserve open spaces as part of a development project (such as on-site woodlands, wetlands, lakes, and fields), including the use of such tools as conservation easements, and land trusts.
- 3) Encourage the maintenance of historically significant structures and lands, and a structurally sound housing stock, and the rehabilitation or removal of blighted structures and yard areas.
- 4) Separate incompatible land uses by distance, natural features, or man-made landscape buffers which adequately screen or mitigate adverse impacts.
- 5) Assure that the quantity and quality of new development does not unreasonably create increases in air, noise, land, and water pollution, or the degradation of land and water resource environments including groundwater.
- 6) Development densities and intensities in environmentally sensitive areas should be limited and all development should be in compliance with applicable local, county, state, and federal regulations.
- 7) Review proposed development in light of its potential impact upon wetlands, woodlands, lakes, and other natural resource areas.
- 8) Educate the public about waste management and the Township's fundamental reliance upon groundwater resources for potable water supplies and the potential detrimental effects of irresponsible land use and development practices.

### **Waterloo State Recreation Area**

A portion of the Waterloo State Recreation is included within Waterloo Township. In 2004 the Department of Natural Resources approved an expanded "Dedicated Boundary" for the Area; see the blue outline on Map 2. More than 53% of the township lies within the Dedicated Boundary including the currently owned properties of the Department of Natural Resources. Over 35% of the Township is currently owned by the State. There are also several hundred privately owned parcels within the Dedicated Boundary. The Dedicated Boundary was established to manage future land purchases and is based on the Department of Natural Resources commitment to: "Conservation, protection, use and enjoyment of the State's natural and cultural resources for current and future generations." Land within the Dedicated Boundary would be a priority purchase for the Department of Natural Resources.

Department of Natural Resources' managed properties include: the Portage Lake State Park (with access to Big Portage Lake on its west shore), an equestrian facility, a commercial aggregate extraction operation, parcels leased for agricultural use, and several managed hiking and equestrian trails. (Map 1, page A-2). The Waterloo Farm Museum and the Dewey School are historic sites owned by the Waterloo Area Historic Society are located within the Dedicated Boundary. There are six privately owned recreational/camping facilities, eight Natural Beauty Roads and several small commercial operations within these boundaries. The amount of State owned/managed land expands as new properties are acquired. In the years 2011-2015 10 parcels were acquired by the Department of Natural Resources amounting to 1,024 acres transferred from private to State ownership.



Waterloo Township is not responsible for providing any public services to the properties actually owned/managed by the Department of Natural Resources. The State does not pay property taxes on their owned land, but is required by law to pay “payments in lieu of taxes” based on total acreage administered by the Department of Natural Resources. In 2015, this amounts to more than 2.5% of the Township’s tax revenues.

The recreation area contributes to the strong rural character of the Township and provides the Township with increased economic stability without any added responsibility for providing public services. The privately owned properties both within and adjacent to the Waterloo State Recreation Area are impacted in complex and variable ways by their proximity to the Area.

In recognition of:

- the substantial role the Waterloo State Recreation Area plays within the Township
- the benefits it provides to other communities and residents outside of Waterloo Township
- the Department of Natural Resources’ intentions to consolidate their holdings by continuing to accept gifts and grants of land and to continue to buy land on behalf of the people of Michigan within the Dedicated Boundary.

The future land use policies of the Township should include actions to maintain the long-term viability and the benefits of the Waterloo State Recreation Area.

***GOAL:*** *Encourage the long-term viability of the Waterloo State Recreation Area through management of land uses and site development practices of the Township.*

### **Objectives**

- 1) Consider setback requirements to minimize the impact of development within and adjacent to the Waterloo State Recreation Area.
- 2) Encourage open space uses and development of limited density within the boundaries of, and abutting, the Waterloo State Recreation Area.
- 3) Discourage the establishment of commercial or similar uses within the Waterloo State Recreation Dedicated Boundary that would encourage traffic and other disturbances within the Waterloo State Recreation Area.
- 4) Consider special review procedures for all projects in proximity to the Waterloo State Recreation Area to assure such development minimizes impacts upon the Waterloo State Recreation Area.

### **Farmland Resources**

Agricultural activities within the Township have been revitalized by changes in the agricultural commodity market. Considerable land that has been fallow is currently in production.

The Township’s farmland resources provide important food and fiber to both local and regional populations, are an important source of income, and contribute to the stability of the local economy. Still, it is important that the Plan’s recommendations recognize the challenges facing the local farming community. The Plan should actively encourage the continuation of farming operations and the long-term protection of farmland resources while similarly providing landowners the option to convert farm acreage into alternative uses when compatible with the overall future land use strategy of the Township.

Advances in technology, changes in infrastructure, and governmental incentives have altered the potential land use impact of wind and solar electrical energy systems. With added height and turbine design, geographically practical wind system locations are expanding into areas like Waterloo Township. Commercial wind power structures are becoming practical on smaller footprints. There is an increase in interest in these clean energy systems for personal use. Generally private/onsite systems have minimal impact on the neighborhood and adjacent land use patterns. In contrast commercial wind and solar energy systems can have significant impacts. Large parcels that have access to roads and the electrical network may be suitable for commercial energy system developments. Distance from residential use could minimize potential quality of life issues with these commercial projects. The Township’s Community Residential Areas are not suitable sites for these commercial solar or wind systems. These commercial projects are not

suitable for high density areas such as commercial or industrial areas. There may be some agricultural parcels in the Township that would be attractive to commercial wind and solar energy development.

***GOAL:*** *Encourage the continuation of local farming operations and the long-term protection of farmland resources.*

### **Objectives**

- 1) Designate areas which support long term farming and encourage the continuation of agricultural operations through complimentary zoning provisions.
- 2) To the extent that residential development occurs in agricultural areas, encourage such development to be placed on less productive farmland.
- 3) The Township should participate in the Jackson County Farmland Preservation Ordinance. Residents should be made aware of opportunities for farmland preservation and encourage participation in the various State and local farmland preservation programs.
- 4) Explore the establishment of a purchase of development rights program as a means of allowing a farmer to continue farming operations while receiving a reasonable financial return on the development potential of the farmland property and consider the adoption of local regulations to facilitate these programs.
- 5) The Township encourages entrepreneurial agriculture by enabling direct marketing of locally produced farm products, specialty crops and agri-tourism.
- 6) Define areas distributed throughout the Township that are best suited for agricultural opportunities.
- 7) The potential use of Waterloo farmland space for commercial alternative energy production such as solar and wind electrical energy production continues to grow. Since the lease income from such developments may provide Waterloo agricultural landowners with better financial returns than more conventional agricultural production on the same land, and particularly since the township does wish to encourage the continuation of farming, some alternative electrical energy agricultural land uses should be encouraged.

## **Local Food Production, Processing and Distribution**

In recent years there has been an increase in the public's interest in food that is produced locally. In response there have been new types of land uses that build on this interest. Examples include: the sale of produce grown on residential property, sale of fresh eggs, sale of firewood, farm stands, farmer's markets, Community Supported Agriculture, Food Hubs, and other emerging enterprises. These are typically small operations and may not easily be considered commercial or light industrial. These operations are often located in residential areas, and with success may expand and generate increased traffic, need for onsite parking, signage and other impacts on surrounding land uses.

### **Objectives:**

Waterloo Township encourages the local production of food, and associated operations to enable public access to locally produced foods and encourage local economic growth associated with these uses. These uses may, however, have adverse impacts on adjacent residential neighborhoods and there should be opportunities for evaluation of their benefits and impacts.

## **Residential Development**

Residential development has declined significantly over the past several years due to the general economic downturn. Waterloo Township is a very attractive place to live for many prospective residents. The Township has abundant natural resources and open spaces, an overall rural character, close proximity to desirable urban services and retail centers, and excellent regional access to near and distant employment centers. Principal limitations to any new residential development will be largely related to environmentally sensitive areas, the ability of area soils to accommodate septic drain fields, limited public services and the ability of the Township to assure adequate public services to meet the demands of the increased residential development, and balancing residential growth with farmland resources protection.



The primary concern in regard to future housing is that it be accommodated in a manner that will support the Township's desire to preserve the community's rural character, and that development densities respect local natural and cultural conditions. The population of Waterloo Township declined from 3,079 in 2000 to 2,856 in 2010. It is anticipated that the population will remain relatively flat over the next 5 years.

**GOAL:** *Accommodate new residential development in a manner which recognizes the opportunities and constraints of the Township's public services, infrastructure, and natural features; preserves the overall rural character of the Township and its farmland resources and accommodates a range of densities and lifestyles.*

**Objectives:**

- 1) Encourage the continued dominance of low-density housing as the principal housing option in the Township and identify land areas, through planning and zoning, most appropriate for such housing.
- 2) Land capacity should be an important consideration when determining the appropriate density of development, and development densities should not undermine important environmental features.
- 3) Discourage strip residential development along the frontage of existing state and county roads, to minimize traffic safety hazards and the "land-locking" of interior acreage.
- 4) Residential development should incorporate the preservation of natural resource systems and open spaces, and the preservation of the Township's rural character.
- 5) Prohibit residential development densities in areas where existing public services and/or natural conditions are inadequate to support the proposed density.

## **Roadway Network**

If new residential and non-residential land uses are introduced into the Township, demands upon the roadway network will increase. Even low-density residential development can significantly increase local traffic levels. This increased traffic may lessen the level of service along some of the Township's roads. This is particularly true of the Township's unpaved roads. Additionally, it must be recognized that road improvements may well attract new development which, in turn, will place further demands on the roadway network. This Plan must seek to assure that the Township's roads are adequately maintained and improvements are coordinated with the planned future land use pattern.

There are also several roadways within the Township that are used extensively by non-residents commuting to and from workplaces outside of the Township. This use of Township roads by non-residents also adds to the maintenance requirements and congestion of our roadway network.

The Plan must recognize the opportunities presented by the Township's improved thoroughfares and strive to maximize their potential through appropriate land use management. The extent to which higher density and intensity of land uses, including commercial and industrial land uses, are in comparatively close proximity to these key thoroughfares will minimize future maintenance costs and traffic levels along the Township's other roads.

The future pattern of parcel divisions and subdivisions within Waterloo Township will have an important impact upon the future quality of life within the Township. Much of the residential development in the Township today is located along the existing county road frontages. This pattern of parcel divisions can be debilitating to Waterloo Township because: 1) the increased number of driveways directly accessing the county roads increases the level of congestion and safety hazards along these corridors; 2) travel times are increased; and 3) the Township's previously rich rural panoramic views of woodlands, fields, and other open spaces, as experienced from the roadway, are reduced to images of never-ending driveways, cars, garages, and front yards. Zoning regulations should be designed to support the effectiveness and character of the Township's roadway network.

Accordingly, the Plan should encourage future residential development which maintains the integrity of the Township's roadway network and rural character.

**GOAL:** *Maintain a transportation network throughout the Township which moves vehicular traffic in an efficient and safe fashion, utilizes road segments specifically designed to accommodate higher traffic flows where higher traffic levels are being generated, and is coordinated with the planned future land use pattern.*

### **Objectives**

- 1) Discourage high traffic generating land uses and development patterns along the Township's secondary roads.
- 2) Adopt land use and/or other regulations which minimize the potential for traffic congestion and safety hazards along adjacent roadways, including limitations on the number, size, and shape of new land divisions along county roads and the discouragement of "strip" development.
- 3) Road improvements, including the paving of gravel roads, which will heighten growth and development pressures in areas of the Township not specified for such growth, should be strongly discouraged.
- 4) Encourage additional designation of appropriate roadways as Natural Beauty Roads.
- 5) Discourage through trucking except on M-52 and M-106.

### **Commercial and Industrial Development**

Waterloo Township has limited commercial development and industrial development. Constraints toward the establishment of such uses in the Township are significant, including the lack of public water and sewer, a comparatively small population base, and the competition from nearby urban centers such as Chelsea and Jackson. These and other nearby cities also address many of the day-to-day consumer needs of area residents as well as providing opportunities for comparative shopping and professional services. The principal opportunities for new commercial development are those presented by the improved road infrastructure of M-52 and M-106.

To the extent that Waterloo Township accommodates future commercial or industrial development, such development should: 1) not be permitted to locate randomly throughout the Township; 2) be compatible with available public services and facilities, including public safety and road infrastructure; and 3) minimize negative impacts upon the enjoyment and use of nearby lands. In light of the existing and planned character of the Township and its limited public services, large commercial facilities which draw from a regional market should be generally discouraged. The lack of extensive public services and infrastructure need not prohibit the introduction of future industrial operations which are geared more to the assembly of pre-manufactured materials rather than manufacturing operations relying upon raw materials. These "light" industrial uses, and commercial development, could improve the economic stability of the Township through increased tax revenues and employment opportunities.

**GOAL:** *Provide opportunities for limited expansion of commercial and industrial uses that minimize negative impacts upon adjacent land uses, respond to the predominant rural character of the community, and are compatible with available public services and infrastructure.*

### **Objectives**

- 1) Identify locations in the Township, through planning and zoning, considered appropriate for commercial and industrial land uses, taking into account the constraints and opportunities presented by the Township's natural features, such as topography and soils, and the availability of public facilities and services, including road infrastructure.
- 2) Recognize the significance of M-106 and M-52 as potential opportunities for the location of new commercial and industrial uses.
- 3) Provide opportunities for new commercial and industrial land uses which assure such uses are in scale with surrounding land uses, including such features as building size and height, setbacks, and open space areas.
- 4) Future commercial and industrial land uses should not be permitted to indiscriminately encroach into residential and agricultural areas but rather be located in appropriately identified locations.
- 5) Encourage consolidated commercial centers rather than strip commercial development patterns.

- 6) Require landscaping and screening measures to assure commercial and industrial uses do not adversely impact the normal use and enjoyment of adjoining land uses.
- 7) Limit industrial uses to those which are predominately characterized by assembly activities and similar “light” operations that do not require heightened levels of public services or otherwise negatively impact surrounding land uses or the community as a whole.
- 8) Provide opportunities for home-based occupations within residential dwelling units under conditions which will not negatively impact the residential character, appearance, and quality of life experienced by surrounding residential properties and neighborhoods.

## **Limited Public Services and Tax Base**

Tax revenues dictate, in part, the extent and quality of public services. Residents do not readily support increases in taxes. Though new development can be expected to increase the Township's tax base, the new development will place additional demands upon public services. Contrary to traditional planning wisdom and thought, research has shown that new development does not necessarily “pay its way,” particularly as it applies to single family residential development. Development patterns which minimize new public costs should be sought where practical.

To this end, it is advantageous to maintain a compact form of growth and development and, to the extent it is practical, locate higher density and intensity development near or adjacent to areas currently being served with higher levels of public services. Current police and fire protection services, and the roadway network, appear to be meeting the current needs of area residents. This is due, in large part, to the limited population of the Township.

**GOAL:** *Maintain public facilities and services in support of the planned future land use pattern and as necessary to assure public health, safety, and welfare in a cost-effective manner.*

## **Objectives**

- 1) Discourage public services improvements that will have the effect of encouraging excessive growth and development, or encouraging growth and development at a rate that the Township cannot assure adequate public health, safety, and welfare.
- 2) Discourage public services improvements that will have the effect of encouraging growth and development in areas of the Township not designated for such growth.
- 3) Continually monitor local attitudes toward recreational facilities in the Township and take appropriate planning and capital improvement actions to acquire and develop local park land and/or recreational programs.
- 4) Maintain a regular meaningful communications program with adjoining municipalities and regional agencies to discuss and investigate public facilities and service's needs, opportunities for new or additional shared facilities and services, and alternative strategies for improving local public services, including contracted services, shared services, and Township-operated services.
- 5) Continue the policy of no public water and sewer.
- 6) Provide for a Waterloo Township Administrative Service Facility.
- 7) Encourage high speed internet services to locate in the Township.

# **Chapter Three**

# **FUTURE LAND USE STRATEGY**

## **Introduction**

Waterloo Township's principal planning components are embodied in the Master Plan's Future Land Use Strategy discussed in this Chapter, and the Public Services Strategy discussed in Chapter 4. The Future Land Use Strategy identifies the desired pattern of land use and development throughout the Township. The Public Services Strategy specifies policies regarding future infrastructure and other public services improvements to better assure future public services are coordinated with the planned future land use pattern, and the achievement of the Plan's goals and objectives.

The Future Land Use Strategy consists of policies regarding future land use and development in the Township. Implementation of these policies rests with the regulatory tools of the Township – most importantly the Waterloo Township Zoning Ordinance. This Ordinance will be the primary implementation tool of the Waterloo Township Master Plan through appropriate changes in the provisions of the Ordinance. The Township's Zoning Ordinance generally regulates the type, location, bulk, and intensity of land development throughout the Township.

The Township may also adopt other supporting regulatory tools to further the implementation of the policies of the Master Plan. Land division and private road regulations are very important as a means to further implement the Master Plan and the Future Land Use Strategy. Land division regulations are intended to assure efficient land division patterns, the avoidance of non-buildable parcels, and adequate public access to public roads. Private road regulations are intended to provide for road circulation networks restricted from general public use, in response to the local housing market, while at the same time assuring such roads are built and maintained to minimum public health, safety, and welfare standards. Related ordinances and a capital improvement program, may, from time to time, be adopted or amended to further carry out this Plan.

## **Overview of the Future Land Use Strategy**

The Future Land Use Strategy establishes the planned future land use pattern throughout the Township for the next 10 to 20 years. However, no new land uses should be established, or land rezoned, without adequate public facilities and services to meet the needs of the proposed uses. Such development should not outpace the Township's ability to effectively manage the rate of development. The goals and objectives presented in Chapter 2 are the foundation on which the Future Land Use Strategy is based, including:

- Environmental protection and the conservation of natural resources, including preservation of woodlands, wetlands, lakes and streams.
- Provide opportunities for a variety of new land uses, including residential development and limited opportunities for expanded commercial and industrial uses, in a purposeful and carefully managed manner.
- Rural character preservation.
- Encourage the preservation and utilization of agricultural resources.
- Minimize public service costs.
- Insure compatibility between land uses.
- Acknowledge the impact of additional land acquisition by the state to fulfil its plans for the Waterloo Recreation Area.

The future land use pattern was established based upon an analysis of the Township's natural and cultural characteristics including community attitudes, existing roadway network, soil conditions, existing and nearby public infrastructure, environmentally sensitive areas, and neighboring municipal land use conditions. The opportunities and constraints presented by these characteristics were evaluated within the context of the goals and objectives presented in Chapter 2 to arrive at a planned future land use pattern.

The Future Land Use Strategy calls for a land use pattern characterized predominantly by agricultural and low-density residential development, natural open spaces including woodlands and wetlands, and the long term viability of the Waterloo State Recreation Area. Future commercial and industrial development is limited to M-52 near Stockbridge and M-106 near Munith. Opportunities for higher density residential development are primarily limited to areas in close proximity to the Village of Stockbridge.

High density residential development in the form of mobile home communities is strongly discouraged at this time. The Township presently has one mobile home community, three private seasonal campgrounds, and one state park. In 2010, the dwellings within these facilities represent approximately one third or more of the total dwelling units in the Township. The Township has provided ample opportunities for this form of residential development. This Plan supports future residential development more compatible with the Township's extensive natural resources, limited public services, and overall rural character.

Land use in Waterloo Township's neighboring communities was a consideration in the development of the planned future land use pattern. The Future Land Use Strategy is generally compatible with the planned land use pattern along its borders. The surrounding Townships of Leoni, Grass Lake, and Lyndon provide for primarily open space, agricultural and/or low-density residential development (one dwelling per two acres or more) near Waterloo Township's borders and this Plan similarly proposes low development densities along the vast majority of the Waterloo Township's peripheral areas. Henrietta Township permits residential densities of approximately one dwelling per one half acre throughout the majority of the Township. Stockbridge Township permits development densities of one dwelling per acre or less, including one half acre lots, mobile home parks, and multiple family dwellings, adjacent to portions of Waterloo Township planned for similar suburban/urban development.

The planned commercial/industrial development near or along M-106 to the northeast of Munith in Waterloo Township is generally compatible with Henrietta Township's program for similarly accommodating commercial development along this corridor through Munith.

## **Individual Components of the Future Land Use Strategy**

The Future Land Use Strategy divides the Township into four land use "Areas," with each Area intended to be reserved for certain dominant land uses, based upon the character of that Area. These individual Areas collectively make up the planned future land use pattern in the Township and consist of the following:

- Waterloo State Proclamation Area
- Agricultural - Rural Residential Area
- Community Residential Areas
- Commercial / Industrial Areas

It is not the intent of this Plan to identify each individual land use which should be permitted in each Area. This Plan makes broad-based recommendations regarding the dominant land use or uses intended to be accommodated in each of the *four* Areas. Specific permitted land uses will be determined by the zoning provisions of the Township, based upon considerations of compatibility.

Following is a review of the principal components of the Future Land Use Strategy.

## **Waterloo State Proclamation Area**

In 2004 the Department of Natural Resources officially designated expanded boundaries for the Department's future land use plans which included a significant portion within Waterloo Township. The Proclamation Area includes approximately 53% of Waterloo Township. The stated goal of the Natural Resources Commission is that: "Land within the dedicated boundary would be a priority purchase for the DNR, should the opportunity to purchase and funding become available." Their actions included a Long-Range Action Goals Plan approved in 2013. (Map 2, page A-3)

The portion of the Waterloo Recreation Area within the Township includes parcels currently owned and managed by the Department of Natural Resources and Rural Development. Their parcels include the Portage Lake State Campground and land managed to preserve natural resources and land for public recreation. These actions define the State's official future land use strategy for this Area of the Township. Within Waterloo Township approximately 66% of the land within the Waterloo Recreation Area's Proclamation Boundary is currently owned and managed by the State. Some of this land is leased for agriculture, some for private mining of aggregate and some for private recreational uses. The State has continually expanded their holdings within the boundary when funding is available and parcels become available. (Table 3, page A-15)

There are a significant number of privately owned parcels within this boundary (approximately 5,700 acres, 34% of the area). Some of these privately owned parcels are vacant, but most are being farmed and some are residential homes.

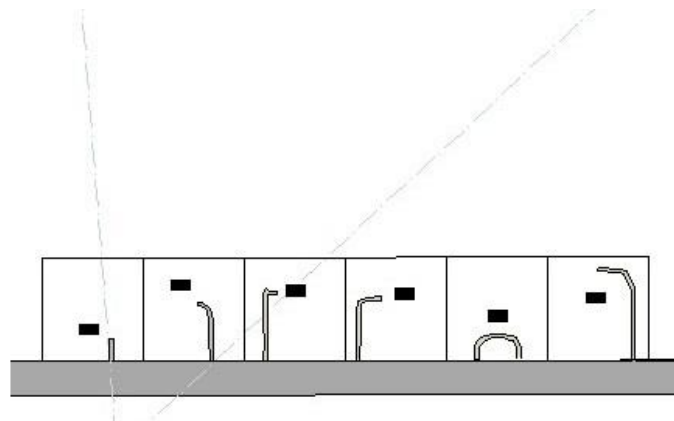
Waterloo future plans must acknowledge the Department of Natural Resources and Rural Development's future plans for the Waterloo Recreation Area at the same time recognizing the current private uses. Land uses that are incompatible with the Department of Natural Resources future acquisitions plans should be discouraged.

## **Agricultural - Rural Residential Area**

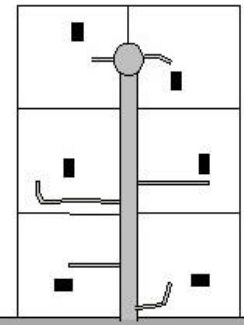
The Agricultural - Rural Residential Area includes the vast majority of the Township not otherwise part of the Waterloo State Recreation Area. This Area is intended to provide opportunities for rural residential lifestyles of comparatively low development density while still providing opportunities for and supporting the continuation of farming activities. This Area is currently composed of primarily large lot residences and agricultural operations.

This Plan discourages the conversion of farmlands to residential use. This Plan encourages long-term farming yet recognizes that other opportunities should be made available to the landowner to pursue reasonable alternative uses. These areas may provide opportunities for low density residential development provided adequate sewage disposal and potable water are available. Low density residential development is considered appropriate for the majority of the Township due to, in part: 1) the limited road infrastructure; 2) large and sensitive wetland environments; 3) the Township's interest in managing the rate of development; and 4) the Township's interest in preserving the area's rural character.

### ***Example A: Strip Development***



### ***Example B: Interior Road Development***



To encourage the preservation of farmland in the Township, development should be encouraged on non-productive farmland. Strip development should be discouraged and interior roads encouraged. Strip development (as illustrated above on the left) is the easiest form of development but it impacts public safety because of the many driveways directly abutting the major roads and it can significantly undermine the rural character of the Township.

Potential new residents in this Area should recognize that the traditional smells, noises, pesticide applications, and generally recognized agricultural activities associated with farming may well continue on a long term basis in this Area, and the Township does not consider such activities and operations as nuisances. Rather, the Township supports the long term continuation of farming in the Township. Local developers and real estate agents must disclose this information to prospective buyers of land in the Agricultural - Rural Residential Area.

## **Community Residential Areas**

The Community Residential Areas provide for residential development of a more suburban character than found or planned elsewhere in the Township. These Areas include both existing residential development of a more suburban character as well as vacant land where new residential development of similar character is considered appropriate. A development density of 1 or more dwellings per acre is considered appropriate in these Areas. The Future Land Use Strategy identifies four locations in the Township as Community Residential Areas. These Areas – the Village of Waterloo, Portage Lake, Clear Lake Residential Areas, and Munith Community Residential Area— are intended to recognize existing suburban development areas but expansion is severely constrained.

Village of Waterloo Community Residential Area: This Area is identified as a Community Residential Area because it already reflects residential development patterns and is not considered a residential growth area. The only locations in this Area that may be appropriate to accommodate new residential development are those limited areas where parcels have already been subdivided for higher density development.

Clear Lake and Portage Lake Residential Areas: Clear Lake and Portage Lake Residential Areas are established in recognition of existing development nodes. These areas are characterized by one or more mobile home parks and lakefront residential development on lots of variable size, many of which are less than 10,000 square feet. This Plan supports the continuation of these existing residential settlements but does not support the expansion of these residential areas. The existing densities do not support the Township's interest in protecting the environmental quality of its lake resources and nearby wetlands.

### Munith Community Residential/Commercial Areas:

The Village of Munith lies mostly within Henrietta Township, but extends into Waterloo Township. The Henrietta Township's Master Plan 2014-2018 designates the portion of the village within their jurisdiction as one of their "High-Density Residential" areas. Although the area of the Village within Waterloo Township has only modest current use, there are undeveloped lands to the east and north.

The current uses are mixed with residential, commercial and light industrial. This area provides the opportunity to designate a mixed use expansion of residential and commercial uses, while enabling separate expansion of an area of light industrial development (see Munith Light Industrial Area below). Future development along Main Street in this area should continue with an integrated commercial and high density residential mix, including portions of buildings for single and multiple family rental housing.

### **Commercial / Industrial Areas**

The Future Land Use Strategy establishes two principal Commercial/Industrial Areas to accommodate future commercial and industrial development – the Munith and North Commercial/Industrial Areas. Development in these Areas is intended to address both the local day-to-day needs of local residents and the needs of regional consumers and highway travelers, and provide opportunities for light industrial uses. Commercial or industrial uses which are characterized by high levels of consumer and/or truck traffic, buildings of comparatively large bulk or size, or operations which require comparatively high levels of public services should be permitted only after review to determine their appropriateness at the proposed location. All future industrial and commercial uses and operations should be compatible with on-site sewage disposal and potable water. Each of these Areas is further discussed below.

Munith Commercial/Industrial Area: The Munith Commercial/Industrial Area is located directly northeast of Munith and is generally bounded by N. Territorial Road to the north, M-106 to the southeast, and Musbach Road to the west including both sides of M-106. This Area is identified as a Commercial/Industrial Area because, in part: 1) M-106 and North Territorial Road provide excellent access infrastructure; 2) the Munith area currently exists as a small commercial/industrial node; and 3) there are existing commercial and industrial uses in this Area. This Area is intended to be compact and not encroach into outlying areas, including further east along M-106.

North Commercial/Industrial Area: The North Commercial/Industrial Area is located along M-52 between N. Territorial and Hill Roads. This Area is identified as a Commercial/Industrial Area because, in part: 1) M-52 provides excellent access infrastructure and visibility; 2) close proximity to the urban and emergency services of Stockbridge; and 3) there are existing commercial and industrial uses along this segment of M-52. This Area is intended to be compact and not encroach into outlying areas, including further east or west along M-52.

The Plan does not support expansion of commercial or industrial development beyond existing uses because of the current and planned residential development in surrounding areas, the Township's interest in protecting the safety and function of the state highways, and the more appropriate locations for commercial and industrial development in surrounding urban communities.

The Strategy recommends that no new additional lands in Waterloo Township be zoned for commercial use and that to the extent that existing commercially zoned properties are developed for commercial purposes, such uses should be geared toward meeting the day-to-day consumer needs of the local residents and visitors. Commercial uses in Waterloo Township which attract regional consumers or excessive vehicular traffic, and/or are characterized by comparatively large building volumes in contrast to the existing or intended residential environment of the area are discouraged.

Strong screening and buffer yard measures are proposed for new commercial and industrial development in the Commercial-Industrial Areas to minimize conflicts with surrounding residential and other uses generally not considered compatible with such development. Limitations on signage, building height, size, bulk, and related architectural qualities should be established to encourage compatibility of new land uses with the desired character of the surrounding areas.



## Public Utilities Right of Way

There is a major utility easement that crosses the Township within the north six sections.

## Special Land Uses

The previous pages presented recommendations regarding the planned future land use pattern for the Township during the coming 10 to 20 years. Each Area presented discusses the dominant land uses to be accommodated. As noted earlier, it is not the intent of this Plan to identify each individual land use which should be permitted in each of these Areas. Specific permitted land uses will be determined by the zoning provisions of the Township, based upon considerations of compatibility and the purpose of each zoning district.

The Township recognizes that some land uses may be considered generally compatible with the intent of a particular zoning district, yet may not be appropriate on a particular parcel in the subject zoning district due to unique or special conditions. These unique or special circumstances may be a result of traffic, noise, or visual or operational characteristics, which if unmitigated could result in significant public or private nuisance. Such uses are typically referred to as *special land uses* in community zoning ordinances. They should be permitted only after a special review has determined that the proposed land use and associated site development proposal meets special standards to assure its compatibility with surrounding land uses, other permitted uses in the district, public facilities and services, and other community features.

Special land uses should be permitted in appropriate locations pursuant to specific standards and review procedures established in the Township's zoning ordinance. Approval should not be indiscriminate and conditions should be imposed (as applicable) to minimize impacts on surrounding lands. Review and approval of such uses should strive to assure such uses are compatible with the character of adjacent property and the surrounding area, do not interfere with the general enjoyment of adjacent property, are not detrimental to the health, safety, or welfare of persons or property, and can be adequately served by essential public facilities and services:

This Plan strongly discourages the approval of special land uses for disruptive commercial or industrial activities in residential areas, under the guise of "*home occupations*." These uses undermine the character of residential neighborhoods and quality of life for current and future residents.

## Conditional Zoning

This plan strongly discourages conditional zoning.

## Phased Zoning

This Plan does not recommend the rezoning of vacant land to a more intensive zoning district except in a phased or incremental manner. For example, while the Plan may identify Township areas that may be appropriate to accommodate commercial or residential development, the Plan does not recommend "across the board" or immediate rezoning of vacant lands. The Plan recommends that rezoning to more intensive districts occur incrementally over time. The Township must be capable of meeting increased public service demands and managing township-wide growth and development. Time is needed for carefully reviewing individual rezoning requests as they apply to the specific property. Rezoning should be in response to a demonstrated need, and minimize unnecessary hardships on the landowner as a result of property assessments and/or resulting nonconforming uses and structures.

# Chapter Four

# PUBLIC SERVICES STRATEGY

## Introduction

The Future Land Use Strategy discussed in Chapter 3 describes the planned pattern of land use throughout the Township. The Public Services Strategy discusses the manner and degree in which public infrastructure and services are to be provided. Public services and related infrastructure include: roads and highways, police and fire protection, recreation, and general government services. As the character and feasibility of land development is directly influenced by the extent to which public services are available, the Public Services Strategy works hand-in-hand with the Future Land Use Strategy and is a critical element of the Township's efforts to manage and guide future growth and development.

An important principle of the Public Services Strategy is that no new development should occur in the Township unless public services are adequate to meet the needs of that new development. The Public Services Strategy consists of policies regarding improvements to the Township's delivery of individual public services. These policies determine the manner by which, and conditions upon which, future public service improvements should be made.

The Public Services Strategy calls for a future public services pattern not very different from the current Township pattern. It is proposed that most of the Township receive limited expansion of public services.

## Individual Public Service Components

### Roadway Network

**Issues:** As new residential and non-residential land uses are introduced in the Township, demands upon the roadway network will increase. The additional residential development anticipated in this Plan, despite its overall low density, will result in higher traffic levels. This increased traffic may lessen the level of service along some of the Township's roads. Conversely, it must be recognized that road improvements (new or conversion from gravel to pavement), may well attract new development which, in turn, will place additional demands on the roadway network.

The Roadway Network component of the Public Services Strategy seeks to assure that the Township's roads are adequately maintained and are coordinated with the planned future land use pattern. Even with the unpaved portions of roadway network that greatly reduce traffic flow capacity, the Township's roadway infrastructure fulfills its function fairly well. This is due, in large part, to the existing very low development density throughout most of the Township. However, the level of service of the Township's paved and unpaved roads can be expected to decline as greater demands are placed upon these roads.

### **Policies:**

- 1) Greatest priority for road maintenance will be assigned to those road segments whose current conditions present imminent danger to the public health and safety. Such dangerous conditions include fallen trees and flooding.

- 2) Functional classification of roads will dictate the priority of improvements when all other conditions are generally equal. The functional importance of the roads in the Township, from highest to lowest, is as follows: 1) county primary roads, 2) county local roads, and 3) minor roads, such as local neighborhood roads in platted subdivisions.
- 3) Subdivisions platted according to PA 591 of 1996 must be built to County Road Commission standards. Development of private roads, whether lot-by-lot or via the Condominium Act, PA 59 of 1978, must be built to meet minimum design standards to assure adequate means of access, including emergency vehicle access. All roads shall be provided with adequate right-of-way or easement widths to facilitate ease of maintenance, improvements, and installation of utilities.
- 4) Provisions designated for walk/running and non-motorized cycling should be considered particularly where neighborhood services, parks or other recreational facilities exist or are anticipated in the Future Land Use Strategy (see Chapter 3), or where there are existing usage patterns and/or unsafe compatibility with vehicular traffic.

## **Sewage Disposal and Potable Water**

### **Issues:**

There is no public water or sewer service in Waterloo Township. Residents rely upon septic systems for sewage disposal. Improperly operating septic systems can contaminate potable groundwater resources, lakes and streams. This poses a public health threat. Industrial, commercial, and higher density residential land uses generally have greater sewage disposal and potable water needs than can often be met by traditional on-site facilities. Many of the Township soils present severe limitations to on-site sewage disposal. This condition highlights the critical relationship between land use, development intensities, and on-site sewage disposal and potable water.

### **Policies:**

- 1) Continue the policy of no public water and sewer.
- 2) All on-site sewage disposal and potable water facilities will be constructed and maintained in accordance with the requirements and standards of the Jackson County Public Health Department, Michigan Public Health Department, and other applicable local, county, state or federal agencies.
- 3) No new land uses or land development projects will be permitted unless regulations regarding on-site sewage disposal and potable water facilities are fully complied with.
- 4) Any future decision by the Township to allow public sewer and/or water services is to be based on an in-depth analysis of all available options, including services provided through cooperative agreements with neighboring municipalities.
- 5) Any public sewer and water services introduced in the Township will be in response to a public health threat.
- 6) Any future introduction of a public sewer and/or water service area, and associated infrastructure, should occur in a phased and incremental manner. The Township must be able to effectively manage the rate of growth and development.

## **Emergency Services and Administrative Facilities**

### **Issues:**

As community growth and land development increases, so does the demand for emergency services and facilities for housing local governmental administrative activities and operations. The comparatively limited commercial, industrial, and high density residential development in the Township reduces the need for the higher level of police and fire protection typically associated with more urbanized communities.

It is important that the Township assure that adequate fire and police protection services are available to existing and future residents and property. The general lack of strong support by survey respondents for an additional tax millage to improve police protection services may be an indication of the current level of satisfaction with police services.

Administrative facilities maintained by the Township must be adequate for carrying out administrative activities. The current Township Offices provide ample room for public meeting purposes, as well as ample space for day to day administration activities.

### **Policies:**

- 1) The Township will require the provision of fire protection infrastructure (wells, water lines, etc.) for all new developments which are of such size and density that on-site infrastructure is considered critical. On-site fire protection infrastructure will generally be considered necessary for platted subdivisions and condominium subdivisions which concentrate building sites in close proximity.
- 2) The Township will continually monitor police protection needs and services and document indicators suggesting deficiencies (or projected deficiencies), and explore improving service levels where deficiencies (or projected deficiencies) arise.

## **Recreation**

### **Issues:**

Waterloo Township is unique in that approximately one half of its total acreage is contained within the Waterloo State Recreation Area. Ironically, the recreation standards adopted by the Michigan Department of Natural Resources (Map 2, page A-3) suggest that the Township, with a population of approximately 3,000 persons, is lacking in many recreational opportunities. These include local (under local control) park land acreage, playgrounds, ball fields, and more.

Waterloo Township formed a Recreation Committee for the purpose of developing a 5 year (2016-2020) Recreation Plan to describe the physical features, existing recreation facilities, and the desired actions which can be taken to improve Waterloo Township recreation facilities. The Recreation Committee developed a Recreation Plan and recommended it to the Waterloo Township board on January 7, 2016. The Waterloo Township Board approved and adopted the plan on January 29, 2016 and the Michigan Department of Natural Resources approved and adopted the plan on March 3, 2016.

### **Policies:**

- 1) The Waterloo Township Recreation Committee is charged with monitoring the needs of the Township.
- 2) Should sufficient public sentiment warrant, the Township will pursue the development of a Michigan Department of Natural Resources approved five year action plan which will provide a specific action plan aimed at providing needed Township facilities and enable the Township to compete for state and federal recreation grant funds.
- 3) The Township will strive to provide recreation facilities in a manner that recognizes the particular recreation needs expressed by its residents.

# **Chapter Five**

# **ENVIRONMENTAL**

# **FEATURES**

## **Geology and Topography**

During the Paleozoic era of geological history, Jackson County and the state as a whole was inundated by successive warm, shallow seas during which large amounts of sediment were deposited. These deposits were subsequently lithified to form bedrock. Waterloo Township sits upon bedrock formed during the Pennsylvanian and Mississippian periods of geological history in Michigan. It is rare that a township exhibits more than one bedrock formation yet Waterloo Township exhibits four distinct materials including limestone, shale, and sandstone. The Ice Age brought four successive continental glaciers across the Great Lakes area. As these ice sheets moved southward from Canada, they scoured and abraded the surface of the land leaving behind deeper valleys and more rounded hilltops. The advancing glaciers carried large quantities of rock materials scraped and gouged from the land's surface. These materials were then deposited during the melting of the ice to form drift materials covering the bedrock below. The bedrock geology of Michigan can be generally described as bowl shaped in that the depth to the bedrock generally increases as one moves toward the center of the state. While the depth to bedrock in portions of the state exceeds 700 feet, the depth in Waterloo Township ranges from approximately 5 to 75 feet and increases across the Township in a northeasterly direction.

The majority of Waterloo Township is comprised of level to nearly level lands. Except for the southern quarter of the Township, the land rarely exceeds grades of 3%. However, the southern quarter of the Township reflects far more topographic relief. The overall land character of the southern quarter is rolling and often exceeds grades of 10% and, less frequently, exhibits grades as high as 25% or more. Elevations range from approximately 910 feet to 1,140 feet above sea level. The lowest elevations are generally associated with the southwestern regions of the Township near Portage Lake and Little Portage Lake. The highest elevations are generally found in the Township's far southern bounds, most particularly northwest of Pond Lily Lake in the extreme southeastern corner of Township. The vast majority of the Township falls within the 915-950 elevation range.

## **Drainage and Water Courses**

Waterloo Township is characterized by more than a dozen lakes and an extensive network of wetlands interconnecting these water bodies, which serve to collect area runoff and drain the Township's upland areas (see Map 5, page A-6). The largest of the lakes is Portage Lake in the southwest corner of the Township and covers more than 400 acres. Other water bodies approaching 150 acres or more in size include Clear Lake in the southeast corner of the Township and Little Portage Lake situated directly northeast of Portage Lake. Portage River is the only river course within the Township, beginning at the center of the Township and flowing westward into Little Portage Lake and then further westward north of Portage Lake into Henrietta Township and Blackman Township where it ultimately joins the Grand River. In addition to the extensive wetlands and numerous lakes, the Township is characterized by many creeks and streams which further provide for area drainage. Many of the waterways in the Township are under the jurisdiction of the Jackson County Drain Commission. Lands abutting or in close proximity to drainage courses, including streams, ponds, and lakes, are subject to flood conditions where the drainage courses do not have the capacity to accommodate the rate of runoff from a single rainfall or numerous rainfalls over a relatively short period of time. Historically, no flooding of any large scale significance has occurred in Waterloo Township. This is due in large part to the comparatively limited development within the Township, and the existence of an extensive network of drainage courses and wetlands to carry and store runoff.

In 2010 the Township was notified that the Federal Emergency Management Agency (FEMA) as part of its ongoing National Flood Insurance Program approved two Floodplain zones within Waterloo Township. These are officially designated as Zone A on the Flood Insurance Rate Maps. The designation establishes insurance rates impacted by 100 year rain events. There are two Zone A areas in the Township. One is in the northwest corner along Orchard Creek (drain) in the area of Baseline, Dewey and Musbach Roads. (See official FEMA Map 3, page A-4). There are several properties, some with residential homes. The other is Clear Lake, and affects many properties around the perimeter of Clear Lake, most of which have residential homes. (See official FEMA Map 4, page A-5). Several of the property owners around Clear Lake have obtained official surveys on their properties to alter the boundaries of the Zone A map. Properties within these two Zone A areas are considered floodplains, and development of those properties is discouraged by FEMA regulations. The Township has opted to participate in the National Flood Insurance Program which includes agreement to abide by the Land Management Program. Waterloo Township discourages any new development within the two designated areas.

## Vegetation

The vegetative cover within Waterloo Township can be classified into three broad categories: natural, agricultural, and residential. Approximately one third of the Township is characterized by agricultural crop land and nearly the entire balance of the Township, except for residences and water bodies, is characterized by natural vegetation areas. The majority of this vegetation is located within the Waterloo State Recreation Area. Natural vegetation includes woodlands, wetlands, and scrub lands.

Though upland woodlands can be found throughout most areas of the Township, they are far more predominant in the Township's southern third. The vast majority of the woodlands are characterized by upland hardwoods (predominantly oaks, black cherry, and hickories).

Wetlands represent the largest portion of the natural vegetation and account for approximately one third of the total Township area (Map 5, page A-5). The wetlands are fairly evenly split between lowland hardwoods (ash, elm, red maple) and shrubby and/or aquatic bed environments (alder, dogwood, water willow, etc.). There are only limited stands of tamarack, a lowland conifer.



The expansiveness of the Township's woodland and wetland environments is important in light of the vital role these resources play in flood control, runoff purification, groundwater recharge, wildlife habitats, recreational opportunities, and supporting the rural character of the Township. Of particular significance is the continuous network of woodlands and wetlands within the Township. For instance, woodland wetland environments near the southern edge of the Township span more than ten miles in length into abutting townships and north to the Village of Stockbridge. This is significant due to the extensive wildlife habitat network that such a wetland-woodland system provides and, as wetlands are environmentally sensitive resources, degradation or pollution of a wetland area can have a destructive impact upon wetlands and related resources further away.

The impact of non-native, invasive species is a significant threat to Waterloo Township's ecosystems and natural areas. By their aggressive behavior, often dominating the environment, invasive species can cause large scale monetary loss and be harmful to human health. Waterloo Township encourages the reduction and eradication of non-native invasive plant species whenever possible.

## Soils

According to the U.S. Department of Agriculture, Jackson County exhibits ten general soil associations. Five of these associations are found in Waterloo Township (Map 6, page A-7). "Soil associations" refer to the classification of broad patterns of soils, topography, and drainage. A soil association generally consists of one or more major soils and other minor soils. It is the pattern of these major and minor soils (including topography and drainage) which differentiates one association from another. An association often includes individual soils of varying character as is the case in Waterloo Township. All of the five soil associations are characterized by muck soils, to one degree or another, with the Houghton-Palms-Henrietta association comprised entirely of muck soils and running through the Township in a southwest to northeasterly direction. The soil associations identified by the Natural Resources Conservation Service are very general and it is important to identify with more specificity those soils which appear to present particular opportunities and constraints upon future land use and development in the Township. The character of soils can have a profound impact upon the suitability of future uses of land in regard to groundwater contamination, on-site sewage disposal, and agricultural productivity. The Natural Resources Conservation Service has identified more specific individual soil units throughout the County based upon the characteristics of the upper soil layers (approximately five feet in depth) and this provides a more reliable basis for township planning purposes.

According to the Natural Resources Conservation Service, approximately three quarters of the Township is characterized by soils that present severe limitations for septic systems (Map 6, page A-7). Those areas presenting more favorable conditions are scattered throughout the Township without any particular quadrant exhibiting significantly greater concentrations. The severe limitation to on-site sewage disposal is due to several conditions including high water tables, poor soil filter characteristics, limited permeability or excessively high permeability, ponding, and/or soil wetness.

These soil limitations are not unique to Waterloo Township as much of Michigan is characterized by similar conditions. Soils which present limitations to septic systems can often be accommodated with specially engineered septic systems at additional costs. The Jackson County Health Department is responsible for issuing permits for on-site sewage disposal and will not do so unless all county requirements for the septic system have been met. A primary concern is the soil's ability to absorb and break-down the leachate from the septic drain fields before it reaches underground water supplies. This can be particularly troublesome where soils are characterized by high water tables and/or high percolation rates.

It should be noted that while a site may be classified by the Natural Resources Conservation Service as presenting a certain level of limitation to septic systems, on-site investigation may show the classification to be less than fully accurate and/or show that the deeper soils (more than five feet deep) present differing characteristics than the upper layer soils and thus, varying limitations. On-site investigations should be carried out before specific land development projects are initiated.

The Natural Resources Conservation Service has also classified certain soils in Jackson County as being "*prime farmland*" soils in that they are, under proper management, particularly well-suited to food, feed, forage, fiber, and oilseed crops and are capable of producing sustained high yields (Map 6, page A-7). Approximately one quarter of Waterloo Township has been classified as "prime farmland." The "prime farmland" areas reflect a somewhat marbled pattern with the highest concentrations (largest contiguous areas) located in the township's northwest corner.

# Chapter Six

# CULTURAL FEATURES

## Geography and Early History

Waterloo Township is located in the northeast corner of Jackson County in the far south-central area of Michigan (Map 7, page A-8). The Township covers approximately 30,000 acres. In contrast to the traditional congressional township configuration of a six mile by six mile square, Waterloo Township extends eight miles from north to south and six miles east to west, covering 48 one mile square sections. The Township is bounded on the north by the Ingham County townships of Stockbridge and the Livingston County Township of Unadilla. The Washtenaw County townships of Lyndon and Sylvan bound Waterloo Township to the east and the Jackson County townships of Grass Lake, Leoni, and Henrietta bound the Township to the south and west. Within the Township are the small unincorporated communities of Waterloo and Munith. Access to and from the Township is facilitated primarily via state highways M-106 and M-52 which travel through the northern periphery of the Township, and Interstate 94 just south of the Township.

The City of Jackson is the nearest incorporated community with a population over 5,000 (approximately 35,000) and is situated approximately 15 miles to the southwest. Some of the other larger cities in the regional area of the Township, and their distances in miles are Ann Arbor (25 miles), Lansing (45 miles), Battle Creek (60 miles) and Detroit (55 miles).

Waterloo Township was opened to pioneer settlement in the early 1830's. The area had been inhabited by native Potawatomi Indians. The United States passed the Indian Removal Act on May 28, 1830 which granted land west of the Mississippi river to Indians who wished to move. The first settler to arrive was Hiram Putnam in 1834. Between 1835 and 1838 many more families arrived in the Township. The early settlers were from ethnic groups of the old world. The two predominant groups in Waterloo Township were Irish and German. The Irish settled mainly in the southeastern part of the Township and the Germans settled mostly in the northwestern area. The land sales in the Township were for \$1.25 per acre and were sold in multiples of 40 acres.

The Township government was first organized by the Michigan Territorial Legislature with the name of East Portage in March of 1836. The name was later changed to Waterloo in the winter of 1846-1847 through the influence of Patrick Hubbard whose previous New York State residence was the same. The first election was held at the residence of Jeremiah Riggs with a total of 14 votes cast. Andrew Correll was chosen as the first supervisor and Earl Pierce as the first Township clerk. From these early organizational activities the township was larger than the typical Michigan Township with two additional rows of sections along the southern border, giving a total of 48 sections.



The majority of the early settlers were farmers. However, there were also wagon makers, blacksmiths, stonemasons, merchants and even a lawyer. The farms generally produced just enough food to feed their large families. The average farm would have a few cows, sheep, pigs, and chickens. Horses and oxen were the main work animals. Corn, rye and wheat were the main grain crops. There were also vegetable gardens for table use and canning. Most also had some apple and nut trees.

There were grist mills for grinding grains in the Trist and Waterloo settlements. Important to the early settlers were their churches and schools. There were Methodist and Baptist churches in the Waterloo settlement and three other churches in the Township (United Brethren, Lutheran, and German Methodist). In 1874 there were reported to be 10 schools in the Township attended by 362 pupils and 19 teachers. Men mostly taught in the winter when the older boys attended and needed a firm hand for discipline and women taught in the early fall and spring when the men and older boys worked in the fields.



The Township has a preserved 1850's era homestead as a result of some very dedicated community members who formed the Waterloo Area Historical Society in 1962. The homestead of the Jacob Realy family was slated to be demolished after the last of the 3 Realy brothers died. On a shoestring and a lot of vision and volunteerism, the house was preserved and now consists of 2 barns, an ice house, a functioning blacksmith shop, a bake house, a milk cellar, and an authentic log cabin. The Society also purchased the one room Dewey School house in 1962 for \$1 from the Stockbridge Community Schools to be used as an educational facility for future generations.



Everyday life in the mid 1800's was a far cry from life today. There were no central heating systems or refrigeration for preserving food. Wood was a prime source for cooking meals on wood stoves and limited heating of the houses in winter by potbelly stoves. Ice cutting was a big business until the early 1900's. Ice was cut from area lakes and preserved for use later in the year in ice houses where it was covered by 3 to 4 feet of sawdust. Harvesting of grain crops and butchering of animals was a community activity where neighbors helped neighbors.

Farm life started to dramatically change as tractors and mechanized equipment started to replace horses and oxen in the early 1900's. Progress has done much to ease and improve the quality of life in the Township, but it is good to remember the hardships and hard work which the early settlers endured so that we have a better life now and in the future.

Additional information about the history of Waterloo Township can be found in the book written by Donald L. Katz in 1977; *The Settling of Waterloo, Michigan The Schnackenberg-Katz Families*. This extensive reference contains detailed information on the early settlements and many of the early families. There are many photographs and biographical sketches of descendants of many of the early settlers are still living in Waterloo. A copy of the book is available in the new Township Offices at 9773 Mt. Hope Road.

## **Transportation Network**

### **Regional Access**

Regional access to Waterloo Township is provided primarily by Interstate 94 (I-94), M-52, and M-106 (Map 8, page A-9). I-94 travels across the middle of Jackson County in an east-west direction linking Detroit to the east with Chicago to the west, and the numerous urban centers along this corridor including Ann Arbor, Jackson, Battle Creek and Kalamazoo. The interstate passes within 1.5 miles of Waterloo Township's southern border. Exit 150 provides direct access into the Township via Mt. Hope Road as does Exit 153 via Clear Lake Road.

M-52 connects I-94 near Chelsea with I-96, 20 miles to the north of the Township, and cuts through the northeast corner of the Township. M-106 starts at its intersection with M-52 in the Township and travels across the northern limits of the Township, terminating in Jackson. (Map 8, page A-9) There are currently no railway or airport facilities in the Township.

### **Local Roadway Network Pattern**

The Township's local roadway network does not reflect the more traditional grid like pattern evident throughout the majority of Michigan's Lower Peninsula townships. This is due, in part, to topographic and wetland conditions, the intersecting regional network, and the limited necessity for access and circulation throughout the Waterloo State Recreation Area.

In compliance with the requirements of Michigan Act 51 of 1951, the Jackson County Department of Transportation (JCDOT) classifies all roads under its jurisdiction as either primary roads or local roads. Primary roads are considered the most critical in providing circulation throughout the County and to more regional areas.

Roads within the Township which the JCDOT classifies as “primary” include:

- Territorial Road
- Waterloo-Munith Road
- Portage Lake Road
- Parks Road
- Mt. Hope Road
- Clear Lake Road
- Seymour Road
- Trist Road
- Harvey Road

All other roads in the Township under the jurisdiction of the county are classified by as “local.” More than half of the “local” road miles have a gravel surface.

In addition to M-52 and M-106, the most heavily traveled roads within the Township according to 2008-2010 traffic counts recorded by the JCDOT were Clear Lake Road, Mt. Hope Road, Portage Lake Road, Seymour Road, and North Territorial Road. All of these corridors are paved county primary roadways. (Table 1, page A-13).

The relatively higher traffic counts along these roadways is not surprising given the access to and from I-94 (Mt. Hope and Clear Lake Roads), principle residential areas (Portage Lake, Waterloo, and Clear Lake Roads), and the role of state highways.

Except for M-106, M-52, and private roads, the JCDOT is responsible for the maintenance of all county roads and improvements to primary paved roads. The Township must share the cost (50%) for improvements to non-primary paved roads.

### **Land Use and Development**

Waterloo Township's overall land use pattern reflects a very low level of development and expansive areas of open spaces (Map 9, page A-10). The vast majority of the Township is characterized by woodlands, wetlands, farmland, and other open spaces and water bodies. Much of the expansive open space is attributable to the Waterloo State Recreation Area. Approximately 5% of the Township area has been developed for residential, commercial, and/or industrial. A review of some of the more significant characteristics concerning land use and development within the Township follows.

**Agriculture** Farmland is more prevalent in the Township's northern half. Nearly all of the active agricultural lands are used as cropland. The most commonly harvested crops are corn, hay, wheat and soybeans. Only a very limited amount of dairy, orchard or other farming activities occur within the community.

In an effort to better protect the State's farming interests, Michigan adopted P.A. 116 of 1974 which provides a program whereby farmers can enroll their properties to get property tax relief, provided the farmland is maintained in agricultural/open space use.

### **Jackson County Farmland Preservation Program**

After widespread input from the county, the Jackson County Board of Commissioners adopted the Jackson County Agriculture & Open Space Preservation Ordinance in 2006. This enabled a State, County and Municipality partnership for farmland protection. In 2010 the State approved the County's Plan.

This paves the way for local landowners to apply for funds to facilitate preserving land for agricultural purposes. This augments other State programs such as PA 116 (Public Act 116 or the Natural Resources and Environmental Protection Act of 1994) managed by the Michigan Department of Agriculture and Rural Development within its Farmland and Open Space Preservation Program Office. The various programs enable incentive funds and tax credits to landowners to protect portions of their land for agriculture or open space uses.

The various programs are currently in a state of flux and the MDARD is uncertain how these programs will operate or be funded in the future.

**Residential/Housing** In the 2010 Census 1,097 households were identified in Waterloo Township. The Township Assessor's records identify 1,384 parcels with residential structures. Included are owner occupied single family structures built on property that they own, owner occupied single family homes on rented property; rental dwellings (both single family and multifamily units), and a few vacant dwellings. There is a mobile home park with 245 housing units. There are three seasonal campgrounds with semi-permanent housing structures. Two of the seasonal campgrounds and the mobile home park account for more than one half of the Township's dwelling units located in the southwest area adjacent to Big and Little Portage Lakes. Other areas with concentrations of housing units are the villages of Munith and Waterloo, and the lakeside units around Clear Lake and Portage Lake. (Map 9, page A-10)

**Commercial/Industrial** Commercial and industrial development is limited. Except for the east side of Main Street in Munith and a convenience store in Waterloo, it is restricted to the M-52 and M-106 corridors. M-106, in and approaching Munith, includes such facilities as a convenience store, restaurant, retail specialty store, beauty shop and steel and metal fabricators. The east side of Main Street in Munith falls within the Township's limits and includes a bank and food processing facility. Several commercial facilities are situated along M-52 including a motel, convenience store, agricultural resources, and propane gas supplier.

**Extractive** There are pockets of sand and gravel deposits where a number of sand and gravel extraction operations have existed. Currently two in the far southeastern corner of the Township, cover a total area of more than several hundred acres. These two sites have reclamation plans.

**Waterloo State Recreation Area** The Waterloo State Recreation Area is the largest state recreation area in Michigan. Covering approximately 20,000 acres, the majority of the Waterloo State Recreation Area is within Waterloo Township but parts extend into the Townships of Leoni and Grass Lake in Jackson County and into Washtenaw County. The recreation area provides the public with over 400 camp sites, picnic and beach areas, interpretive center, opportunities for swimming, hunting, fishing, snowmobiling, hiking, cross country skiing, and horseback riding. The boundary of the Waterloo State Recreation Proclamation Area sets the future limits for the facility as currently desired by the State. Approximately two thirds of the land within the Waterloo State Recreation Area is publicly owned. The state places greater emphasis upon acquiring private in-holdings rather than expanding the limits of the recreation area. Use of privately owned parcels within the Waterloo State Recreation Proclamation Area is in no way restricted due to the presence of the parcels within the proclamation boundaries of the recreation area. (Map 2, page A-3)

## **Community Facilities and Services**

Waterloo Township is governed by an elected five member Township Board. Township offices are located at 9773 Mt. Hope Road. The Hall serves as the meeting place of the Township Board and other public bodies of the Township.

There is no public sewer or water service in the Township. Sewage disposal is accommodated through septic fields, and solid waste collection is provided by private services. The closest source of public sewer is Stockbridge. Electrical service is provided throughout the Township by Consumers Energy Company and the Tri-County Electric Company. Telephone service is available throughout the Township. High speed internet service is only available in limited areas of the Township at this time.

Michigan State Police and the Jackson County Sheriff's Department provide coverage on an as needed basis. The Stockbridge Area Emergency Services Association (SAESA) provides fire protection and ambulance services to the Township. The Chelsea and Grass Lake Township Fire Departments provide fire protection services to the southeastern and southwestern areas of the Township respectively.

Waterloo Township is served by four separate public school districts although there are no public school facilities within the Township. The four districts are: Chelsea, East Jackson, Grass Lake and Stockbridge. (Map 10, page A-11).



(Map 11, page A-12)

There are seven Cemeteries in Waterloo Township; Munith Cemetery on Neu and Musbach Roads, Moss Cemetery on Huttenlocher and Hannewald Roads, Mt. Hope Cemetery on Loveland Road, Mt. Pleasant Cemetery on Seymour Road, North Waterloo Cemetery on Farnsworth Road, St Jacobs Lutheran Church Cemetery on Riethmiller Road, and Landis/Lantis/Trist/German Methodist Cemetery on Trist Road.

In the event that a cemetery is no longer under private management and ownership, responsibility for care and maintenance shifts to the Township.

# **Chapter Seven**

# **COMMUNITY**

# **FEATURES**

## **Population Trends & Projections**

The number of residents living in Waterloo Township had been increasing since its founding. The growth rate peaked in the 1970's and the growth rate has been declining in the subsequent decades. However, for the first time the actual population dropped between the census in 2000 and the count in 2010. This decline can in part be explained by the closure of the State's correctional facility, Camp Waterloo, in 2001. However, much of the decline paralleled the drop in population in Jackson County and the State during that same period. (Graph 1, Appendix page 17). Changes occurred among people younger than 65 years, but the increase in those residents 65 years of age and older continued. Currently it is difficult to project changes in the total population because the available data are estimates.

Information on the number and type of housing units can be seen in Graph 2 and Graph 4, Appendix pages 17 and 18. The only significant change appears to be a decline in seasonally occupied dwellings. This is most likely the result of conversion or replacement of lakeside units from seasonal units to year round homes.

Graph 3, Appendix page 18 gives the level of education of Waterloo Township residents that are 25 years or older according to the most recent data from the 2000 US Census.

Table 2, Appendix page 14 lists new structures built in the Township in recent years. Table 3, Appendix page 15 shows property sales by parcel size from 2011 to 2015.

# Appendix

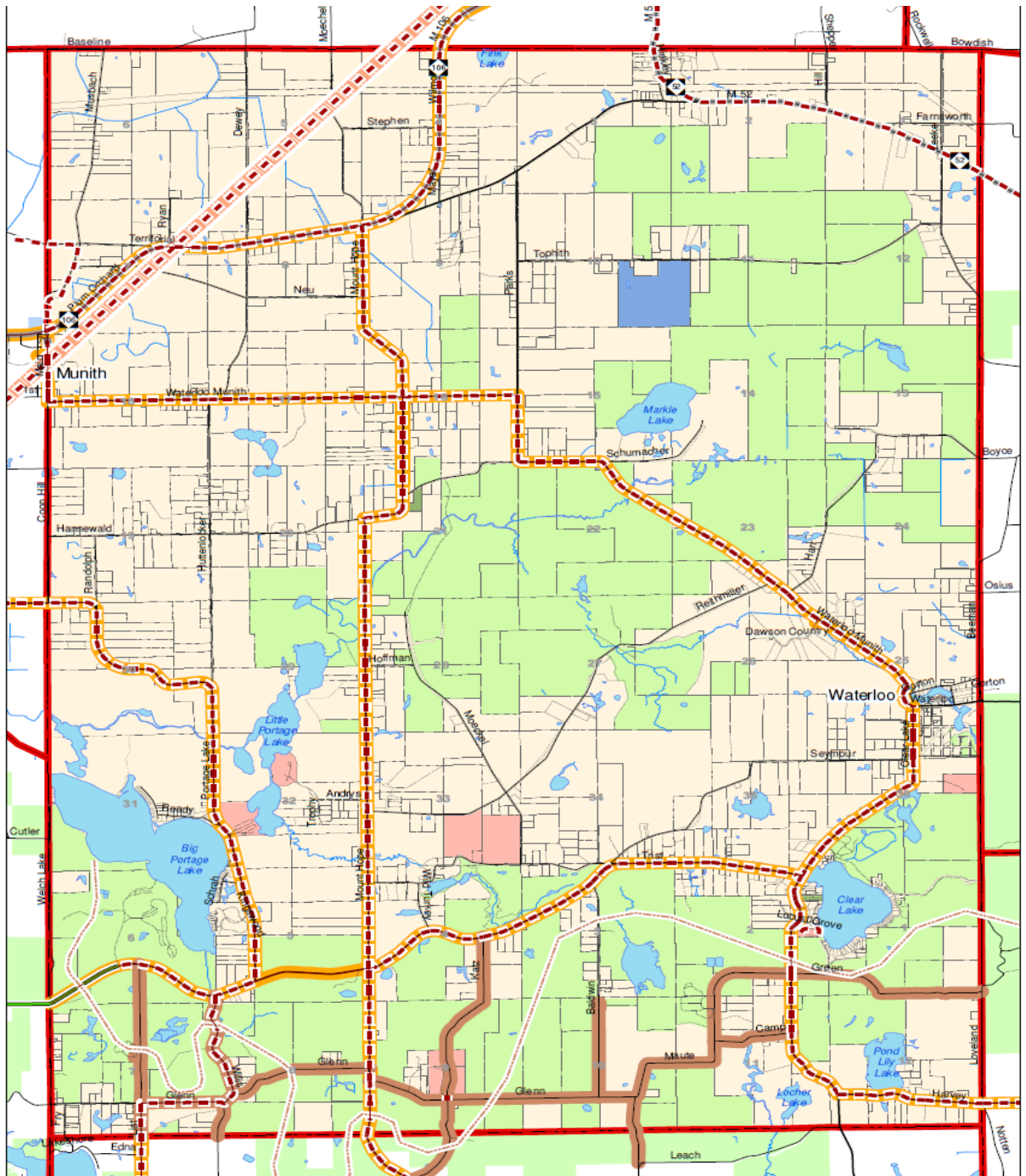
# MAPS, TABLES & GRAPHS





# MAP 1

# TRAIL NETWORK



## Legend

- Proposed Multi-Use Pathways
- Existing Bike Lanes
- Existing Rustic Hiking Trail
- Iron Belle Trail
- Route #1 - GLTL Trails
- Natural Beauty Roads
- Proposed Bike Lanes

**Region 2**  
Planning Commission

## Trail Network

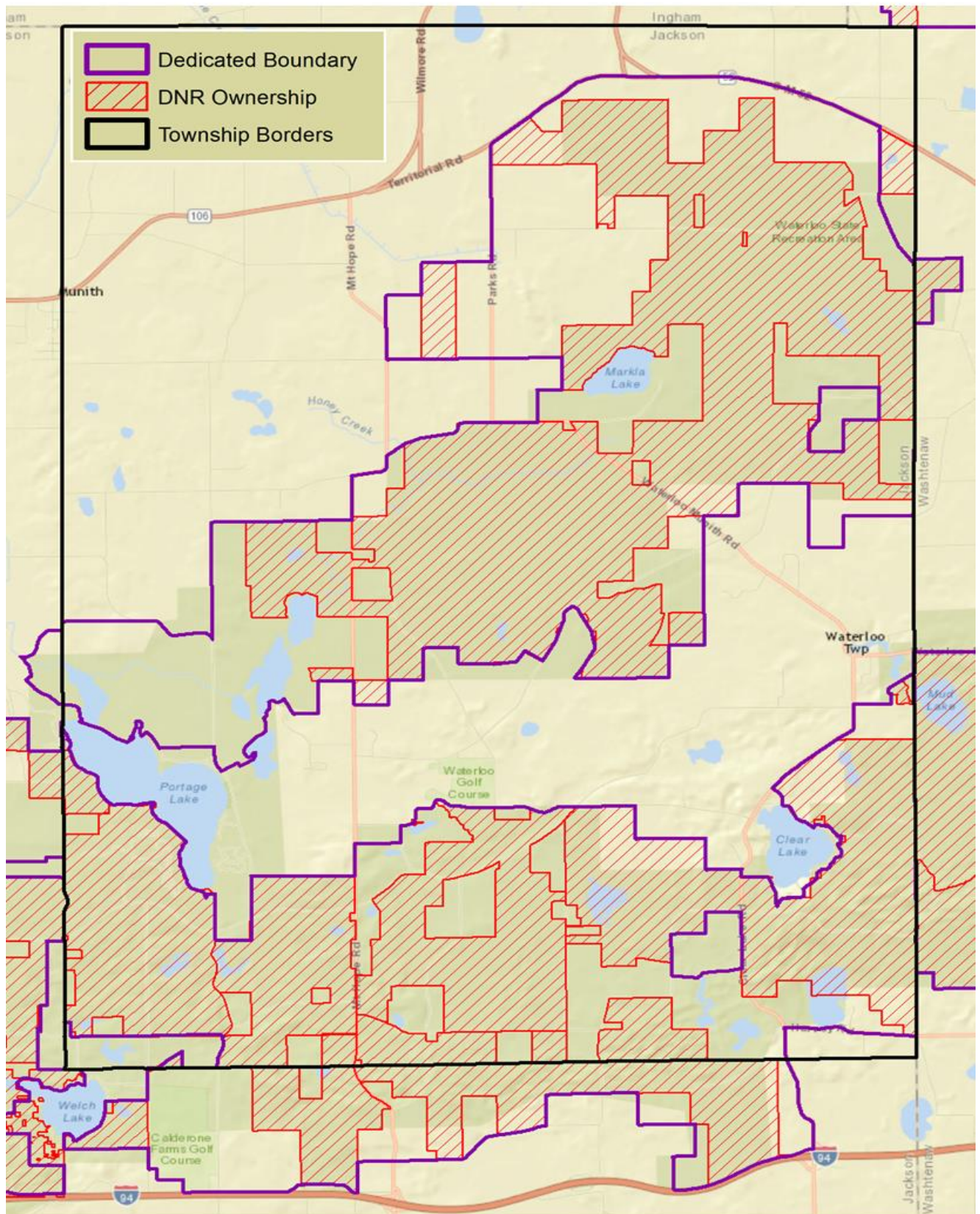
Waterloo Township Recreation Plan



B-9

## MAP 2

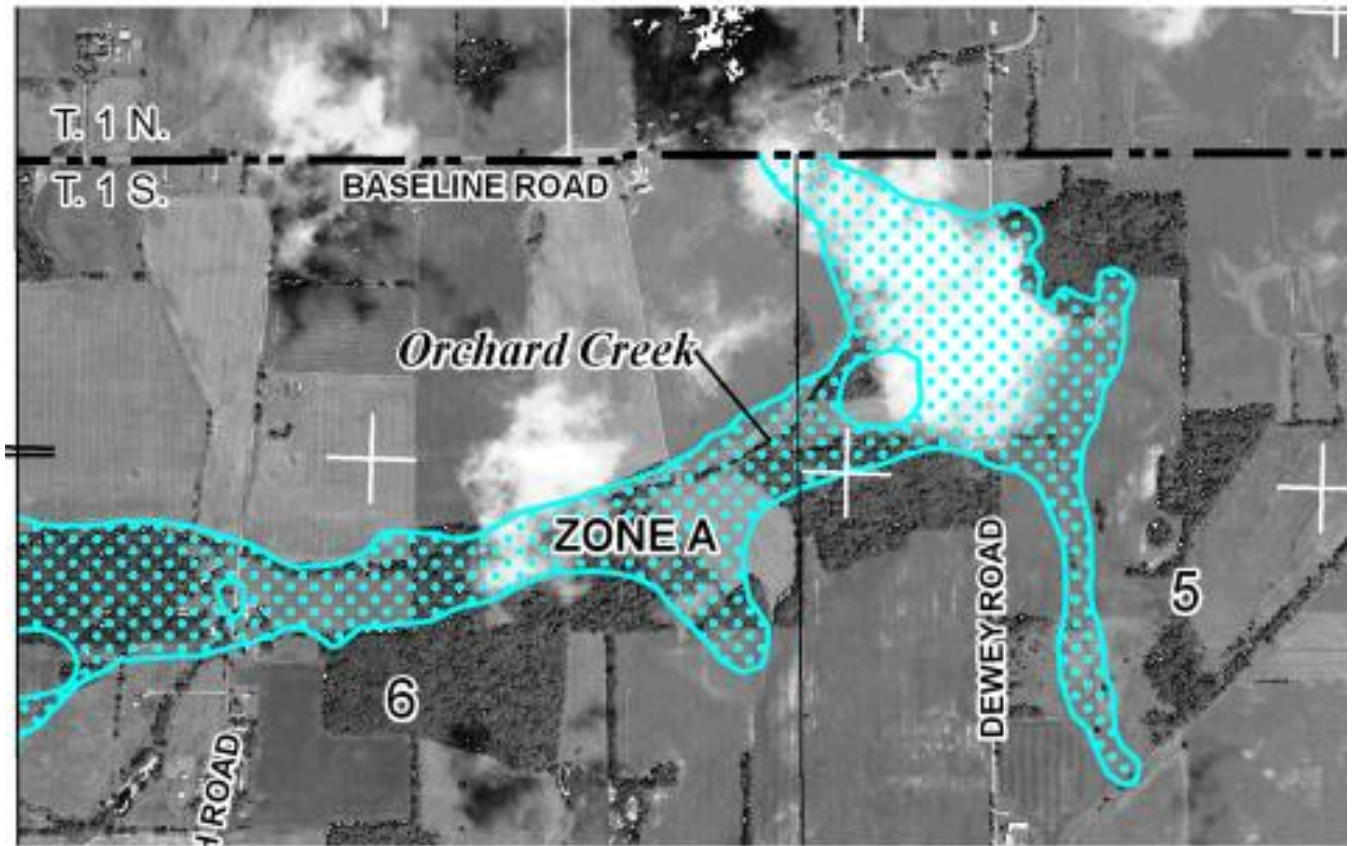
## WATERLOO RECREATION AREA





## MAP 3

Official Digital Federal Insurance Rate Map panel 0125D



## MAP 4

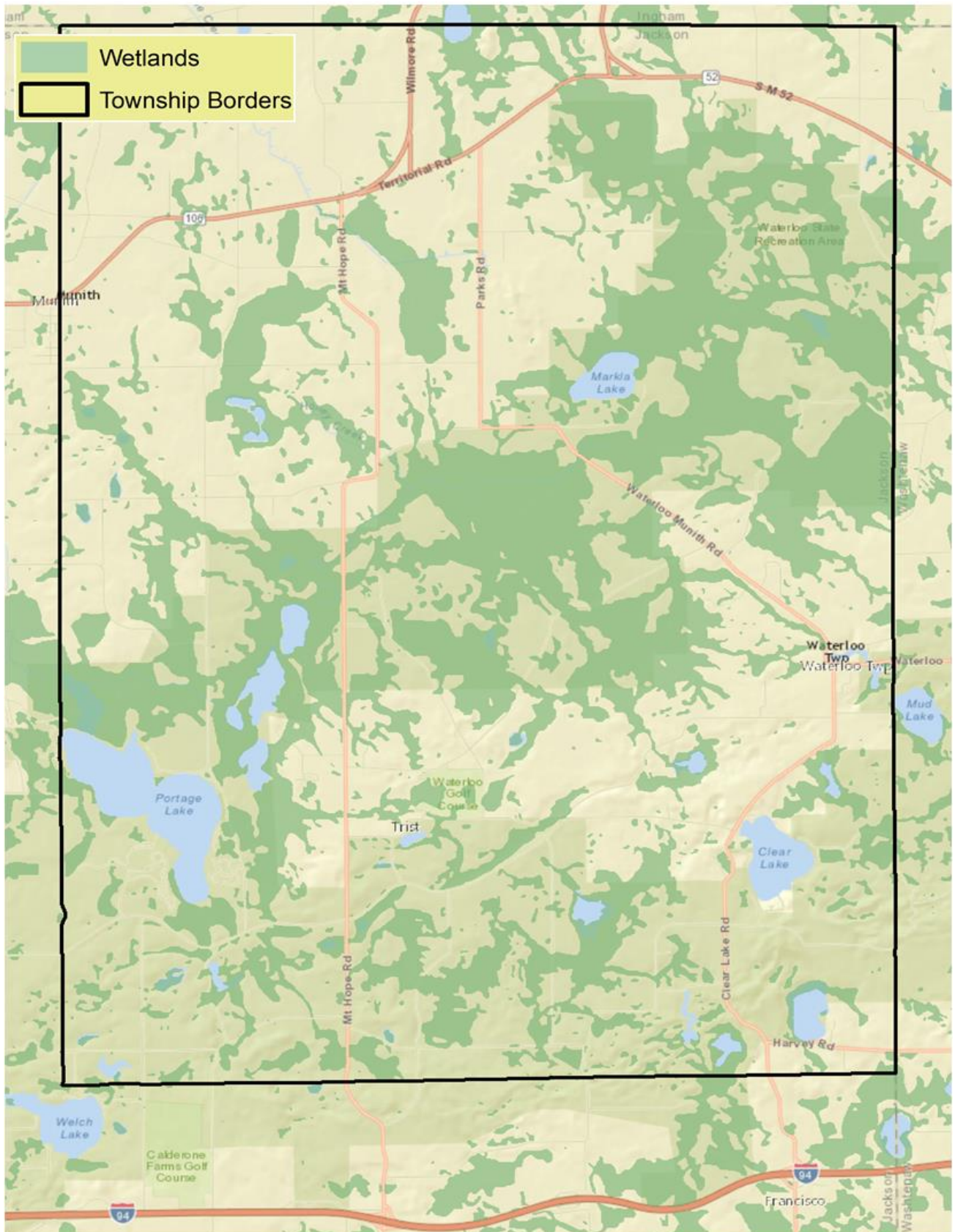
### Official Digital Federal Insurance Rate Map pane 0250D





## MAP 5

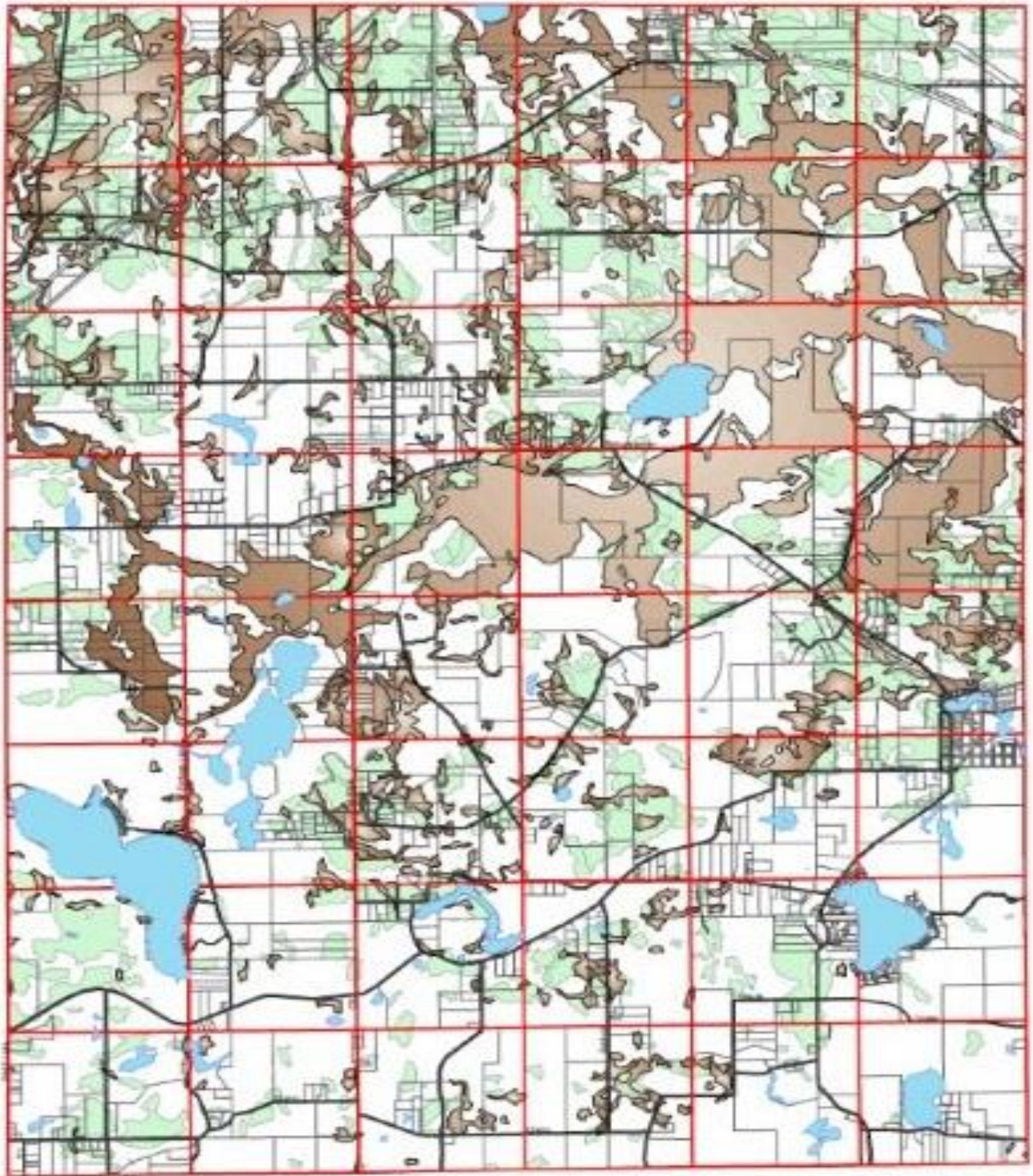
## WETLANDS





## MAP 6

## PRIME AGRICULTURAL SOILS



**WATERLOO TOWNSHIP**  
Jackson County, Michigan

### PRIME AGRICULTURAL SOILS

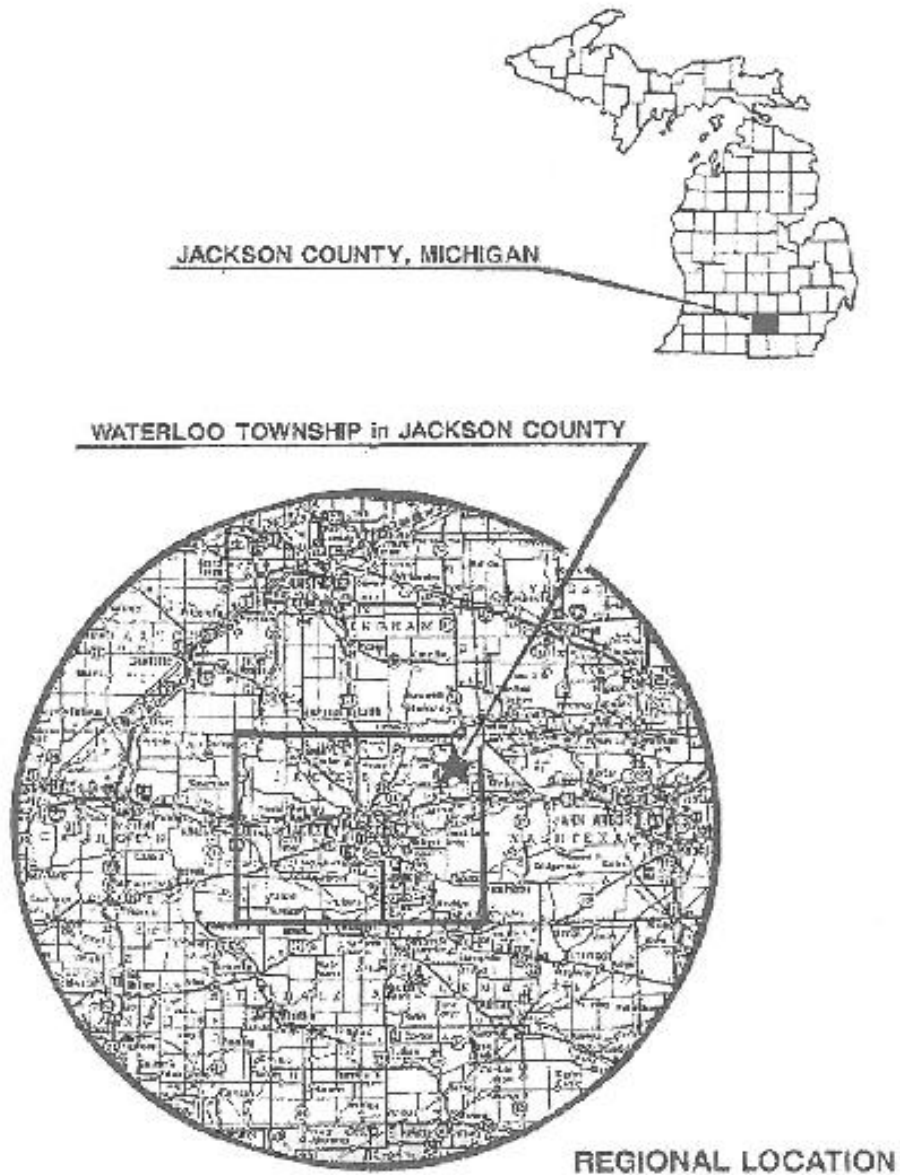
#### LEGEND

- Prime Agricultural
- Prime Agricultural & Forested

Region 3  
Planning Subcommittee  
Map Prepared: September 1, 2006

## MAP 7

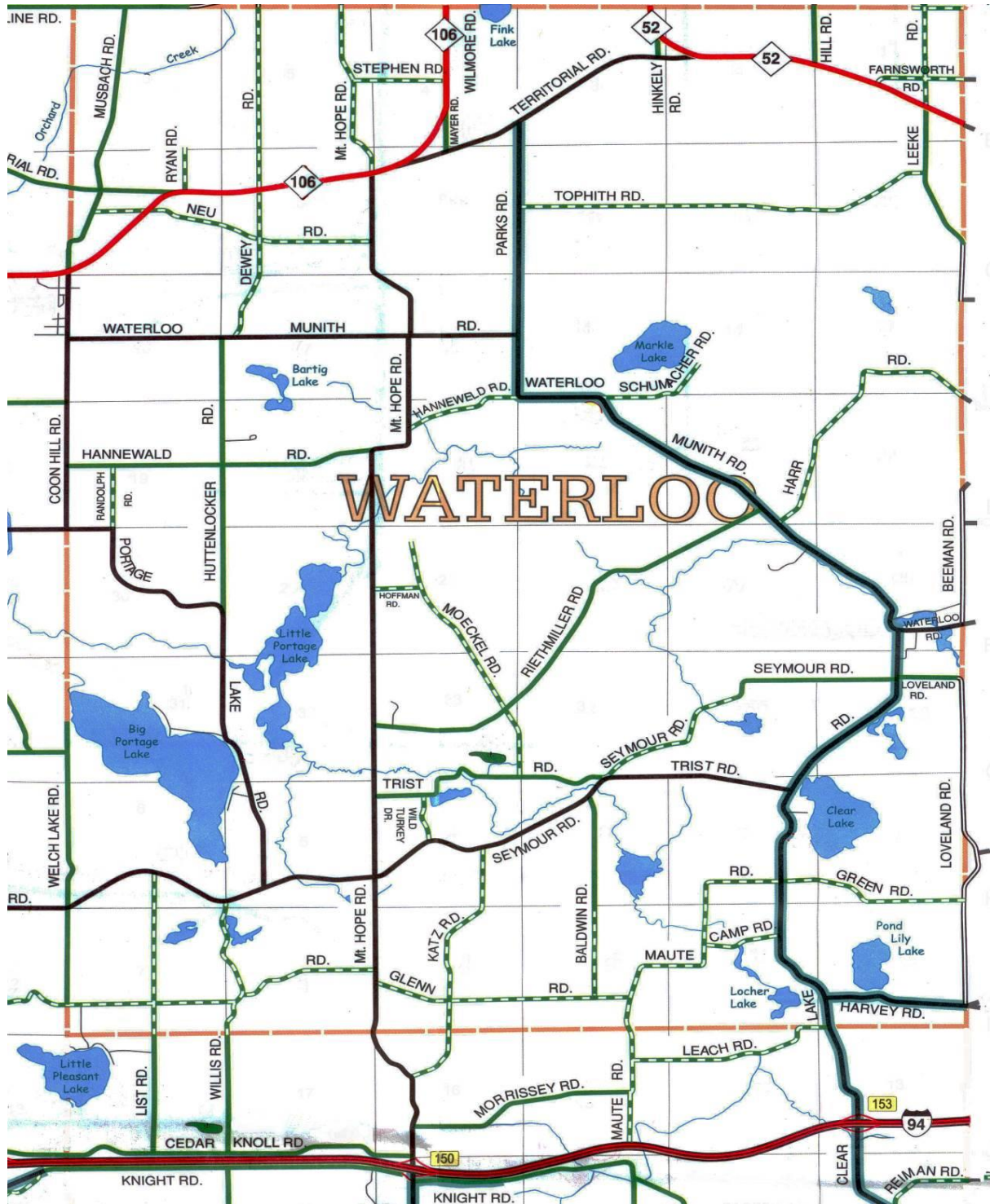
## REGIONAL LOCATION





# MAP 8

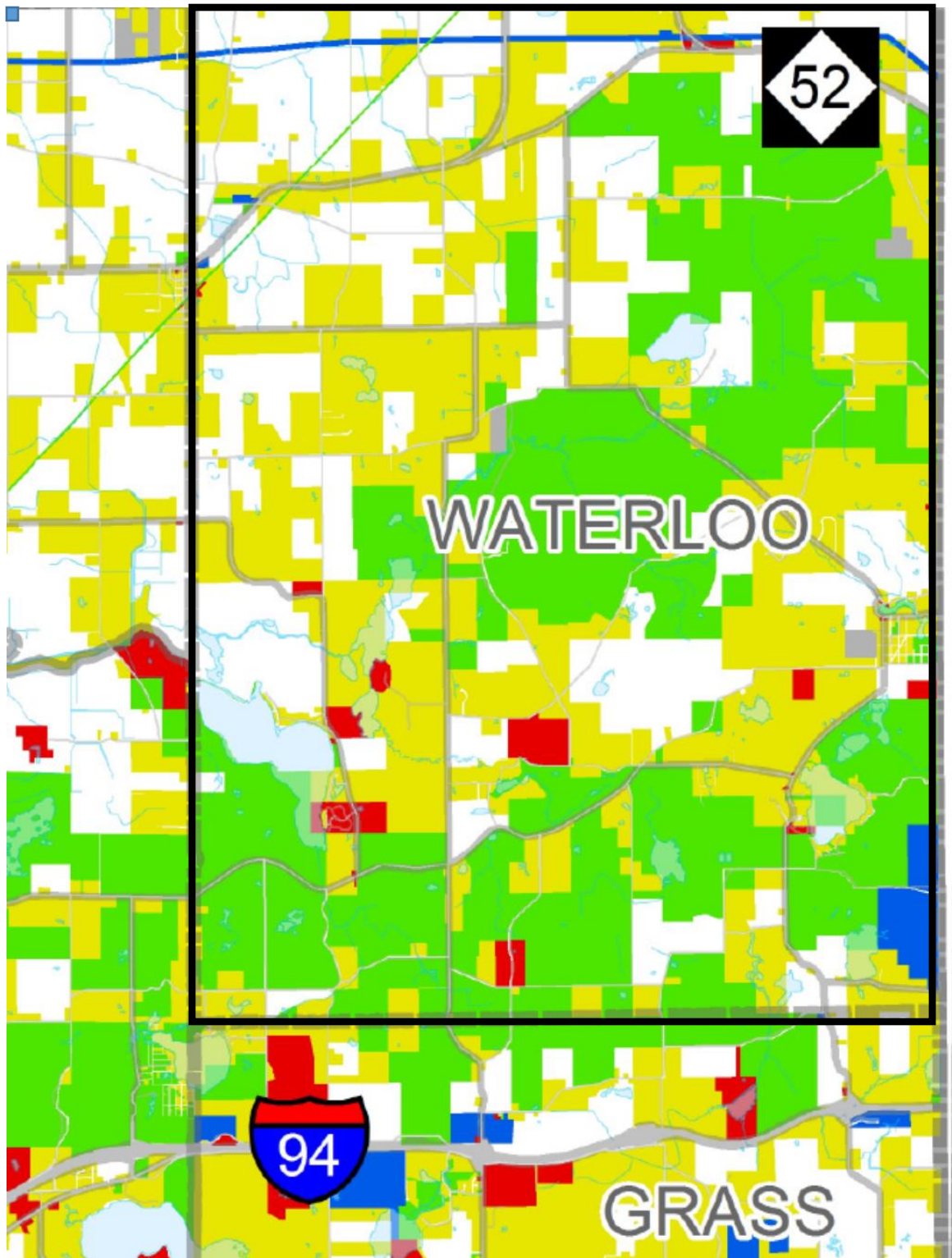
# MAJOR ROADS



STATE:		LEGEND		COUNTY:	
Freeway				Primary Paved	
Routes				Local Paved	
Symbols				Local Gravel	
Exit Number				Class A Road	
				Subdivision Street	
				Out County Road	

# MAP 9

# EXISTING LAND USE



## JACKSON COUNTY MAPPING PROJECT

	AGRICULTURAL		INDUSTRIAL
	RESIDENTIAL		PUBLIC/EXEMPT
	COMMERCIAL		DEVELOPMENTAL/OTHER

SOURCE(S):  
- MICHIGAN GEOGRAPHIC DATA LIBRARY  
- JACKSON COUNTY GIS (1/2014)

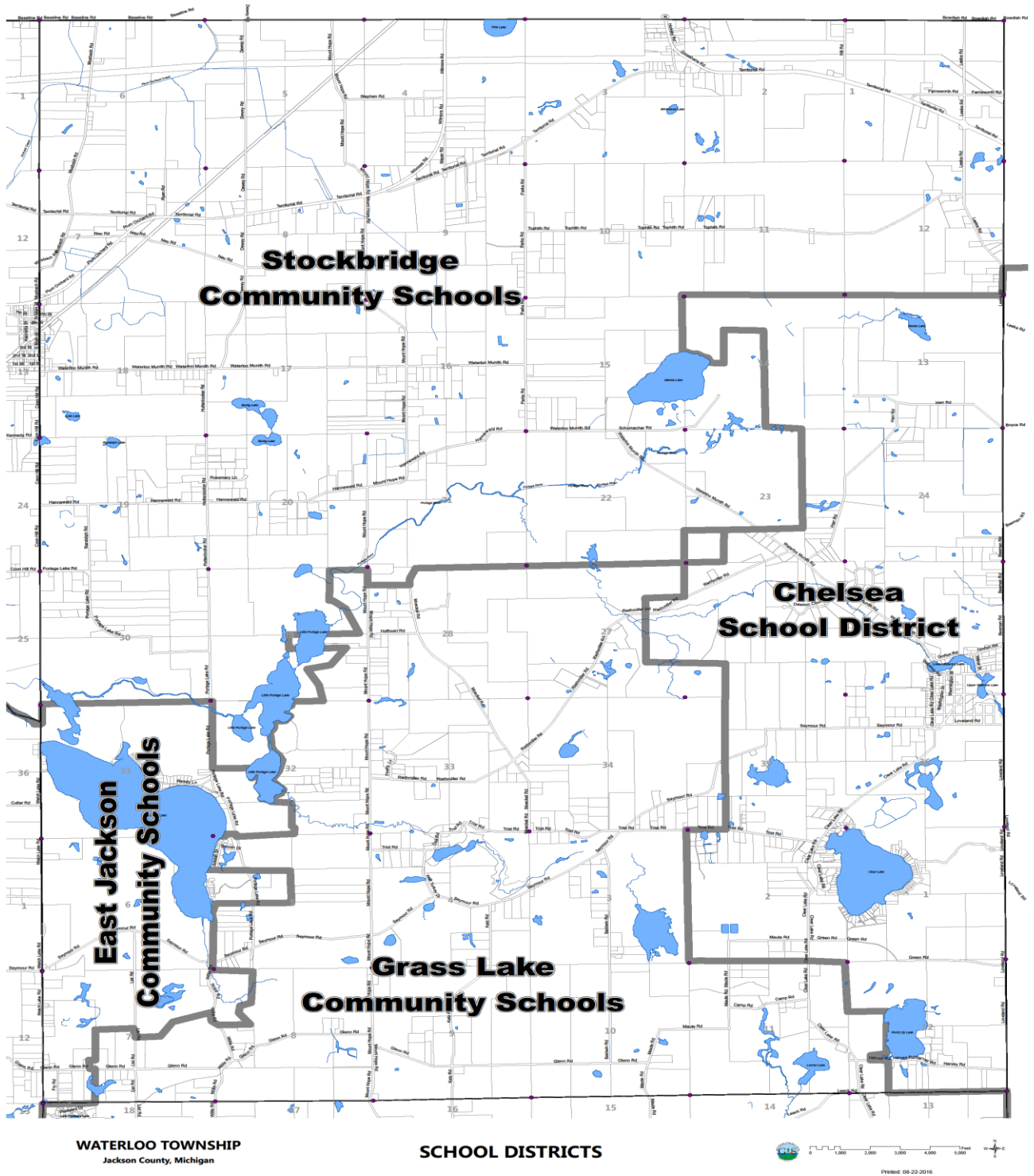
\*BASED UPON THE PROPERTY CLASS  
(I.E., USE) ASSIGNED TO EACH PARCEL  
BY MUNICIPAL ASSESSORS

WATERLOO TOWNSHIP MASTER PLAN  
Appendix One: Maps, Graphs and Tables



# MAP 10

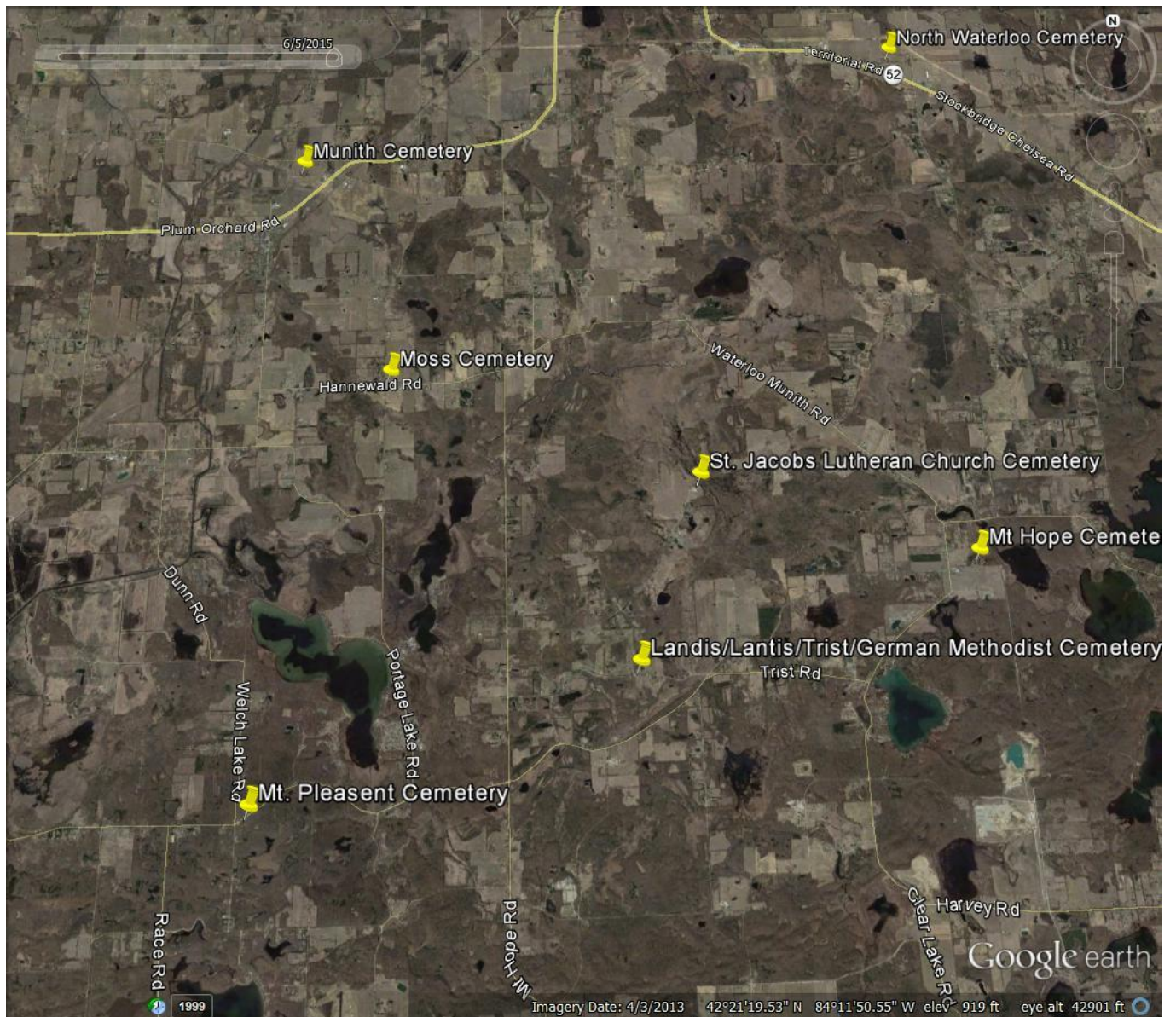
## SCHOOL DISTRICTS





## MAP 11

## CEMETERIES IN WATERLOO TOWNSHIP



**TABLE 1****ROAD TRAFFIC COUNT**

<b>JACKSON COUNTY ROAD COUNTS</b>					
<b>DIRECTION</b>	<b>ROAD NAME</b>	<b>ROAD SEGMENT</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
E	Camp	Maute & Clear Lake			10
W	Camp	Maute & Clear Lake			17
N	Clear Lake	Waterloo & Trist	474		564
S	Clear Lake	Waterloo & Trist	487		572
N	Clear Lake	Trist & Harvey			783
S	Clear Lake	Trist & Harvey			762
E	Glenn	Maute & Mt. Hope			26
W	Glenn	Maute & Mt. Hope			23
E	Glenn	Mt. Hope & Race			19
W	Glenn	Mt. Hope & Race			18
N	Katz	Seymour & Glenn			12
S	Katz	Seymour & Glenn			15
N	Maute	Glenn & Clear Lake			20
S	Maute	Glenn & Clear Lake			21
N	Mt. Hope	Waterloo-Munith & Seymour	336		692
S	Mt. Hope	Waterloo-Munith & Seymour	437		691
N	Mt. Hope	Seymour & I-94			1211
S	Mt. Hope	Seymour & I-94			1191
E	Seymour	Race & Portage Lake			642
W	Seymour	Race & Portage Lake			657
E	Seymour	Baldwin & Trist	296		275
W	Seymour	Baldwin & Trist	296		237
E	Territorial	M-106 & Parks	667		632
W	Territorial	M-106 & Parks	663		593
E	Waterloo	Clear Lake & Beeman	542		497
W	Waterloo	Clear Lake & Beeman	540		527
E	Waterloo-Munith	Huttenlocker & Mt. Hope	165		207
W	Waterloo-Munith	Huttenlocker & Mt. Hope	163		252
E	Waterloo-Munith	Mt. Hope & Parks		153	
W	Waterloo-Munith	Mt. Hope & Parks		154	
N	Waterloo-Munith	Schumacher & Riethmiller	169		249
S	Waterloo-Munith	Schumacher & Riethmiller	174		175
N	Willis	Glenn & Seymour			31
S	Willis	Glenn & Seymour			36

**TABLE 2**

<b>NEW STRUCTURES</b>				
<b>YEAR</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>	<b>AGRICULTURAL</b>	<b>INDUSTRY</b>
2011	1			
2012	4		3	
2013	3		8	
2014	5		10	
2015	2		11	
2016	9	1	8	

**TABLE 3**

<b>2011 TOTAL SALES 40</b>					
<b>CLASS</b>	<b># OF PARCELS</b>	<b>SIZE 0-3</b>	<b>SIZE 3.1-5</b>	<b>SIZE 5.1-40</b>	<b>SIZE 40.1+</b>
101 Agricultural Real	1			1	
102 Agricultural Vacant	4			3	1
103 DNR PILT	4			2	2
401 Residential	26	17	1	8	
402 Residential Vacant	3			3	
404 Res/Bld Leased Land	2	NA	NA	NA	NA
<b>TOTALS</b>	<b>40</b>	<b>17</b>	<b>1</b>	<b>17</b>	<b>3</b>

<b>2012 TOTAL SALES 42</b>					
<b>CLASS</b>	<b># OF PARCELS</b>	<b>SIZE 0-3</b>	<b>SIZE 3.1-5</b>	<b>SIZE 5.1-40</b>	<b>SIZE 40.1+</b>
101 Agricultural Real	1			1	
102 Agricultural Vacant	1			1	
103 DNR PILT	1			1	
401 Residential	29	15	9	5	
402 Residential Vacant	9	1	4	4	
404 Res/Bld Leased Land	1	NA	NA	NA	NA
<b>TOTALS</b>	<b>42</b>	<b>16</b>	<b>13</b>	<b>12</b>	<b>0</b>

<b>2013 TOTAL SALES 53</b>					
<b>CLASS</b>	<b># OF PARCELS</b>	<b>SIZE 0-3</b>	<b>SIZE 3.1-5</b>	<b>SIZE 5.1-40</b>	<b>SIZE 40.1+</b>
102 Agricultural Vacant	3			2	1
201 Commercial Real	1	1			
401 Residential	43	18	9	15	1
402 Residential Vacant	3			3	
404 Res/Bld Leased Land	3	NA	NA	NA	NA
<b>TOTALS</b>	<b>53</b>	<b>19</b>	<b>9</b>	<b>20</b>	<b>2</b>

<b>2014 TOTAL SALES 71</b>					
<b>CLASS</b>	<b># OF PARCELS</b>	<b>SIZE 0-3</b>	<b>SIZE 3.1-5</b>	<b>SIZE 5.1-40</b>	<b>SIZE 40.1+</b>
102 Agricultural Vacant	2			1	1
103 DNR PILT	5	1	1	2	1
401 Residential	43	22	5	15	1
402 Residential Vacant	12	2	5	5	
404 Res/Bld Leased Land	8	NA	NA	NA	NA
701 Exempt	1			1	
<b>TOTALS</b>	<b>71</b>	<b>25</b>	<b>11</b>	<b>24</b>	<b>3</b>

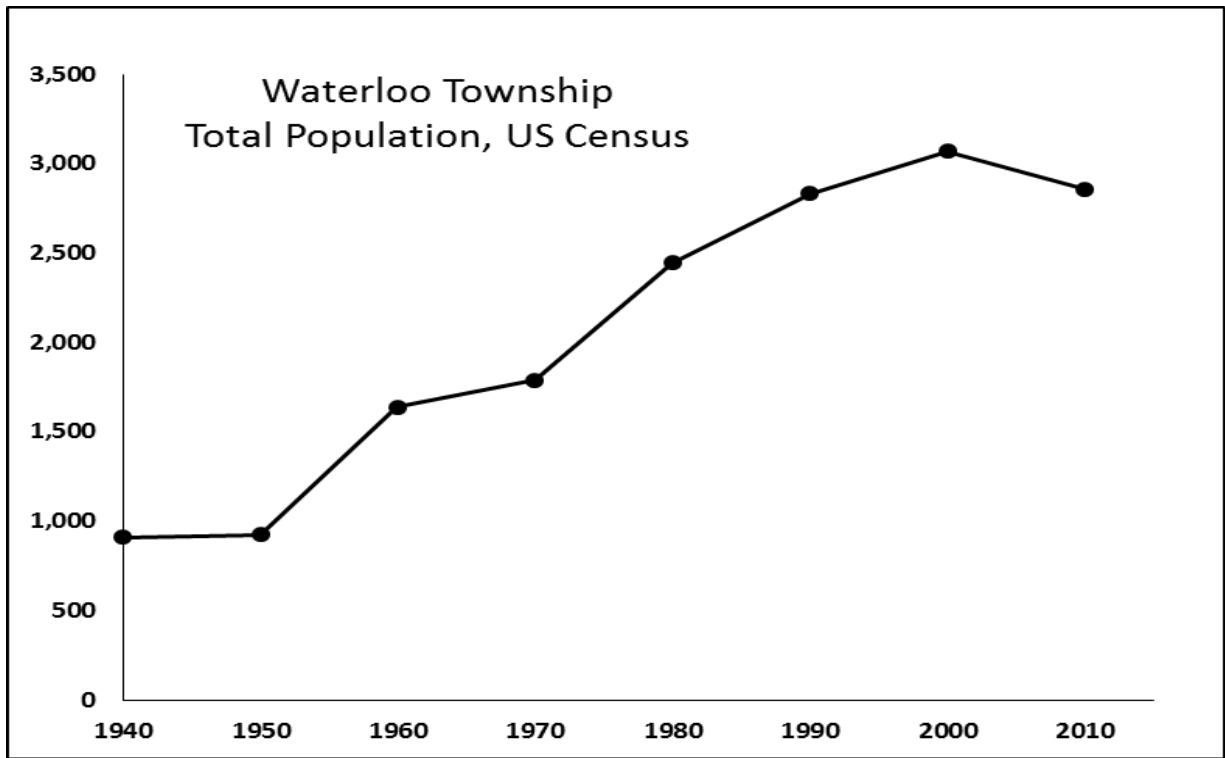
<b>2015 TOTAL SALES 73</b>					
<b>CLASS</b>	<b># OF PARCELS</b>	<b>SIZE 0-3</b>	<b>SIZE 3.1-5</b>	<b>SIZE 5.1-40</b>	<b>SIZE 40.1+</b>
201 Commercial Real	2		1	1	
401 Residential	56	24	12	20	
402 Residential Vacant	11	2	1	8	
404 Res/Bld Leased Land	4	NA	NA	NA	NA
<b>TOTALS</b>	<b>73</b>	<b>26</b>	<b>14</b>	<b>29</b>	<b>0</b>

**TABLE 4****Adjoining Townships**

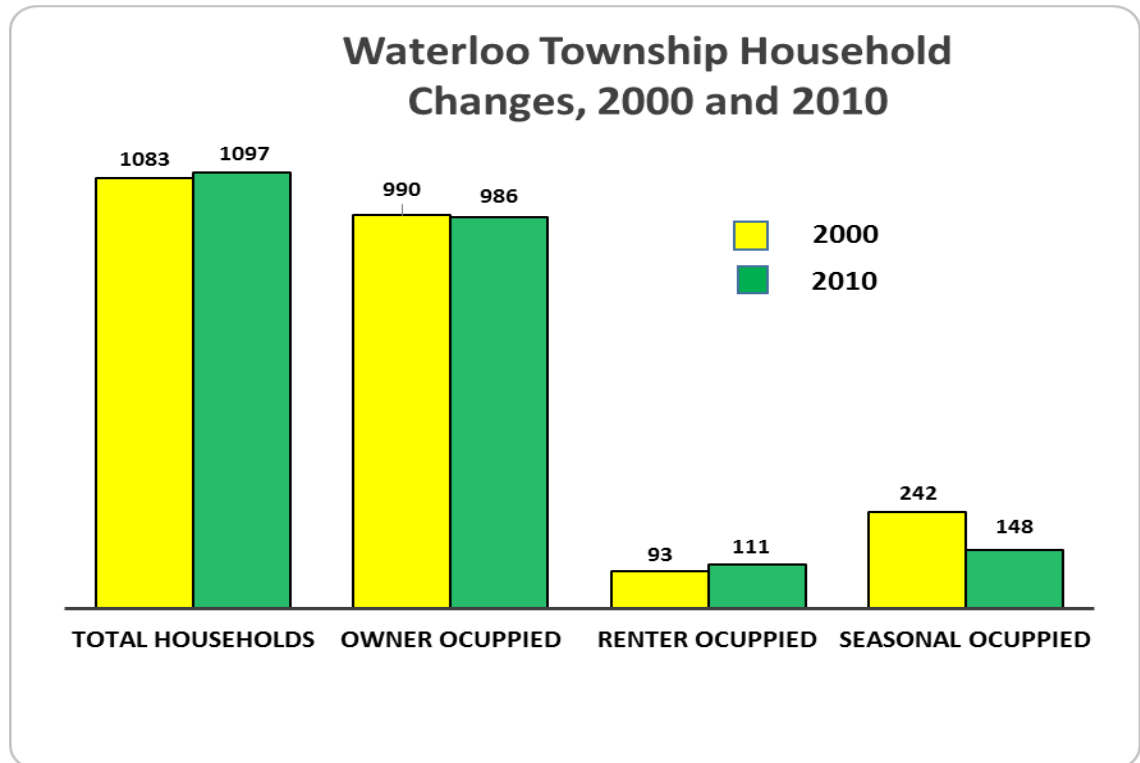
There are six townships that adjoin Waterloo Township, in Washtenaw, Jackson and Ingham Counties. All have Master/Comprehensive Plans. Table 4 lists these and indicates their adjoining Zoning Districts.

<b>Township</b>	<b>County</b>	<b>Master Plan Adopted</b>	<b>Adjoining Zoning Districts</b>
Lyndon	Washtenaw	2010	Wilderness Recreation Rural Residential
Sylvan	Washtenaw	2008	Agricultural
Grass Lake	Jackson	2003	Agricultural, Public
Leoni	Jackson	2012	Agricultural
Henrietta	Jackson	2014	Agricultural
Stockbridge	Ingham	2009	Agricultural Residential

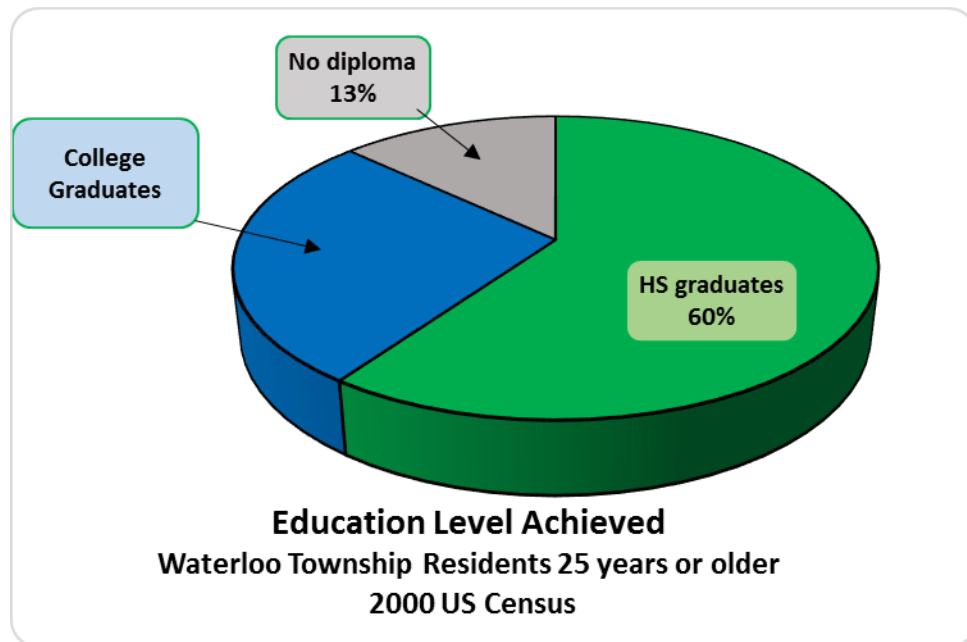
**GRAPH 1**



**GRAPH 2**



**GRAPH 3**



**GRAPH 4**

