

Adopted September 8, 2016

RESOLUTION APPROVING THE ADOPTION OF THE MASTER PLAN

At a regular meeting of the Hamlin Township Board of Trustees held on September 8, 2016, the following Resolution to adopt the 2016 Master Plan was considered and adopted:

A RESOLUTION APPROVING THE 2016 MASTER PLAN

WHEREAS, the Michigan Planning Enabling Act, MCL 125.3801 (MPEA) authorizes the Planning Commission to prepare and periodically update a Master Plan for the use, development and preservation of all lands in the City; and

WHEREAS, the Hamlin Township Planning Commission prepared an updated Master Plan and submitted the plan to the Hamlin Township Board of Trustees for review and comment; and

WHEREAS, the Hamlin Township Board of Trustees received and reviewed the proposed Master Plan on April 14, 2016 and authorized distribution of the Master Plan to the Notice Group entities identified in the MPEA; and

WHEREAS, notice was provided to the Notice Group entities as provided in the MPEA;

WHEREAS, the Hamlin Township Planning Commission held a public hearing on August 8, 2016 to consider public comment on the proposed Master Plan, and to further review and comment on the proposed Master Plan; and

WHEREAS, the Hamlin Township Board of Trustees finds that the proposed Master Plan is desirable, proper, and reasonable and furthers the use, preservation, and development goals and strategies of the Township;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

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- 1. Adoption of the 2016 Master Plan, the Hamlin Township Board of Trustees hereby approved and adopts the proposed 2016 Master Plan, including all of the chapters, figures and maps and tables contained therein. Pursuant to MCL 125.3843, the Hamlin Township Board of Trustees has asserted by resolution its right to approve or reject the proposed Master Plan and therefore the approval granted herein is the final step for adoption of the Plan.
- 2. Effective Date, the updated Master Plan shall be effective as of the date of the adoption of this resolution.

YEAS: 5
NAYS: 6
ABSENT: 6
ABSTAIN: 6

CERTIFICATION:

I, Catherine Lewis, Hamlin Township Clerk, do hereby certify that the following is a true and original copy of the resolution adopted by the Hamlin Township Board of Trustees at a regular meeting held on the 8th day of September 2016.

Catherine Lewis

Hamlin Township Clerk

ACKNOWLEDGMENTS

Township Board Nancy Vandervest (Supervisor)

Catherine Lewis (Clerk) Susan Ptaszenski (Treasurer)

Larry Rees (Trustee)

Johnaine Gurzynski (Trustee)

Planning Commission Dave Mahannah (Chair)

Ken Greb (Vice-Chair) Johnaine Gurzynski Mark Herban Sabrina Sisson Ron Key

Ronda Smalley

Township Staff Stanley Armstrong (Assessor and Zoning Administrator)

Kathy Genter (Office Manager)

Plan Update Prepared By:



324 Munson Avenue Traverse City, MI 49686 www.liaa.org

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CHAPTER 1 - WHY MASTER PLAN?

Hamlin Township was established in 1861 and has the largest residential population of any Township in Mason County, Michigan. The Township is located north of the City of Ludington and boasts a wide variety of unique natural and recreational resources. including Hamlin Lake and Ludington State Park. The map on the following page illustrates Hamlin Township's location within the County and State. The Hamlin Township Master Plan presents a vision for land use and development for the next five to ten years. The Master Plan Is both visionary and *strategic*, outlining goals and objectives for the future and guiding land use policy. It is visionary in the sense that the anticipated future of the Township is being recognized. It is also strategic in that the Plan lays out essential goals and means to reach them.



Hamlin Township boasts a wide variety of unique natural features, including picturesque Hamlin Lake.

Why Is a Master Plan Needed for the Township?

Master Plans are authorized by the Michigan Planning Enabling Act (P.A. 33 of 2008). This act describes the basic purpose and requirements of Master Plans including the need to:

- 1. Promote the public health, safety, and general welfare;
- 2. Encourage the use of resources in accordance with their character and adaptability;
- 3. Avoid the overcrowding of land by buildings or people;
- 4. Lessen the congestion on public roads and streets;
- 5. Facilitate provisions for a system of transportation, sewage disposal, safe and adequate water supply, recreation and other public improvements; and
- 6. Consider the character of each community and its suitability for particular uses judged in terms of such factors as the trend in land and population development.

Lawful Zoning Ordinances Need a Master Plan

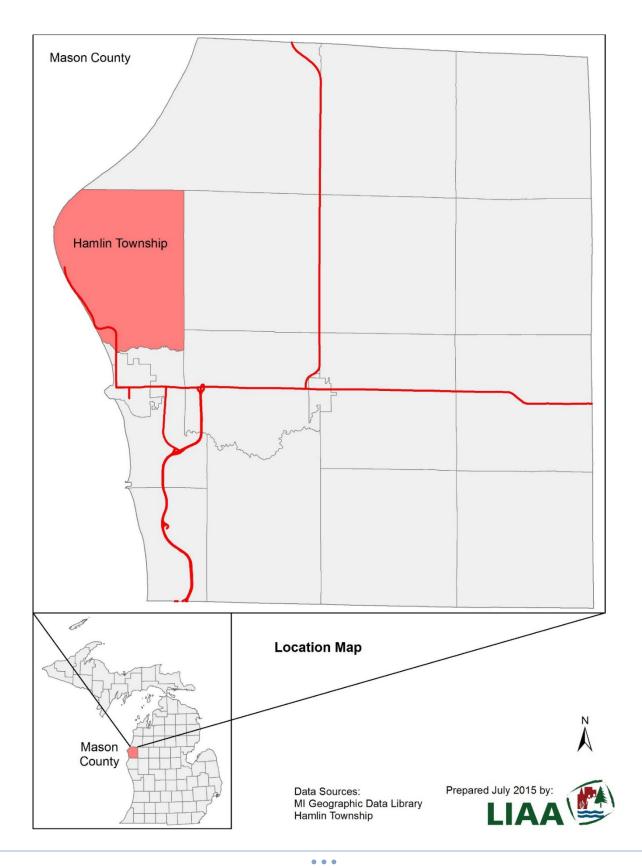
In order for a community to have a legally defensible zoning ordinance, a Master Plan is needed that is designed "to promote the public health, safety, and general welfare; to encourage the use of lands In accordance with their character and adaptability; and to limit the improper use of land...." to name only a few reasons prescribed by the Michigan Planning Enabling Act (P.A. 33 of 2008).

The Master Plan is intended to prepare the area to properly manage its growth and provide a reliable basis for public and private investments.

The Master Plan is also intended to serve as a means to protect and enhance the quality of life in Hamlin Township. It accomplishes this by fostering orderly, manageable, and cost effective growth and establishing a framework for future decisions. This will enable the residents to truly enjoy the qualities that make Hamlin Township a great place to live.

The Plan will serve as a decision making tool for public and private decision makers, including the Township administration, boards, and commissions, as well as businesses, community groups, and Individuals. It will also be used as a tool for planning commissioners and elected officials in their deliberations on development opportunities and zoning actions.

The Plan's goals and supporting statements will be used to direct development activities and implementation programs. They are also designed to help the Township make decisions that will achieve the best use of land resources.



Putting the Plan Together

The dedication of community leaders and the desire of the Planning Commission and Township Board members to preserve the qualities that they felt made Hamlin unique spawned this planning process, The Master Plan represents the efforts of Hamlin Township to achieve the following:

- A common "blue print" of land uses and land use development and preservation goals for the future growth and development within Hamlin Township
- A foundation for establishing compatible land uses that will benefit the Township.

Public involvement provides township residents with opportunities to voice their opinion about what they see happening in the community; and a chance to offer suggestions, provide insight; and strengthen the position of the Master Plan through their involvement.

Hamlin Township is somewhat unique in that there is a substantial seasonal population, located mostly around the lakes of the Township.

Using public input to identify issues of importance in the township is essential to the formation of a sound vision for the future. Unless problems are accurately identified, and proper solutions sought, the plan will not achieve its full potential as a guide that can make Hamlin Township a better overall community in which to live, work and recreate.

The most recent update to this plan is based on a robust, multi-jurisdictional public input and planning process called Resilient Ludington. Residents, municipal staff, and elected and appointed officials from Hamlin Township, the City of Ludington, Pere Marquette Charter Township, and Mason County participated in the Resilient Ludington planning process. The process addressed community-wide issues with an emphasis on how the greater Ludington community could be more resilient to quickly changing climatic and economic conditions. A thorough description of the Resilient Ludington planning process and additional information about community resilience can be found in Chapter 2.

Previous public involvement, which formed the basis for the creation of the original



The Resilient Ludington planning process provided many opportunities for public involvement and input.

Master Plan, included a written survey that was mailed to all of the Hamlin Township property owners to determine their views about the future of the Township. Questions ranged from how the residents felt about Township services to protection of natural resources.

What is the Difference Between the Master Plan and Zoning Ordinances?

The relationship of the Master Plan and Zoning Ordinance is often misunderstood. Stated concisely, the Master Plan is a land use guide for the future; the Zoning Ordinance regulates current land use.

The implementation of the Master Plan will depend upon the existence of supporting community services and activities. The following topics will be of primary importance in realizing development of the goals and objectives:

- · Updated zoning ordinance
- Targeted road improvements
- Parks and recreation facilities
- Fire and police protection
- Natural resource protection

Using the Plan

The Master Plan can be used in a number of ways. Consistent use of the Plan is of primary importance. The ability to use the Plan to support various development related decisions is directly related to the ability of the Township to demonstrate that the Plan is used consistently, or that departures from the Plan are clearly identified and explained.

Refer to the Master Plan in all Zoning Decisions

Use of the Master Plan ensures that the Township's desires regarding future development are translated into action. These decisions take place one action at a time, whether through re-zonings, site plan reviews, special land use approvals, or variances. It is those every day decisions, added together, that create the future land use pattern for Hamlin Township.

Encourage Other Decision Making Bodies to Use the Master Plan

The Master Plan should assist in guiding the decision making efforts of others. The planning and development programs of other agencies such as the County Road Commission, Mason County Drain Commission, Mason County Health Department and MDOT, and adjacent communities can help in the implementation of the Master Plan.

Keeping the Plan Current

The Michigan Planning Enabling Act mandates that the Plan be reviewed and updated every 5 years. However, to make sure the Plan stays current, the Planning Commission should conduct an annual review. This review will help make the 5 year updates much easier by ensuring that changing conditions have been taken into account. During the reviews any amendments to the Plan can be done at that time to make it consistent with changing community philosophies and needs as well as unanticipated events.

Conclusion

The Master Plan is designed to be a part of an overall process of attaining the form and character of the Township that will provide a safe and attractive environment and a high quality of life for its citizens. A challenging issue facing the Township is its ability to balance the positive aspects of preserving the character of the community and the pressure of development. The ability to maintain a unique yet prosperous community environment will depend heavily on cooperative efforts with other units of government.

The leaders of Hamlin Township have a responsibility to look beyond the day-to-day zoning issues and provide guidance for land use and development through the Master Plan. A properly developed, well thought-out Master Plan can be of great value by providing tangible benefits in improved quality of life, more efficient use of financial and other resources, a cleaner environment, and an economically healthy community. However, the value of the Master Plan is directly related to a willingness to follow its course, and diligence in keeping the plan current and relevant to today's conditions. It is hard work; but the rewards make the effort worthwhile.

Chapter 1 Why Master Plan?

CHAPTER 2 – OVERVIEW AND VISION

The Hamlin Township Master Plan, previously updated in 2008, is intended to take a long-range view of land use and future development. Much of the 2008 Plan, including many of its goals, objectives, and actions, are still valid and large portions of the older Plan have remained intact for the current, focused plan update facilitated by the Resilient Ludington process. As time passes, conditions change, new issues and priorities emerge and new goals begin to take shape. The current update to the Hamlin Township Master Plan addresses these changes and builds upon the foundation laid by the previous Plan.

RESILIENT LUDINGTON PLANNING PROCESS

In early 2014, the City of Ludington, Hamlin Township, Pere Marquette Charter Township, and Mason County began a community-wide planning process called Resilient Ludington. Through this cooperative planning effort, the citizens and leaders of the greater Ludington Community worked together to address shared issues and identify ways to manage changes and challenges of all kinds. The City of Ludington, Hamlin Township, and Pere Marquette Charter Township reviewed and revised their respective master plans as a part of the project.

The Resilient Ludington planning process allowed citizens and leaders of the greater Ludington area to address shared issues and identify ways to manage challenges of all kinds.

Local officials and staff from each of the four participating governments formed the Community Planning Committee to oversee the planning process and consider the recommendations created during the project. Research, planning, and facilitation services for the Resilient Ludington project were provided by the Land Information Access Association (LIAA) with support from the Michigan Municipal League (MML), Michigan Townships Association (MTA), Michigan Association of Planning (MAP), and University of Michigan's Taubman College of Architecture and Urban Planning. Funding for the Resilient Ludington project was provided by the City of Ludington, Hamlin Township, Pere Marquette Charter Township, Mason County, and the Kresge Foundation.

Ultimately, the goal of the Resilient Ludington project is to help the citizens and local officials of the greater Ludington community refine and update their land use and development plans. The planning process will support the City of Ludington, Hamlin Township, and Pere Marquette Charter Township in performing the required five-year reviews of their Master Plans with a focus on building greater community resilience. In all cases, this community planning process is following the requirements of the Michigan Planning Enabling Act (P.A. 33 of 2008).

Community Planning Committee

A Community Planning Committee (CPC) was formed to manage and oversee the Resilient Ludington project. The CPC was made up of appointed planning commissioners, elected officials, and municipal staff from the City of Ludington, Hamlin Township, Pere Marquette Charter Township, and Mason County. The CPC met regularly over the course of the project to review existing planning documents and make recommendations for the master plan updates of the City and two Townships. CPC meetings were open to the public and included informational presentations designed to build a better understanding of local land use and demographic trends as well as climate and economic resilience. The project team also conducted personal interviews with a wide variety of community stakeholders during the beginning portions of the planning process. These interviews, along with insight from the CPC, helped identify the major issues and land use and development topics that became the focus of the Resilient Ludington process.

Public Forum

In May of 2014, the Resilient Ludington project team held a Public Forum at Ludington City Hall to officially begin the public involvement portion of the project and gather input from citizens of the greater community. The Public Forum consisted of brief informational presentations on the Resilient Ludington Project, community resilience, the potential impacts of climate change, and the master planning process. A community visioning session was also conducted at the Public Forum, allowing citizens the opportunity to voice their concerns, identify important community issues, and share their visions for the future of the Ludington Community.

Leadership Summit

In May of 2014, a day-long Leadership Summit was held to educate and engage interested citizens, public officials, and community leaders in discussions about the future of the greater community. The Leadership Summit provided educational presentations that helped the audience better understand the challenges presented by a changing climate and global economy. Presentations were made by experts from Michigan State University, the University of Michigan, Michigan Technological University, Michigan District Health Department #10, the City of Grand Rapids, the Mason County Emergency Management Office, and LIAA. Following the presentations, attendees gathered in small groups



The Resilient Ludington Leadership Summit featured a variety of presentations by experts from across the state.

to discuss community-wide issues and visions for the future. These small group discussions helped form the basis for the Community Action Team meetings that were held later in the summer and fall.

Community Action Teams

As part of the Resilient Ludington community planning project, leaders formed Community Action Teams (CAT) to discuss the various aspects of systems that sustain the Ludington Community, with an emphasis on resilience. Citizens from the entire community were invited to attend a series of working sessions to formulate system-specific recommendations for the City of Ludington, Pere Marguette Charter Township, and Hamlin Township. Participants chose to participate on one of six CATs addressing different systems within the community. Those systems were (1) Access and Transportation, (2) Agriculture and Food, (3) Energy and Economy, (4) Environment and Natural, (5) Human and Social, and (6) Neighborhoods and Infrastructure. Each team had the opportunity to learn about the workings of the system, as well as its strengths and weaknesses.



Approximately 70 community members participated in a series of three Community Action Team (CAT) meetings.

Then, the CATs established goals and recommendations to submit to the Community Planning Committee.

Approximately 70 individuals participated in the CAT process which included a series of three meetings between June and September of 2014. CAT members were able to choose the system they were most interested in working on by signing up using forms provided at community meetings, using an online signup page, or choosing a system at the CAT meetings. Each of the CAT meetings was conducted in a large meeting space and began with a presentation to the entire group. The presentations included information about community planning, the Resilient Ludington project, community resilience, and instructions for meeting activities. Following the presentations, the CATs conducted separate discussions focused on the six systems and then reported their conclusions to the overall group.

US-10/US-31 Corridor Planning Charrette

In July of 2014, the Resilient Ludington project team conducted a three day long planning charrette focused on the US-10/US-31 corridor between Ludington and Scottville. A charrette is a multiple-day collaborative planning event that engages community members to create and support a feasible plan for sustainable and positive change for a specific issue or area of the community. The US-10/US-31 Corridor Charrette incorporated a public workshop, multiple community stakeholder meetings, an open house meeting, and a final presentation. Over the course of the three day event, a wide variety of conceptual alternatives for the corridor were developed. The findings of the Charrette were presented to the public, collected in a Charrette Summary Report, and presented to the Community Planning Committee.

Online Community Planning Survey

The project team worked with the CPC to develop questions for an online survey that was conducted in order to gather additional public input for the Resilient Ludington planning process. The survey was announced in late August of 2014 and responses were accepted through the end of September, 2014. The goal of the survey was to learn more about the citizens of greater Ludington, the importance they placed on a variety of community-wide issues, and their visions for the future of the community.

The online survey allowed anonymous participation and solicited feedback from all members of the greater community. Due to the fact that the open, anonymous online survey could be taken multiple times by one individual and that relatively few (88) survey forms were submitted, the project team and CPC used the survey results to verify the themes that had emerged during other public input opportunities.

BUILDING COMMUNITY RESILIENCE

Most communities across Michigan are wrestling with difficult economic, social, and environmental challenges. The shifting global economy and statewide recession are forcing big changes in business practices and employment. State and federal funding is declining and new long-term assistance appears unlikely. Fuel and electrical energy costs are high and subject to unpredictable price spikes. Further, paying for basic energy supplies continuously siphons off community resources. Making matters worse, the harmful impacts of extreme weather events on agriculture, infrastructure, and human health are being felt almost everywhere across Michigan.

These are turbulent times for many Michigan communities. However, with planning and preparation, communities can weather the storms and recover, becoming even better places to live and thrive. Through community-wide planning, resilient cities and townships actively cultivate their abilities to recover from adverse situations and events, working to strengthen and diversify their local economies and communications networks, increase social capital and civic engagement, enhance ecosystem services, improve human health and social systems, and build local adaptive capacity.

Chapter 2 7 Overview and Vision

Resilience

Resilience can be described as the capability of a person or community to withstand and recover from a shock or serious misfortune without permanent disruption. According to the Rand Corporation, community resilience is a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and/or recover from adverse situations. 12 Communities that are resilient are able to learn from adversity and adapt quickly to change. In general, the most important characteristics of community resilience are: (1) strong and meaningful social connections, (2) social and economic diversity, (3) innovation and creative problem solving capacity, and (4) extensive use of ecosystem services.

Resilience includes adaptive capacity. Adaptation is a critically important part of resilience because it allows us to prevent further harm from disasters and disruptions while making the most of the new conditions. By adapting rapidly to changing circumstances, our communities may not only survive challenges, but thrive.

Communities interested in becoming more resilient assess their vulnerabilities and make action plans to reduce their sensitivities and exposures to hazards of all kinds. For example, local governments can improve building standards to reduce heating and cooling challenges posed by severe temperature swings (cold and hot). Improvements in social cohesion and civic engagement also improve community resilience, by increasing the capacity of volunteer organizations and providing more secure neighborhoods, among other things. Planning processes can help increase civic engagement by improving communications and encourage cooperation between cultural and service organizations and assuring more effective community projects.

To improve economic resilience, communities can work to encourage and support local production of goods and supplies, increasing self-reliance and reducing the flow of funds out of the community. Programs to encourage local investing and entrepreneurship have been helpful in building both employment and production capacity. Local investments, consumption of locally produced products, and locally owned businesses all help to diversify the community's economy, giving it greater resilience.

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 $^{^1\,}Rand\,Corporation, Community\,Resilience.\,http://www.rand.org/topics/community-resilience.html$

² Focus on Community Resilience. Santa Monica, CA: RAND Corporation, 2012. http://www.rand.org/pubs/corporate_pubs/CP640-2012-04

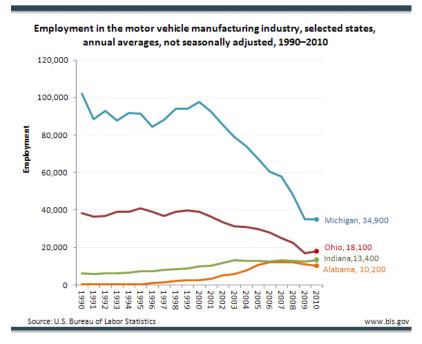
Economic Trends and Challenges

Over the past 20 years, technologies such as broadband digital communications and the rapid transport of agricultural and manufactured goods have changed the global economy. Many manufactured goods can now be produced anywhere in the world and transported anywhere else, increasing global competition. As a result, many manufacturing jobs have been and are being moved to countries with the lowest labor and related costs.

Figure 1

The trend toward moving jobs to other, lower-cost countries together with the continuing automation of processes has resulted in the nation, as a whole, losing manufacturing jobs. The impact of this changing trend has been particularly hard on Michigan's economy which has relied more heavily on manufacturing than most other states' economies. In the vehicle manufacturing sector alone, Michigan lost 65,100 jobs from 1990 to 2010. Overall, between 2000 and 2010, Michigan lost 367,000 manufacturing jobs.3

Over the past decade, most communities across Michigan have faced severe economic challenges due in part to a



statewide loss of manufacturing jobs combined with a severe national recession. Along with the harsh economic downturn has come a loss in population and a significant loss in real estate values as many people moved to other locations. Ranked 17th of all states in 1970, Michigan was ranked 34th in average household income by 2007.

According to many experts, most of the future economic growth in Michigan will come in the high-technology and services sectors, including health care, financial management, highly-skilled manufacturing, human services, and the food industry. While the recovering manufacturing sector will remain a major component of our state's economy, most of the jobs already lost will not return. Rather than compete for a decreasing number of manufacturing jobs, the experts say, communities and regions should embrace this *New Economy*.

The *New Economy* is a buzz-phrase used to describe the transition from a manufacturing-based economy to a service-based or innovation-based economy. In the new economy, communities and regions are encouraged to build from within, expanding existing businesses and supporting new entrepreneurial enterprises. To rebuild or retain economic vitality, the experts say, communities will need to attract and retain educated and talented people.

There are a number of things that communities and regions can do to improve their economic outlook. Economic development actions recommended by many experts reflect on the characteristics of the *New Economy*. For example, the following list presents some of the actions suggested by Michigan State University's Land Policy Institute's (MSU LPI) 2010 training course. All of these actions could, if properly focused, increase community resilience.

³ U.S. Bureau of Labor Statistics, BLS Spotlight on Automobiles. October 2011. http://www.bls.gov/spotlight

Actions We Could Take to Restore Prosperity

- 1. Diversify our economy.
- 2. Expand our markets.
- 3. Embrace the Green Economy and its focus on alternative energy.
- 4. Promote and support entrepreneurialism.
- 5. Focus on talent retention and attraction.
- 6. Focus on population retention and attraction.
- 7. Focus on effective *placemaking* and place-based strategies.
- 8. Right-size and maintain our infrastructure.

Climate Change and Variability

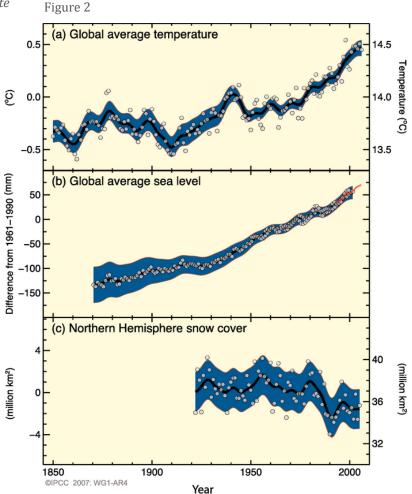
Climate and *weather* are directly related, but not the same thing. *Weather* refers to the day-to-day conditions we encounter in a particular place: sun or rain, hot or cold. The term *climate* refers to the long-term patterns of weather over regions or large areas. When scientists speak of global climate change, they are referring to generalized, regional patterns of weather over months, years and decades. Ongoing and predicted climate changes refer to the generalized weather characteristics or averages on a regional basis.

As stated by the *Intergovernmental Panel on Climate Change*, significant changes in the earth's climate have been observed and thoroughly

documented. Warming of the climate system is unequivocal and is now evident in average air and ocean temperatures, rising sea levels and the melting of ice. Further, more change is expected.

Figure 2 provides a summary of observed changes in several key climate indicators over the last 100 to 150 years, as compiled by the Intergovernmental Panel on Climate Change.

To help predict what the climate will be in the future, scientists are using rapidly improving three-dimensional computer models of the earth's atmosphere, oceans and land surfaces to understand and predict large-scale changes in climate. These General Circulation Models (GCM) have been improved and verified in recent years, resulting in relatively reliable predictions for climate changes over large regions. To help predict climate change at the earth's surface for smaller regions, scientists apply downscaling techniques.



The Great Lakes Integrated Sciences Assessment (GLISA) is a consortium of scientists and educators from the University of Michigan and Michigan State University that is helping to provide downscaled models for the Great Lakes Region in support of community planning efforts like Resilient Ludington. According to GLISA, the Great Lakes region has already experienced a 2.3° F increase in average temperatures from 1968 to 2002. An

Figure 3

additional increase of 1.8 to 5.4° F in average temperatures is projected by 2050. Although these numbers appear relatively small, they are driving very dramatic changes in Michigan's climate.4

Based on the most recent models, the climate of Michigan will continue to warm, with greater increases in temperature during the winter months and at night. There are a variety of weather impacts expected with this change in average temperatures. For example, storms are expected to become more frequent and more severe. Some of the potential impacts of climate change for Michigan include:

- 1. Increases in winter and spring precipitation
- 2. Less precipitation as snow and more as rain
- 3. Less winter ice on lakes
- Extended growing season (earlier spring/later fall)
- Greater frequency and intensity of storms
- More flooding events with risks of erosion
- Increases in frequency and length of severe heat events
- Increased risk of drought, particularly in summer

These changes in climate could have a number of both good and bad effects on the greater Ludington area. For example, an extended growing season could help increase crop yields for area farmers. On the other hand, the highly variable weather conditions such as severe storms and flooding mixed with summer droughts present big challenges to farming. Additionally, increased summer temperatures and a longer summer season could improve the local tourism economy, but at the same time contamination of the area's lakes could limit their appeal to tourists.

The National Climate Assessment for 2009 (U.S. Global Change Research Program) includes a number of illustrations that help us understand the extent and character of anticipated climate change impacts. The section on the Midwest includes an illustration of projected summer climate

ILLINOIS mid-century mid-century end-of-century end-of-century **MICHIGAN** mid-centur mid-century end-of-century end-of-century Lower Emissions **Higher Emissions** Hayhoe et al.28 Scenario9 Scenario⁹ Model projections of summer average temperature and precipitation changes in Illinois and Michigan for mid-century (2040-2059), and end-of-century (2080-2099), indicate that summers in these states are expected to feel progressively more like

summers currently experienced in states south and west. Both states are projected to get considerably warmer and have less summer precipitation

for Illinois and Michigan under two different emissions scenarios (see Figure 3). The higher emissions model refers to the continuation of existing discharge levels. Models indicate that Michigan's climate will feel more like present-day Arkansas or Oklahoma by the end of the century.5

Responding to the impacts of climate change will challenge many different parts of the Ludington Community, from social services to industrial production. The following is a partial list of climate change impacts on community life as described by GLISA and Michigan's State Climatologist:

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⁴ U.S. Global Change Research Program. Global Climate Change in the United States, 2009. Cambridge University Press, Cambridge, MA. http://www.globalchange.gov/usimpacts

⁵ U.S. Global Change Research Program. Global Climate Change in the United States, 2009. Cambridge University Press, Cambridge, MA. http://www.globalchange.gov/usimpacts

Rivers, Stream and Lakes

Decline in cold water fish populations – changing fisheries. Lower river and lake levels and more frequent lake stratification. Increases in pollution from stormwater runoff.

Plants and Wildlife

Increases in invasive species that damage local trees and plants. Changes in tree species able to survive in the new regional climate.

Energy & Industry

Increases in electrical energy demand due to heat waves. Reduced water availability from streams and groundwater.

Transportation

Increased damage to roads and bridges from flooding and heat waves. Additional difficulty for shipping on the Great Lakes due to lower water levels.

Public Health Risks

Increased risk of illness and death due to high heat and humidity. Increased risk of water contamination from flooding events. Increased risk of disease spread by mosquitoes, ticks and other vectors.

Moving Forward

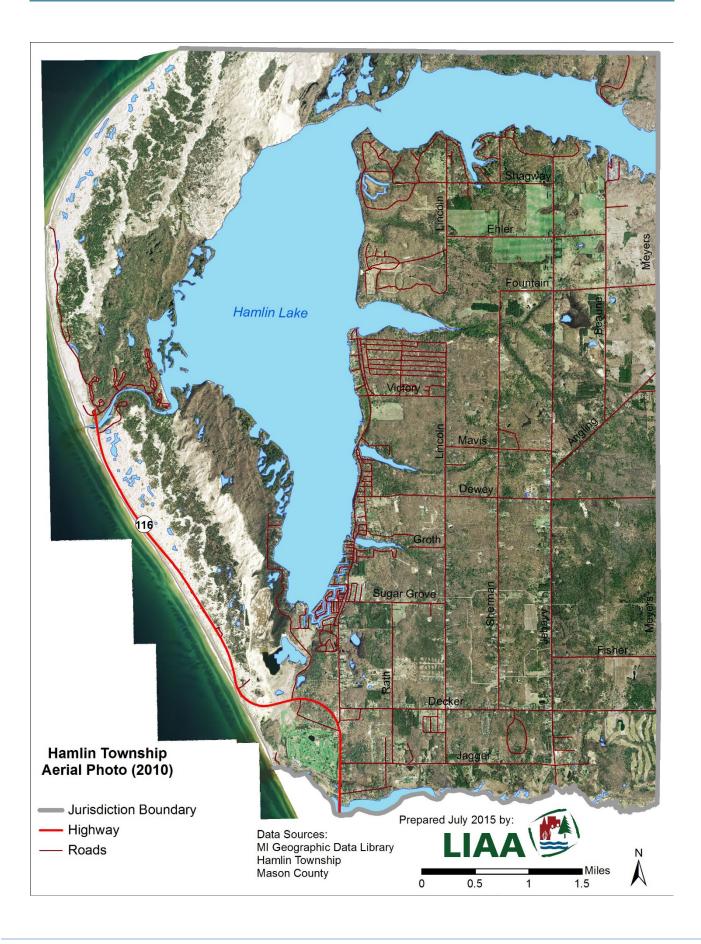
The Resilient Ludington planning process resulted in many recommendations and strategies based on best management practices for promoting economic and climate resilience for a healthy, thriving community. These recommendations and strategies are applied, where applicable, within the Hamlin Township Master Plan.

COMMUNITY VISION

Hamlin Township can truly boast "one-of-a-kind" status. Hamlin Township harbors some of the most spectacular resources in the world. Nowhere else on earth are there fresh water sand dunes like those on the west side of Michigan, and nowhere in west Michigan is there an expansive State Park and National Forest/Wilderness Area. Hamlin Lake is more than 12 miles long and 5,000 acres large. Manistee National Forest to the north, towering dunes in the west and miles of undeveloped wilderness all around "Hamlin Lake", a man-made lake that originated during the logging hey-day when lumberman dammed the Big Sable River to make an enormous holding pond for trees felled upstream. The State Park comprises about one quarter of Hamlin Lake's shoreline, remaining portions of the lake are lined with homes, resorts and small parks. Aside of areas near the City of Ludington, most of the township is rural in nature, heavily wooded with agricultural uses interspersed throughout the community.

The Master Plan helps the community realize a vision for its future. Goals and strategies should be crafted based on that overall vision. For Hamlin Township the vision is as follows:

Hamlin Township will remain an uncongested, rural, recreational resort community with well preserved and protected natural resources. Future residential development will maintain the rural character of the Township and complement, not overpower, the natural environment. Agricultural and forest lands will be preserved through the careful consideration of future development and the Township's sensitive natural areas, natural resources, and water quality will be protected. The Township will accommodate small scale commercial uses that serve the local population and limit the establishment of intense commercial and industrial uses, allowing them to remain concentrated in the adjacent communities of the City of Ludington, Pere Marquette Charter Township, and Amber Township that have the public services able to accommodate such uses.



CHAPTER 3 – ISSUES AND GOAL IDENTIFICATION

GUIDING PRINCIPLES

Over the course of the Resilient Ludington planning process, area citizens, leaders, and officials identified many community-wide issues for the consideration of the Community Planning Committee (CPC). Following the conclusion of the Resilient Ludington public input process, the Hamlin Township Planning Commission discussed the applicability of these issues to the Township Master Plan update. After examining the community-wide issues identified during the planning process, the planning issues identified in the current Hamlin Township Master Plan, and topics presented by the project team, a series of principles was developed to guide the Master Plan update. These Guiding Principles are:

- 1. Protect the Township's Natural Resources and Natural Features
- 2. Preserve the Township's Rural Character
- 3. Provide Services and Infrastructure that Meet Needs and the Vision for the Future

TOWNSHIP RESIDENT SURVEY

Hamlin Township conducted a survey of the residents in 2005 to develop a better understanding of the population's attitudes concerning the environment, zoning, land use, public services, and related issues. Approximately 35% of the township's residents responded to the survey. The actual questions and comments which were received can be found in the Appendix.

The 2005 survey results showed that trees rule. The most often picked description of "rural character" is "tree lined roads". The next most often picked description was "wood lots". In addition, 91.9% of respondents considered maintenance and protection of forests and woodlands as important or very important. Also, the growth issue of highest importance is loss of farmland/forests and 73.6% of responses indicated new policies or regulations may be appropriate.

78.4% agree or strongly agree that groundwater protection may require new policies and/or regulations. Groundwater importance was second only to lake and stream water quality which was at 97.6%.

The survey results showed that 67.6% of respondents agreed or strongly agree that recreational uses, such as hiking, biking, nature trails and pedestrian paths are popular enough to support additional taxes.

The ability to re-build on a non-conforming lot was an issue that was important or very important to 78.3% of respondents. Similarly, the ability to sell a non-conforming adjoining lot separately was an issue of importance to 67.3% of respondent

Hamlin Township's population per the 2000 U.S. Census Bureau is 3,192 persons. Of this number, 1,598 were males and 1,594 were females with 17.3% being 65 years and over and 78.3% being 18 years and over.

Overall, residents are satisfied with the present percentage of land uses in the various districts. There is strong support for the percent of residential, commercial, and industrial land uses to stay the same. According to the survey comments, the only utility that is needed in Hamlin Township is sanitary sewer. The residents are evenly divided on the need for any other facilities, such as street lights or natural gas, as cited by some.

When asked what transportation improvements are needed, the largest area of concern was for road repair, particularly road resurfacing. The second strong area of need was for the return of the Dial-A-Ride service. The need for some form of public transportation and the better care of dirt roads were also listed. In 2004, a County wide transportation millage request was on the ballot at .83 Mill. In Hamlin Township, the millage request was defeated by 47 votes. In 2008, Hamlin Township placed a Township wide transportation request on the ballot. Millage rate was to be .73 mill for 3 years. The request was defeated by 90 votes.

LAKE STUDY SURVEY

The Hamlin Lake Improvement Board conducted a survey of Riparian owners around Hamlin Lake as part of The Hamlin Lake EPA Phase 1 Diagnostic Feasibility Study. This survey was distributed in August of 1991. Although the segment of the population surveyed is limited to lake property owners and specific to uses on Hamlin Lake and its water quality, it directly related to land use affecting more than just Hamlin Lake.

The survey addressed several key points. Residents were asked their opinions on physical problems with Hamlin Lake that they felt needed to be addressed, possible sources of pollution, wetland regulation, tenure of residence, and occupancy status of the homes. The three major problems residents felt needed to be addressed in the study were excessive rooted plant growth in the lake itself, inadequate septic systems and excessive algae growth. Residents felt that septic seepage was the primary cause of pollution to the lake. Over 95% of the respondents stated that they would like to see local regulations protecting the wetlands.

Homeowner information revealed that the majority of lakefront property owners have observed the lake for quite some time and that most were seasonal owners. Over 50 percent of the respondents said they have observed the lake for over 20 years. However, 55.9 percent said they only occupy their home part of the year.

Based on recent interaction with the public and discussions among community leaders, the attitudes reflected in written surveys are still prevalent today. This Master Plan update was developed under the assumptions that the community overall wants to:

- 1. Protect the water quality of Inland lakes.
- 2. Protect rural character and natural features.
- 3. Maintain low density and low intensity single family uses.
- 4. Limit commercial development in areas zoned for commercial within the Twp.
- 5. Encourage industrial development in areas with appropriate infrastructure to service the development (e.g., in the City of Ludington, Amber Township, Pere Marquette Charter Township).

GOALS AND OBJECTIVES

Based on the vision statement from Chapter 2 and the Guiding Principles found above, a series of broad land use and development goals were developed. Each of these goals are supported by more specific objectives. Many of the objectives are followed by action items that, if completed over time, will help implement the recommendations of this Plan. The goals and objectives of this Plan are outlined below, organized by the Guiding Principle that they most closely follow. Many of the goals and objectives from the previous Plan update were found to still apply to the current vision for the Township and have been modified or kept in their entirety for this update.

Protect the Township's Natural Resources and Natural Features

Goal

Protect the water quality of Lake Michigan and the Township's inland lakes, rivers, and streams. *Objectives*

- 1. Coordinate efforts on water quality protection.
 - a. Encourage proper riparian land management practices within the Township to reduce nutrient loading into Hamlin Lake, Hamlin Lake Bayous, Lincoln Lake, and the Lincoln River.
 - b. Work with adjoining jurisdictions and groups like the Big Sable Watershed Restoration Committee and the Hamlin Lake Preservation Society to establish water quality protection standards within regional watersheds.

- c. Promote the establishment of a regional watershed council to further water quality protection activities in the area.
- 2. Coordinate stormwater and runoff controls with appropriate agencies to protect the water quality of lakes, rivers, and streams.
 - a. Establish stormwater management standards that prevent direct discharge of storm or melt water into surface water.
 - b. Encourage the use of Low Impact Design (LID) stormwater control techniques like rain gardens, bio-retention areas, and bioswales.
 - c. Encourage proper maintenance on stormwater basins and traps through slit traps and buffer strips using such tools as 433 agreements, maintenance agreements and special assessment districts.
- 3. Establish consistent water quality protection standards for waterfront properties.
 - a. Evaluate current anti-keyholing or funneling regulations along water bodies.
 - b. Review current shoreline protection standards for waterfront lots and consider the inclusion or revision of language to discourage of the use of herbicides, pesticides, and phosphorus fertilizers within shoreline greenbelts/vegetative buffers.
 - c. Enact zoning ordinance regulations that prohibit the clearing or grading of land without proper zoning approvals and erosion control permits.

Goal

Preserve the Township's unique natural features and resources, such as forests, farmlands, wetlands, floodplains, and dunes.

Objectives

- 1. Implement a conservation program that preserves unique natural areas through public education, easement development, and land acquisition.
 - a. Utilize the existing environmentally sensitive areas inventory to prioritize areas of the Township for preservation, including shorelines, drainage ways, steep slopes, wetlands, porous soils, and erodible soils.
 - b. Develop an overlay zoning district that provides additional protective measures for environmentally sensitive areas including:
 - Prohibition of development within sensitive areas.
 - Increased setbacks from natural features.
 - Vegetative buffers.
 - Limited development densities.
 - Land use restrictions in environmentally sensitive areas.
 - Mandatory Planning Commission site plan review.
 - A required natural features inventory as a part of the site plan review process.
 - Minimum open space preservation requirements.
 - c. Work with groups like the Natural Resource Conservation Service and the Land Conservancy of West Michigan to educate residents on the importance of conservation and specific opportunities for conservation of lands within the Township.
 - d. Encourage participation in the Michigan Department of Environmental Quality's wetland banking program.
 - e. Encourage property owners to implement land preservation techniques such as conservation easements.

Preserve the Township's Rural Character

Goal

Promote development patterns and land preservation techniques that preserve open space, agricultural lands, and forest lands.

Objectives

1. Implement a program that distributes information on and promotes planning issues, regulations, and land preservation programs for the education of residents.

- a. Utilize local resource groups, like the Natural Resource Conservation Service, the Land Conservancy of West Michigan, and MSU Extension to provide relevant information to residents.
- b. Distribute information about the importance of preserving open space and other unique resources through Township newsletters and on the Township website.
- 2. Promote clustering of development, design flexibility, and innovation that protects and enhances natural amenities and open space.
 - a. Encourage residential developments that use natural land features and open space design criteria for the preservation of community character and quality of life.
 - b. Suggest that proposed development(s) with sparse natural vegetation provide natural plantings, fence rows, and other landscaping as scenic buffers and wind breaks.
- 3. Work with large landowners to pre-determine where splits will be placed on their land. Consider alternative development methods that will permit them to realize a higher financial return for their efforts while protecting rural character.
- 4. Explore financial tools to promote open space preservation like conservation easements, transfer or purchase of development rights, and land banking.
- 5. Work with area conservation groups to educate property owners about non-regulatory incentives for preserving wildlife habitat and open spaces (including conservation easements).

Goal

Provide commercial development to serve the basic needs of residents and visitors while maintaining the rural recreational character of the Township.

Objectives

- 1. Maintain limited areas for small commercial centers that are consistent with the rural recreational character of the township.
- 2. Require amenities within commercial developments like open space areas and outdoor seating.
- 3. Maintain design standards that require new commercial development to reflect the rural character of the Township. Provide for:
 - Building and parking areas of limited size.
 - Design standards for commercial buildings.
 - Parking at the side or rear of sites.
 - "Build to" lines for structures.
 - Limited signage and controlled lighting.

Goal

Enact development standards and site plan review measures that preserve rural character in the Township. *Objectives*

- 1. Limit the amount of industrial activity within the township to the existing activity.
- 2. Ensure that new development does not deter from the rural recreational and natural aesthetic character of the township by implementing development standards and site plan review criteria.
 - a. Consider development options and incentives within the Zoning Ordinance to encourage the preservation of rural character. Options to consider include:
 - Additional allowed development density for the provision of additional open space, private recreational opportunities, or connections to adjacent greenways in proposed developments.
 - Allow smaller minimum lot sizes in exchange for preserving larger tracts of parent parcels for agricultural and open space preservation.
 - b. Consider requiring planned unit development review or clustering for developments of over a certain size (e.g., more than 10 dwelling units.)
 - c. Consider requiring a certain percentage of open space in all developments. Depending on the nature of the development, allotments of open space could range from 15-50%
 - d. Consider providing buffer areas around active agricultural operations to prevent conflicts with surrounding land uses and minimize the development of conflicting land uses in adjoining areas.
 - e. Consider the development of greenways throughout the Township by coordinating the interconnections of open spaces between parcels during site plan review.

- f. Consider requiring naturally landscaped common setback areas for new residential developments adjacent to arterial or collector roads.
- g. Consider incorporating site design and performance standards into residential, commercial, and industrial areas to ensure the safety and welfare of property owners and residents and to prevent the loss of natural areas and vegetation from unnecessary land disturbance.
- h. Consider establishing standards and site plan review measures that specifically address the protection of natural features like woodlands, landmark trees, rolling topography, wetlands, etc.
- 3. Consider restricting development within areas identified as floodplain, wetland, or vital to the identity of the Township and its rural character.
- 4. Consider developing an escrow policy and consistently seek professional assistance when evaluating development proposals.

Provide Services and Infrastructure that Meet Needs and the Vision for the Future

Goal

Expand and improve parks and recreation facilities to meet the needs of residents and visitors that capitalize on recreational opportunities presented by the Township's abundant natural features.

Objectives

- 1. Develop an integrated park system through the use of trails, bike paths, and greenbelts that will link residential areas, community parks, and state recreational areas.
- 2. Maintain and update the Township recreation plan, and submit that plan to the Michigan Department of Natural Resources (MDNR) for approval.
- 3. Provide additional park and recreational property and amenities for the use of Township residents and visitors.
 - a. Provide for increased public access to water resources through land acquisition, conservation and other recreation easements, donations, and access tools.
 - b. Provide additional park properties within the Township to better serve the recreation needs of residents.
 - c. Provide additional active and passive recreation opportunities at existing and/or new park properties.
- 4. Identify opportunities for state and federal funding for parks and recreational facilities, and submit proposals to obtain such funding.

Goal

Provide a diverse, efficient, and safe transportation network to serve Township residents and visitors. *Objectives*

- 1. Establish an access management plan to provide for safe and efficient vehicular traffic between public roads and private development.
 - a. Consider requiring vehicular connections between properties to prevent a series of dead-end roads that cause circulation problems, public service issues, and public safety concerns.
 - b. Consider prohibiting direct driveway access along county roadways within larger residential developments during the site plan review process.
 - c. Consider requiring traffic calming measures to keep speed limits low in and around new residential developments.
- 2. Re-evaluate private road standards to prevent future problems with providing public services and connecting street networks.
- 3. Consider providing access to local bus service for Township residents and visitors.
 - a. Work with the Ludington Mass Transit Authority, local officials, and local transit advocacy groups to identify funding opportunities that could allow the Township to be included in the regional dial-a-ride system.
- 4. Consider improving walkability and bicycle routes within the Township.
 - a. Consider working with the appropriate agencies to provide integrated pedestrian access and connections to neighboring areas in new developments.

- b. Consider working with the appropriate agencies to provide bicycle and pedestrian connections between residential neighborhoods, parks, commercial areas, and adjoining jurisdictions.
- c. Work with the Mason County Road Commission and Michigan Department of Transportation to provide safer conditions, such as widened shoulders, for bicyclists and pedestrians along roads within the Township.
- d. Adopt a complete streets resolution that considers all modes of transportation when designing and implementing street construction or improvement projects.

Goal

Maintain and improve necessary public facilities and services to adequately serve Township residents and visitors and further the Township's vision for the future.

Objectives

- 1. Maintain and improve existing infrastructure.
 - a. Implement a Capital Improvement Plan that specifies the timing and cost of providing or expanding public facilities in specific areas.
 - b. Continue to investigate the potential for providing public sewer to waterfront areas to protect long-term water quality.
 - c. Work with the Mason County Road Commission to develop a street improvement plan to coordinate projects and improvements.
- 2. Improve public stormwater drainage facilities to help prevent damage to roads and other infrastructure during heavy precipitation events.
 - a. Work with the Mason County Road Commission to identify areas where road damage, road flooding, and washouts occur during heavy precipitation events.
 - b. Identify potential areas for stormwater storage facilities near problem sites.
 - c. Encourage the development of a plan for the creation of stormwater storage facilities near problem sites to prevent future damage to critical infrastructure.

IMPLEMENTATION TABLE

The table on the following pages identifies the priority levels and general implantation timing for the objectives for each goal in this chapter. Each objective has been assigned a priority of low, medium, or high importance. The objectives have also been assigned a timeframe for completion. Objectives are either identified for completion in the short-term (within the next five years), or over the long-term (five years or more in the future). If an objective is something that should be addressed in the short-term, but work will continue for a period of time longer than five years into the future, the objective is considered "ongoing."

Protect the Township's Natural Resources and Natural Features					
Goal	Goal Timeframe Priority				
	Protect the water quality of Lake Michigan and the Township's inland lakes, rivers, and streams.				
	Objective 1: Coordinate efforts on water quality protection.	Ongoing	High		
	Objective 2: Coordinate stormwater and runoff controls with appropriate agencies to protect the water quality of lakes, rivers, and streams.	Ongoing	High		
	Objective 3: Establish consistent water quality protection standards for waterfront properties.	Ongoing	High		

Goal		Timeframe	Priority
Preserve the Township's unique natural features and resources, such as forests, farmlands, wetlands, floodplains, and dunes.			
	Objective 1: Implement a conservation program that preserves unique natural areas through public education, easement development, and land acquisition.	Ongoing	Medium

Preserve the	e Township's Rural Character		
Goal		Timeframe	Priority
	velopment patterns and land preservation that preserve open space, agricultural lands, ands.		
di pl pı	bjective 1: Implement a program that istributes information on and promotes lanning Issues, regulations, and land reservation programs for the education of esidents.	Ongoing	Medium
de in	Objective 2: Promote clustering of development, design flexibility, and innovation that protects and enhances natural amenities and open space.		Medium
pi th m hi	bjective 3: Work with large landowners to re-determine where splits will be placed on neir land. Consider alternative development nethods that will permit them to realize a ligher financial return for their efforts while rotecting rural character.	Ongoing	Medium
o _l	bjective 4: Explore financial tools to promote pen space preservation like conservation asements, transfer or purchase of evelopment rights, and land banking.	Ongoing	Medium
gr no w	bjective 5: Work with area conservation roups to educate property owners about on-regulatory incentives for preserving vildlife habitat and open spaces (including onservation easements).	Ongoing	Medium

Goal		Timeframe	Priority
Provide commercial development to serve the basic needs of residents and visitors while maintaining the rural recreational character of the Township.			
	Objective 1: Maintain limited areas for small commercial centers that are consistent with the rural recreational character of the township.	Ongoing	Low
	Objective 2: Require amenities within commercial developments like open space areas and outdoor seating.	Ongoing	Low
	Objective 3: Maintain design standards that require new commercial development to reflect the rural character of the Township.	Ongoing	Low

Goal		Timeframe	Priority
	velopment standards and site plan review s that preserve rural character in the Township.		
	Objective 1: Limit the amount of industrial activity within the township to the existing activity.	Ongoing	Medium
	Objective 2: Ensure that new development does not deter from the rural recreational and natural aesthetic character of the township by implementing development standards and site plan review criteria.		Medium
	Objective 3: Consider restricting development within areas identified as floodplain, wetland, or vital to the identity of the Township and its rural character.	Ongoing	Medium
	Objective 4: Consider developing an escrow policy and consistently seek professional assistance when evaluating development proposals.	Ongoing	Medium

Provide Services and Infrastructure that Meet Needs and the	Vision for the	Future
Goal	Timeframe	Priority

Goal		Timetrame	Priority
meet the r	d improve parks and recreation facilities to needs of residents and visitors that capitalize ional opportunities presented by the s abundant natural features.		
	Objective 1: Develop an integrated park system through the use of trails, bike paths, and greenbelts that will link residential areas, community parks, and state recreational areas.	Ongoing	High
	Objective 2: Maintain and update the Township recreation plan, and submit that plan to the Michigan Department of Natural Resources (MDNR) for approval.	Short-term	High
	Objective 3: Provide additional park and recreational property and amenities for the use of Township residents and visitors.	Ongoing	High
	Objective 4: Identify opportunities for state and federal funding for parks and recreational facilities, and submit proposals to obtain such	Short-term	High

Goal	Timetrame	Priority
Provide a diverse, efficient, and safe transportation		

facilities, and submit proposals to obtain such

funding.

network to serve Township residents and visitors.		
Objective 1: Establish an access management plan to provide for safe and efficient vehicular traffic between public roads and private development.	Ongoing	Medium
Objective 2: Re-evaluate private road standards to prevent future problems with providing public services and connecting street networks.	Ongoing	Medium
Objective 3: Consider providing access to local bus service for Township residents and visitors.	Ongoing	Low
Objective 4: Consider improving walkability and bicycle routes within the Township.	Ongoing	High

Goal		Timeframe	Priority
Maintain and improve necessary public facilities and services to adequately serve Township residents and visitors and further the Township's vision for the future.			
Objective 1: Maintain and improve existing infrastructure.		Ongoing	Medium
	Objective 2: Improve public stormwater drainage facilities to help prevent damage to roads and other infrastructure during heavy precipitation events.	Ongoing	High

CHAPTER 4 - EXISTING CONDITIONS

OVERALL LAND USE

Land, Water, and Ownership

Hamlin Township by virtue of its location along Lake Michigan and its varied types of land and water features, is a unique community. Many special considerations regarding the use, function, and preservation of these features need be addressed. The seasonal and resident population place different demands on the resources of the township.

Hamlin Township encompasses 34.3 square miles. There are 7.1 square miles of surface water and 27.2 square miles of land surface. Unique features associated with the land portion of the township include 2,576 acres of sand dunes, approximately 613 acres of various wetlands, and 10,107 acres of forest and woodlands, together representing over three-fourths of the land area of the township.

Of the 27.2 square miles of land area 6.1 square miles are state owned, leaving approximately 21.1 square miles in private and quasi-private ownership and subject to township regulations. The township also has extensive shoreline areas associated with the abundant water resources. These areas are unique in that they often require special land use considerations. In Hamlin Township, there are 7.7 miles of Lake Michigan shoreline, 32.0 miles of Hamlin Lake shoreline, and 3.1 miles of Lincoln Lake and Lincoln River shoreline.

CURRENT LAND USES

Considering the development portions of the township, residential areas are the overwhelming land use type. Single-family residential development occupies 1,341 acres (2.1 square miles), while mobile home parks make up approximately 80 acres. There are approximately 33 acres of commercial area in the township. Industrial activity is limited to oil and gas extraction. There are no manufacturing businesses in the township. Oil and gas operations occupy approximately 18 acres scattered throughout the township.

TRANSPORTATION

Street and Highway Network

For the most part, Hamlin Township is a termination or destination point. In the same way the township acts as a suburban community to the City of Ludington, it also acts as an extension of the city's transportation system. US-31 limited access highway terminates into US-10 immediately southeast of the township. US-10 acts as a major regional link to the City of Detroit and the east side of the state. US-31 links the area to outstate communities of Illinois, Indiana, and Ohio.

Within the township, two major transportation corridors exist. M-116 extends north along the Lake Michigan shoreline from the City of Ludington and terminates at the Ludington State Park. Jebavy Drive runs north-south through the eastern part of the township. To the south, it connects with the US-10/US-31 corridor, and to the north, it joins Angling road, extending to the east before eventually connecting with the two-lane US-31 north of Scottville. Three collectors (Jagger, Decker, and Dewey Roads) run east-west and join M-116 and Lakeshore Drive to Jebavy Drive.

The portion of the township north of Upper Hamlin Lake is geographically isolated from the remaining township road network. This area can only be accessed from the northeast via adjoining Victory and Grant Townships. The only road leading to the residential areas along the north shore of Hamlin Lake is Nurnberg Road. This road is unpaved and falls under the jurisdiction of Grant Township.

Complete Streets

The Complete Streets movement has been gaining increased attention in communities across the county. The State of Michigan requires local transportation agencies to consider all roadway users in all phases of transportation projects through Complete Streets legislation passed in 2010. Public Act 135 defines Complete Streets as "roadways planned, designed, and constructed to provide appropriate access to all legal users, whether by car, truck, transit, assistive device, foot or bicycle." It is important to consider all modes of transportation when designing and constructing transportation improvements to provide equitable opportunities for those with differing transportation needs, financial means, and physical abilities. Additionally, integrating complete streets practices can help encourage safe and active transportation, decrease pollution, and reduce the incidence of childhood obesity, social isolation, and serious health conditions. The Township should consider adopting a Complete Streets Resolution that supports the inclusion of safe and diverse transportation opportunities in future transportation projects.

Non-Motorized Transportation Options

Due to its rural nature, Hamlin Township has very little dedicated pedestrian and bicycle infrastructure. Sidewalks are impractical in most areas of the Township, as distances between neighborhoods, commercial areas, and public spaces are often greater than people are willing to walk. However, some of the major roads within the Township have widened shoulders and help provide a safer environment for bicyclists.

Throughout the Resilient Ludington planning process, participants frequently noted the importance of maintaining and enhancing the community's non-motorized transportation networks. The general lack of sidewalks, non-motorized trails, and bike lanes in the community were main points of emphasis during public visioning sessions. Visions for the future of the community prioritized walkability, accessibility, and improved and expanded pedestrian and bicycle facilities. The Township should consider creating pedestrian and bicycle connections between residential neighborhoods, parks, commercial areas, and adjoining jurisdictions. These connections could be made by sidewalk, shared-use pathways, or bicycle lanes and widened road shoulders.

POPULATION, HOUSING, AND INCOME

This section of the Plan describes the population, socioeconomic, and housing characteristics and trends of Hamlin Township. Generally, the data used to compile this information was collected from the U.S. Census Bureau. Population projections referenced in this section were developed by the West Michigan Shoreline Regional Development Commission (WMSRDC). The characteristics of a community's population can impact its ability to respond to changing circumstances and conditions. For additional information on the vulnerability of the community's population in relation to changing climatic factors, please see Appendix D.

Population

According to data published by the U.S. Census Bureau, the population of Hamlin Township in 2010 was 3,408 – a 6.8% increase from the year 2000. Over the same time period the overall population of Mason County grew by 1.5%, while the populations of the City of Ludington and the State of Michigan fell by 3.4% and 0.6%, respectively. The following table shows the population trends from 1990 to 2010 for Hamlin Township, the City of Ludington, Pere Marquette Charter Township, and the State of Michigan. Hamlin Township has experienced higher growth rates than its neighbors, and the State in general, over this time period.

¹ Public Act 135 (Complete Streets Legislation) Sec 10 p. 1

² American Planning Association Magazine, October 2013 Issue, Public Health Policy and Law, p.5

Population Trends - 1990-2010

Community	1990	2000	Percent Change 1990-2000	2010	Percent Change 2000-2010
Hamlin Township	2,597	3,192	22.9%	3,408	6.8%
City of Ludington	8,507	8,357	-1.8%	8,076	-3.4%
Pere Marquette Charter Township	2,065	2,228	7.9%	2,366	6.2%
Mason County	25,537	28,274	10.7%	28,705	1.5%
State of Michigan	9,295,297	9,938,444	6.9%	9,883,640	-0.6%

It should be noted that the seasonal population is not counted in the Census figures. The summer population of Hamlin Township is well above the year-round population and since many of the summer residents are on or near the lakes, they have the potential to have a much higher impact than year-round residents.

The West Michigan Shoreline Regional Development Commission (WMSRDC) developed population projections for Hamlin Township through the year 2040. While it is impossible to predict population growth with one hundred percent certainty, it is important to consider these forecasts when planning for the future. The population projections created by WMSRDC in 2011 indicate that the Township population will continue to grow, but at a slower rate than recently experienced. According to WMSRDC, these population projections were developed using the traditional cohort survival technique and historical trends.³ The following table shows the WMSRDC population projections for Hamlin Township through 2040.

Hamlin Township Population Projections

	2010	2020	2030	2040
Population	3,408	3,460	3,513	3,566
Percent Change (as compared with 2010)	0.0%	1.5%	3.1%	4.6%

An Aging Population

The age distribution of the population within a community can help identify social trends and the potential for future service needs. The following table shows the age distribution of Hamlin Township's population from 2000 to 2018. The 2000 and 2010 age distribution data was published by the U.S. Census Bureau and the 2018 age distribution projections were developed by ESRI, a geographic mapping and data services company.

³ West Michigan Regional Development Commission, October 2011, Demographic and Economic Projections, p.1

Age Distribution in Hamlin Township

Age Group	2000 Percent	2010 Percent	2000-2010 Percent Change	2018 Percent	2010-2018 Percent Change
0 to 4	4.2%	4.4%	4.8%	4.2%	-4.5%
5 to 9	5.6%	5.7%	1.8%	4.8%	-15.8%
10 to 14	7.3%	5.8%	-20.5%	5.7%	-1.7%
15 to 24	9.5%	9.0%	-5.3%	9.2%	2.2%
25 to 34	8.2%	7.8%	-4.9%	8.1%	3.8%
35 to 44	16.1%	10.8%	-32.9%	10.3%	-4.6%
45 to 54	18.1%	16.1%	-11.0%	13.0%	-19.3%
55 to 64	13.6%	19.4%	42.6%	18.6%	-4.1%
65 to 74	10.4%	12.7%	22.1%	17.0%	33.9%
75 to 84	5.9%	6.8%	15.3%	7.1%	4.4%
85 +	1.0%	1.6%	60.0%	2.2%	37.5%

In 2000, the percentage of Hamlin Township residents aged 65 and older was 17.3%. According to the U.S. Census Bureau, that number had risen to 21.1% in 2010. Additionally, population projections estimate that 26.3% of Hamlin Township's population will be 65 or older by the year 2018. Recent trends show significant increases in the total percentage of Township population for residents aged 55 and above, with reductions in total percentage of Township population for residents between the ages of 10 and 54. Age distribution projections indicate that these trends will continue in the near future with additional growth in Township population for those ages 65 and above by 2018. Generally, the Hamlin Township population is comparatively older than those of Mason County and the State of Michigan, with 44.9% of Hamlin Township's population aged 55 and over in 2010 compared with 34.5% and 26.4% of Mason County's and Michigan's respective populations in the same year.

The higher concentrations of older age groups in the Township's population could be a result of older individuals moving into their vacation homes or cottages on a full time basis following retirement. An aging population presents challenges to the Township as it considers how to plan for the future. The quality of life for seniors can be improved by providing a range of housing options that allows for aging in place, accessible transportation options, and a variety of social services.

Smaller Households

The average household size in Hamlin Township is shrinking. According to the U.S. Census Bureau, the average Township household size in 2010 was 2.37 persons per household. This size was nearly identical to the average Township household size of 2.38 in 2000. Household size declined significantly in the two decades prior to 2000, falling from a household size of 2.76 persons per household in 1980. Household sizes can be expected to stay near current levels as the Township's population continues to age and fewer families with children live in the Township.

Seasonal Housing

According to the U.S. Census Bureau, there were a total of 2,349 housing units in Hamlin Township in 2010. This was an increase of 226 housing units, or 10.6%, from the 2000 census, where there were a total of 2,123 housing units in the Township. Between 2000 and 2010 there was a slight decline (-2.0%) in occupied housing units. The number of vacant housing units in the Township rose from 780 (36.7% of total housing units) in 2000 to 909 (38.7% of total housing units) in 2010. Of those 909 vacant housing units, 774 (33.0% of total housing units) are considered as seasonal, recreational, or occasional use units. With seasonal housing and vacation homes making up one third of the Township's housing stock, seasonal population increases significantly during the summer months.



Approximately one third of Hamlin Township's housing units are seasonal or vacation homes.

Housing Tenure in Hamlin Township

	2000 Quantity	2000 Percent	2010 Quantity	2010 Percent	Change 2000-2010	Percent Change 2000-2010
Total Housing Units	2,123	100.0%	2,349	100.0%	226	10.6%
Occupied Housing Units	1,343	63.3%	1,440	61.3%	97	-2.0%
Owner Occupied	1,248	92.9%	1,337	92.8%	89	-0.1%
Renter Occupied	95	7.1%	103	7.2%	8	0.1%
Vacant	780	36.7%	909	38.7%	129	2.0%
Seasonal, recreational, or occasional use	684	32.2%	774	33.0%	90	0.7%

Income

Income levels in Hamlin Township are significantly higher than those in Mason County. According to the U.S. Census Bureau's 2008-2012 American Community Survey, estimated median household income in Hamlin Township was \$54,237 compared to \$40,957 in Mason County. These values represent rises of 30.4% and 18.0% in median household income since 2000 in the Township and County respectively. The number of individuals living below the poverty level in Hamlin Township, as estimated by the 2008-2012 American Community Survey, was 177, or 5.2% of the total population. This represents an overall decline of 1.8% of the percentage of the population living below the poverty level from the 2000 census.

Median Household Income

	Median Household Income 2000	Median Household Income ACS 2008-2012	2000-2012 Percent Change
Hamlin Township	\$41,594	\$54,237	30.4%
Mason County	\$34,704	\$40,957	18.0%
State of Michigan	\$44,667	\$48,471	8.5%

RECREATION

Hamlin Township, with its Lake Michigan and Hamlin Lake shorelines, provides a very unique opportunity for recreation. The quality of outdoor recreation is the direct benefit of a quality environment and is recognized as such. These unique features and quality environments highly influence the decisions made by vacationers and persons considering a permanent move to Hamlin Township. Along with these areas, schools, public buildings, churches, and golf courses also appear.

Hamlin Township has five Township owned parks that provide a variety of recreational opportunities to residents and visitors. These parks primarily offer passive recreational options and access to Hamlin Lake. Wilson Hill/Hamlin Lake Township Park offers additional active recreation amenities like playground equipment and horseshoe pits. The following description of the five Township parks is provided in the Hamlin Township Recreation Plan:



Long Skinny Park, located on the shores of Hamlin Lake, offers passive recreational opportunities like picnicking, to residents and visitors.

- 1. <u>Long Skinny Park</u> located on N. Lakeshore Drive between the South and Middle Bayous on lower Hamlin Lake. This park is broken up by privately owned land as well as public land. It currently features picnic areas, grills, fishing access, benches and provides magnificent views of Hamlin Lake.
- 2. <u>Middle Bayou Park</u> is a very small triangular shape piece of land. A person may have access to swimming, fishing and a bench for viewing of Hamlin Lake. Hamlin Lake is accessible by a ladder built into the seawall many years ago. A grassy area should be utilized for towels, etc. Limited parking.
- 3. North Bayou Park is located on the lower lake near the North Bayou of Hamlin Lake. This park includes a rustic boat launch. A person can fish from shore, launch a rowboat, paddle boat, sail boat or kayak. Views of Hamlin Lake can also be obtained. Limited Parking and a porta john are also provided..
- 4. <u>Wilson Hill/Hamlin Lake Township Park</u> is located on Upper Hamlin Lake. This park consists of a shelter, electricity, horseshoe pits, picnic tables, grills, boat ramp, dock, playground equipment, sand box, port-a-potty and running water fit for drinking.
- 5. <u>South Bayou Park</u>, is located on the South Bayou of Hamlin Lake. This park consists of a boat ramp, docks, picnic tables, grills, fishing, port-a-potty, sand box, and playground equipment.



The Ludington State Park is another significant recreational resource located within the township. Persons utilizing the park range from 640,000 to 740,000 annually. Park visitors utilize the facility for overnight camping and day use. The state park offers tent and trailer camping, swimming beaches on both Lake Michigan and Hamlin Lake, picnicking, extended hiking trails, and a water trail for canoe enthusiasts. The state park is partially within the Nordhouse Dunes Wilderness Area, located between Hamlin Lake and Lake Michigan. The state park is classified as a regional recreational facility. Attendance information from the park shows that many of the visitors originate from states bordering Michigan.

Other important recreational facilities in the township include private resorts. These facilities provide access to Hamlin Lake, boat rentals, and lodging. Resorts provide the opportunity for vacationers coming to Hamlin Township to remain for extended periods of time ranging from 3 to 7 days. Many vacationers are repeat customers who return to the Township annually.

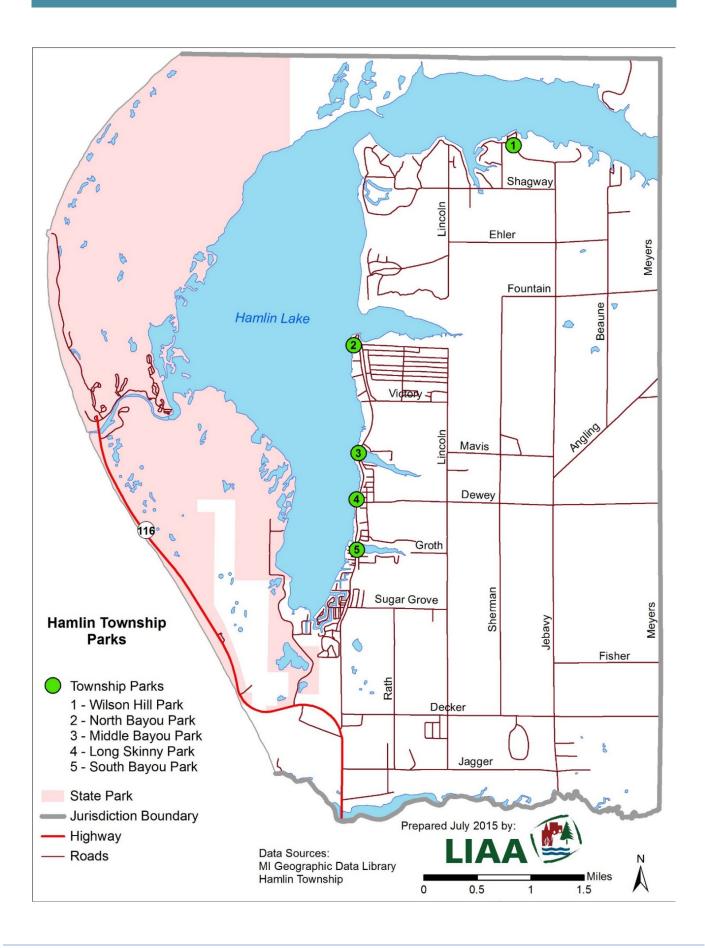
There is a desire within the Township to provide additional recreational amenities and opportunities for Township residents. The 2005 survey of Township residents and Hamlin Township Planning Commission discussions during the Resilient Ludington planning process identified a number of ideas for improving recreational offerings. Generally, there is a desire for additional public access to Hamlin Lake, specifically on the lower lake where public boat



Private resorts provide lodging and access to Hamlin Lake to vacationers and visitors to Hamlin Township.

launch facilities are lacking. There is also a strong desire for additional park property and recreational amenities within the Township. Limited parking availability near public boat launches on Hamlin Lake was also noted. The Township should continue to update the Recreation Plan and seek opportunities to expand recreational offerings within the Township. Efforts to create safe pedestrian and bicycle connections between neighborhoods and parks should also be continued.

The map on the following page shows the locations of public parks within Hamlin Township.



TOURISM

Commercial lodging visitors are generally the group that most businesses think of as the tourist population. This group includes visitors staying at campgrounds, motels, hotels, and resorts. Vacationing commercial lodging visitors are probably the most significant tourist group in the township. Generally, this group utilizes the southwest, east, and northeast shores of Hamlin Lake where well-developed lodging facilities cater to them. Information from the 2008 property assessment roll shows that there are 15 resorts operating within the township. Almost all are exclusively located on the shores of Hamlin Lake. In the past three to five years, many resorts on Hamlin Lake have dissolved. In some instances, resorts were redeveloped as a condo. Other resorts have been split and resold for private residential development.

A subgroup of these tourists could be classified as the seasonal resident population. This group is important to Hamlin Township because it tends to have a higher level of income than the overall resident population and spends dollars over a longer period than visiting tourists. Another group that makes up the tourist population consists of area or regional residents that utilize an attraction and/or service for a single day. They may drive 1 to 3 hours to fish, boat, ski, picnic, or attend festivals. Origin and destination information for a five-county area surrounding Mason County shows a significant attraction to out-state travelers. Illinois appears to be the strongest generator of travel to Mason County from outstate sources, with 31 percent. An additional 22 percent of out-state travel comes from Ohio, and 21 percent originates from Indiana.

CHAPTER 5 - NATURAL FEATURES

The natural features of Hamlin Township are some of the Ludington community's greatest assets. The Township's shorelines, beaches, dunes, woodlands, and water bodies are treasured by local residents and visitors alike. Outdoor recreational opportunities are plentiful and residential development patterns make it clear that residents enjoy living in the Township's beautiful natural settings. Over the course of the Resilient Ludington planning process, it became clear that protecting the area's natural resources is of the utmost importance. Additionally, responses from a 2010 survey of Township property owners showed that when considering future development within the Township, environmental preservation and protection were a priority for Township residents. Preservation of the Township's natural resources not only enhances the quality of life for residents, but helps sustain the local economy and region's rural character. Planning and development



Preservation and protection of the Township's natural features is an important part of maintaining the quality of life for Township residents and visitors.

decisions in Hamlin Township must consider the benefits that natural resources can provide and the impacts of their destruction or alteration. This chapter provides a description of Hamlin Township's natural resources, special environments, and preservation areas.

GEOLOGY

The physical features of Hamlin Township were primarily formed by the actions of the Lake Michigan lobe of the Wisconsin glacial ice sheet. According to the Soil Survey of Mason County, Michigan, the glacial activity "...produced five dominant land features – moraines, till plains, outwash plains, lake plains, and drainage ways" in Mason County. Winds then altered these features and created the dunes that line the Lake Michigan shoreline. Glacial deposits in the area generally range from 200 feet to 800 feet thick.²

SOILS

According to the Soil Survey of Mason County, Michigan, there are four general soil associations present in Hamlin Township:

• Dune Land – Nordhouse – Quartzipsamments Association – Dune land and gently sloping to very steep, excessively drained, sandy soils on dunes. These soils are found along the western edge of the Township between Hamlin Lake and Lake Michigan and west of Lakeshore Drive.

¹ Soil Survey of Mason County, Michigan (1995). United States Department of Agriculture Natural Resources Conservation Service and Forest Service with Michigan Department of Agriculture, Michigan Agricultural Experiment Station, Cooperative Extension Service, and Michigan Technological University.

² Beth, A. Apple and Howard W. Reeves, 2007, Summary of Hydrogeologic Conditions by County for the State of Michigan. U.S. Geological Survey Open-File Report 2007-1236, 78 p. 49

- Grattan Epworth Association Nearly level to steep, excessively drained to moderately well drained, sandy soils on lake plains and outwash plains. These soils are generally located between Hamlin Lake and Jebavy Drive, south of the North Bayou of the Lake.
- Entic Haplorthods, Sandy Association Nearly level to hilly, excessively drained, sandy soils on morains and outwash plains. A small area of these soils is located in the northeast corner of the Township along the northern edge of Hamlin Lake.
- Covert Pipestone Saugatuck Association Nearly level and undulating, moderately well drained and somewhat poorly drained, sandy soils on outwash plains and lake plains. These soils are generally located in the eastern portion of the Township between Jebavy Drive and the Township's eastern border, south of Fountain Road.
- Fern Marlette Association Nearly level to very steep, well drained, sandy and loamy soils on moraines and till plains. These soils are generally found in the northeast portion of the Township between Hamlin Lake and the Township's eastern border north of Fountain Road.

The suitability of Township soils for building site development and septic field absorption vary. Seasonal high water tables in the southeast portion of the Township limit building and septic field development. Soils along the eastern shores of Hamlin Lake vary from rapidly draining to poorly drained and cause concerns for septic field development in both cases. Rapidly drained soils can allow septic fields to contaminate ground water, while poorly draining soils can prevent the proper functioning of septic fields. Specific site characteristics will ultimately determine the feasibility of development throughout the Township and should be considered as future development is proposed.

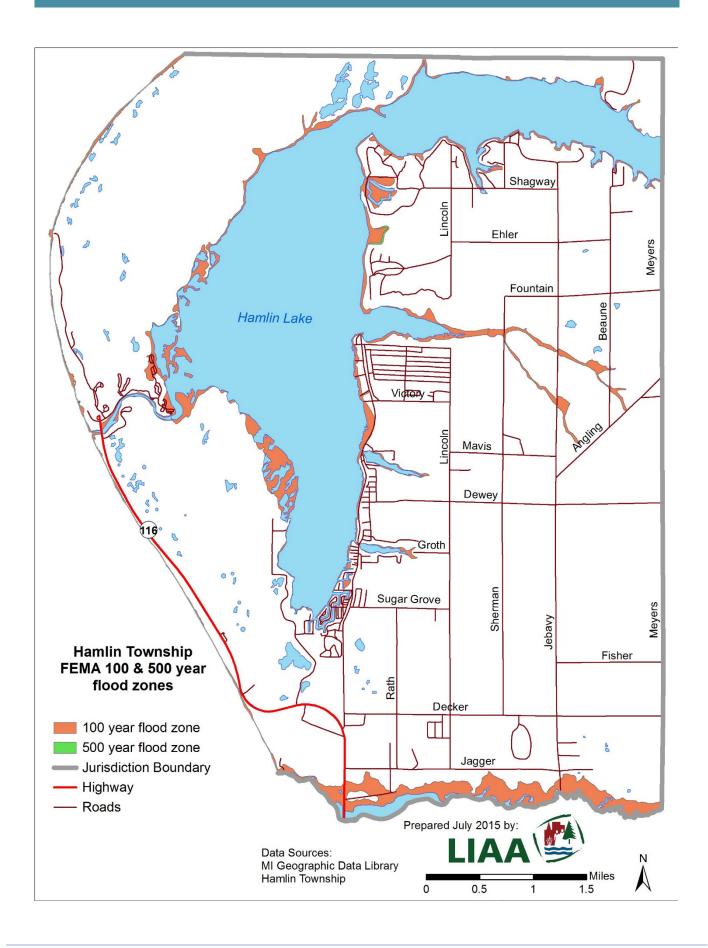
FLOODPLAIN

The Federal Emergency Management Agency (FEMA) develops Flood Insurance Rate Maps (FIRMs) for each County in the United States. According to FEMA, the FIRM is "the primary tool for state and local governments to mitigate the effects of flooding in their communities." The National Flood Insurance Program was created in 1968 to reduce future damage and provide an insurance program that would help protect property owners from losses. The FIRM shows areas subject to flooding, based on historic, hydrologic, hydraulic and meteorological data as well as flood controls. The maps identify a base flood elevation (BFE), sometimes referred to as the 100-year flood zone. These are areas with a 1% chance of flooding in any given year. The maps also identify the areas with a 0.2% chance of flooding in any given year, sometimes call the 500-year flood zone. FEMA points out that these are only probabilities, not forecasts. Therefore, there is a 26% chance of a flood occurring in the 100-year flood zone during a 30-year period, the term of a residential home mortgage.

FEMA is currently conducting a Great Lakes Coastal Flood Study. This comprehensive storm and wind study of the Great Lakes basin will ultimately be used in updating the coastal flood hazard information and FIRMs for Great Lakes coastal communities. This new hazard analyses defines cross-shore transects to represent terrain and variability of shoreline features. There is also analyses of storm-induced erosion which may occur within coastal areas.

The products, wave run up and storm surge elevations, will be used to identify coastal Special Flood Hazard Areas (SFHA) Wave run up is the vertical height above the surge elevation to which water will rush. Within the coastal SFHA, there are two primary zones: Zone AE and Zone VE. Coastal AE Zones contain a wave height component, ranging from 0 to 3 feet in height. VE Zones have a wave component that is greater than 3 feet in height.

The map on the following page shows the locations of flood zones identified by FEMA within Hamlin Township. Regional FEMA FIRMs were updated in 2014/2015.



Flooding Hazards

Generally, most flooding events occur in the winter and early spring as a result of heavy rainfall and snowmelt. Heavy precipitation events, which recent data show to be increasing in frequency and intensity, can cause localized flooding at any time of the year. Flooding can cause road closures, damage infrastructure and private property, and create safety and health risks. Additional information about community vulnerability to flooding can be found in the Vulnerability Assessment created during the Resilient Ludington planning process.

In June of 2008, a large storm dumped around 11 inches of rain on areas of Mason County in six hours.³ According to Sue Conradson's article "Friday the 13th Flooding in Northern Michigan" in *Flood News for Michigan Floodplain Managers*, local rivers flooded, roads were closed to traffic or washed out, and many local homes were damaged. The flooding stranded many Hamlin Township residents as access roads were closed. Water levels at the Hamlin Dam were measured at nearly two and a half feet higher than normal summer levels and Ludington State Park was evacuated due to the fear of dam failure and campground flooding.

It is important for the Township to consider the impacts of intense precipitation events and flooding on infrastructure, private property, and residents when planning for future development. The Township should discourage development within flood prone areas and identify ways to limit the impacts of stormwater runoff resulting from large storms.

WATER RESOURCES

One of the most unique and attractive amenities in Hamlin Township is the abundant surface water resources. Nearly 8 miles of Lake Michigan shoreline make up the western edge of Hamlin Township. An additional 32 miles of Hamlin Lake shoreline lies within the township, while its southern border is formed by over 3 miles of Lincoln Lake and Lincoln River shoreline.

Hamlin Township has 4,555 acres of surface water inland from Lake Michigan. This equals 20.7 percent of the total township surface area in rivers, streams, lakes, and reservoirs. Lakes make up 98.7 percent of the total surface water.

Hamlin Lake Study

The Hamlin Lake EPA Phase 1 Diagnostic-Feasibility Study was completed in August of 1992. This document is the culmination of 2 years of tributary and in-lake sampling of Hamlin Lake. The study encompassed the entire Big Sable River watershed but focused heavily on sub-basins immediate to Hamlin Lake.

The following summary information is based on the findings and recommendations of the lake study. Data from the study was used throughout this plan in analyzing land use alternatives for Hamlin Township. Joint databases were maintained for the Hamlin Township Land Use Plan and the Hamlin Lake Study for the correlation and exchange of data sets between the two projects. This approach allowed in-depth information concerning land use practices and impacts to water quality to be incorporated into the planning process.

Diagnostic study findings indicate that water quality conditions in Hamlin Lake are dictated largely by external (i.e., watershed) influences. Based on sampling conducted during the course of study, the lake does not exhibit significant or prolonged thermal stratification during Ice free periods. As a result of the intermittent mixing of the water column, sufficient dissolved oxygen levels are maintained throughout the water column to inhibit internal phosphorus release from profundal (i.e., deep water) sediments. Thus, internal phosphorus recycling and fertilization In Hamlin Lake is largely mitigated by natural processes (i.e., lake morphometry and wind action).

Detailed historical studies of Hamlin Lake have shown the lake supports highly productive macrophyte (i.e., rooted plant) and fishery communities (Michigan Department of Conservation, 1932, 1943). The lake

³ Conradson, Sue. "Friday the 13th Flooding in Northern Michigan." Flood News for Michigan Floodplain Managers (Summer, 2008).

continues to maintain abundant plant growth and an excellent warm-water fishery. The type and distribution of aquatic plants provide habitat and cover critical to sustaining a quality fishery. Although, in select areas, nuisance plant growth does occur. In terms of water quality and trophic state, Phase 1 sampling results indicate the lake is borderline mesoeutrophic.

The watershed of Hamlin Lake is approximately 23 times the surface acreage of the lake. Of the tributaries monitored as part of the Phase 1 sampling program, the Big Sable River contributed the largest phosphorus load to Hamlin Lake. Due to the considerable base flow and the vast size of the Big Sable River subbasin relative to the other minor tributaries, this finding was not unexpected. Although Dennis Creek does not represent a major source of pollution input to Hamlin Lake, the creek consistently exhibited substantially elevated phosphorus concentrations when compared to the Big Sable River and the Middle Bayou drain. The increased concentrations measured in Dennis Creek are likely related to the predominance of agricultural activity in the Dennis Creek watershed sub-basin.

The impact of runoff and septic seepage from shorelands adjacent to Hamlin Lake is significant; in that, water quality problems associated with shore land activities tend to be manifested in localized areas near shore. Most often, it is the near-shore problems that most lake residents consider to be of paramount concern since excessive plant growth or bacterial levels diminish the recreational and aesthetic appeal of the lake. Given the relatively high density of development adjacent to Hamlin Lake and the limited suitability of area soils to adequately treat septic system effluent, there is a real potential for excessive pollution loading and near-shore water quality problems.

A model used to estimate the impact of phosphorus loading to Hamlin Lake predicted that, at current loading levels, the ambient phosphorus concentration in the lake is at a level slightly below the eutrophic threshold concentration of 20 microgram/liter. This data suggests that a small increase in phosphorus loading to Hamlin Lake above current levels will cause the lake to rapidly shift to a more eutrophic state. A eutrophic lake is a body of water whose oxygen level is depleted because of organic pollutants (e.g., lawn and farm chemicals, septage, etc.) This should be of primary concern because it can fundamentally shift the balance of the lake. A eutrophic lake will often experience depleted fish populations and higher weed growth which can severely impact the quality of recreational experiences on the lake. In severe cases it can impact public health. (e.g., no body contact warnings). In light of this consideration, it is imperative that a plan be implemented to reduce controllable sources of pollution loading from the watershed to a level that will preserve and protect lake water quality over the long term.

To this end, it was proposed that the Hamlin Lake management plan include the following components:

- Shoreland Management Practices
- Geographic Information System (GIS) Mapping and Analysis
- Land Use Planning and Zoning
- Wetlands Protection
- Agricultural Best Management Practices (BMPs)
- Forest Land Management
- Conservation Easements
- In-Lake Improvements
- Water Quality Monitoring

Groundwater

Groundwater and its availability are critical to the sustainability of Hamlin Township's rural population. Mason County is fortunate to have Lake Michigan as an available water source; however, the expansion of this source to Hamlin Township is not likely to occur in the near future. For this reason, Hamlin Township will remain largely dependent on groundwater as its primary source of potable water.

Glacial deposits are a very complex series of unconsolidated materials that include sand and gravel. Water that occupies the pore space within these deposits and the underlying bedrock is groundwater. Most of Michigan's groundwater is produced from surficial glacial sands and gravel.

Both the composition and thickness of glacial deposits vary greatly. These glacial deposits range from 200 feet to over 700 feet in thickness. This is pertinent when considering the availability of glacial drift aquifers. Glacial drift aquifers are layered throughout the drift formations and tend to be highly mineralized.

This then, makes the availability and vulnerability of glacial drift aquifers important to the drinking water supply for Hamlin Township, since glacial drift aquifers are sensitive to contamination from surface activities. There were two sites in Hamlin Township with groundwater contamination by the brine from well-drilling operations. Both of these sites have been cleaned up.

Surface Water and Watersheds

There are three river basins within Hamlin Township. The Little Manistee River basin lies north of Hamlin Lake, along the crest of the Lake Michigan barrier dunes system to the north side of Big Sable Bay.

The Big Sable River basin encompasses most of the central section of the township. Approximately 7 percent of the basin is covered by steep slopes occurring primarily around Hamlin Lake. There are numerous areas of wetlands within the basin, with the largest concentration being located in the west portion of the basin.

The Lincoln River basin occupies a small portion of the southern part of the township and also features some steep slopes. Numerous wetlands are scattered throughout the basin and along Lincoln River. This basin is classified as having severe erosion potential in 51 percent of its land area.

Nonpoint source pollution problems have become a greater concern in recent years. Nonpoint pollutants result from a wide range of sources associated with such activities as urban development, mining, agriculture, septic system failure, and construction projects. These sources may contribute pollutants, such as sediments, nutrients, pathogens, chlorides, and toxins.

Although an assessment of these problems is beyond the scope of this plan, some key examples of possible concern have evolved and now require attention. These include:

- Septic tank failure and the inability of soil to absorb containments prior to reaching ground and surface water.
- County drains and natural drainage systems that are inadequate and accentuate problems such as
 flooding and ponding. However, in 1986-1987 the Black Bass Bayou Drain was constructed in Hamlin
 Township which runs in the southern portion of Hamlin Township leading to the South Bayou of Hamlin
 Lake
- Wetlands that are extensive in the township and that provide an opportunity for groundwater recharge, wildlife refuges, and pollution abatements.
- Lakeside residents and property that have special problems. Hamlin Lake has been degraded due to non-point pollution problems. According to the 2008 Lake Water Quality Assessment for Impaired and Threatened lakes-Mason County, the MDNR describes an impaired lake a "falling to meet one or more of the state water quality standards." Hamlin Lake falls within the impaired lake (freshwater) category and is experiencing problems supporting recreational demands. Hamlin Lake (in the Big Sable River Watershed) is listed as not supporting the fish consumption designated use due to mercury in fish tissue.

(An impaired or threatened water body is any water body that is listed according to section 303(d) of the Clean Water Act. A water body is considered impaired if it does not attain water quality standards. Standards may be violated due to an individual pollutant, multiple pollutants, thermal pollution, or an unknown cause of impairment. A water body is considered threatened if it currently attains water quality standards but is predicted to violate standards by the time the next 303(d) list is submitted to EPA. The 303(d) list is a comprehensive public accounting of all impaired or threatened water bodies, regardless of the cause or source of the impairment or threat.)

Hamlin Lake offers a smorgasbord of fish. Tiger muskie, northern pike, large and small mouth bass, perch, crappie, blue gill and over 600,000 walleyes, planted several years ago. The fishing doesn't cool down in the winter either. Tip-ups and shanties dot the ice as fisherman pull in pan fish and walleye.

Seasonal Lake level Change for Hamlin Lake begins April 1st unless there is still ice on the lake. The Michigan Department of Natural Resources and the Ludington State Park begins the process of raising Hamlin Lake to summer levels. The process usually takes two to four weeks, depending upon precipitation during the period. The summer level is maintained at approximately two feet above the winter level.

SPECIAL ENVIRONMENTS

The environmental conditions in an area such as Hamlin Township are paramount when considering the development of future land use policies. By addressing environmental aspects, decisions can be made that ensure the future health and economic viability of a community. Lack of proper consideration for natural systems may result in expensive mitigation measures and loss to overall quality of life that is so vital to this community. This section will attempt to address those natural systems within the township that could have the greatest impact on or be impacted by future land use practices.

Influences on natural systems are not bound by governmental borders and, thus, may require multijurisdictional cooperation and regulation in order to completely address impacts upon them, This is very important when considering programs that are developed at the township level for the purpose of environmental protection. This will be especially important when considering the preservation of Hamlin Lake and associated surface water drainage systems.

The regions outlined on this map were designated by using a combination of steep slopes, wetland, and floodplain information. Many of these environmentally sensitive areas are associated with the vulnerability associated with groundwater contamination; severe erosion; unique natural resources; and general public health, safety and welfare.

Wetlands

Significant wetland complexes are present in many areas within Hamlin Township. Wetlands are described by the State of Michigan as being land characterized by the presence of water at a frequency and duration sufficient to, under normal circumstances, support wetland vegetation or aquatic life and are commonly referred to as bogs, swamps, or marshes.

In general, many wetlands are associated with the rivers, lakes, and streams in Hamlin Township. Significant wetland acreage exists around Hamlin Lake, particularly in the vicinity of the North Bayou. The majority of these wetlands are classifies as wooded and contain woody vegetation of either shrubs or trees.

Wetlands are a valuable ecological resource that can function in a variety of ways and can provide for many public benefits. They may provide essential breeding, nesting, and foraging grounds for fish and wildlife; and they house threatened and endangered species while providing various recreational opportunities for a wide cross-section of the population. Wetlands stabilize the water table within a watershed through surface water retention. Certain wetlands may minimize stream bank erosion while filtering out nutrients and sediments from surface water runoff. They may act as groundwater recharge areas for aquifers.

Wetlands are protected under a variety of state and federal laws. The Michigan Wetlands Protection Act (P.A. 203 of 1979) provides for the preservation, management, protection, and use of regulated wetlands. A regulated wetland falls under the provisions of the act if it meets one of the following criteria:

- If it is contiguous to the Great Lakes and/or to any inland lake, pond, river, or stream;
- If it is more than 5 acres in size and in a county with a population of 100,000 or more;
- If it is more than 5 acres in size and in a county of less than 100,000 persons where the MDNR has completed its wetlands inventory for that county; or
- If, regardless of its size or location, it is designated by the MDNR as an environmentally important area.

Mason County neither has a population of over 100,000 nor does it have an MDNR-conducted wetlands inventory. This leaves many of the noncontiguous wetlands within the township unprotected by the state permitting and review processes.

In 2014, the Michigan Department of Environmental Quality (MDEQ) completed a Landscape Level Wetland Functional Assessment (LLWFA) for Ludington area watersheds. The LLWFA utilizes National Wetland Inventory (NWI) data and assesses wetland function within the Ludington area, including Hamlin Township. The LLWFA evaluated a wide variety of wetland functions including:

- Flood Water Storage;
- Streamflow Maintenance;
- Nutrient Transformation:
- Sediment and Particulate Retention;
- Shoreline Stabilization;
- Ground Water Influence:
- Wildlife Habitat:
- Carbon Sequestration; and
- Pathogen Retention.

The LLWFA illustrates the loss of area wetlands over time that perform these valuable functions. In order to protect water quality, limit flooding, and preserve wildlife habitat, the Township should carefully consider the impacts of future development on remaining wetlands.

The map on the following page shows the locations of wetlands and potential wetland restoration areas within Hamlin Township.

Forest and Farmlands

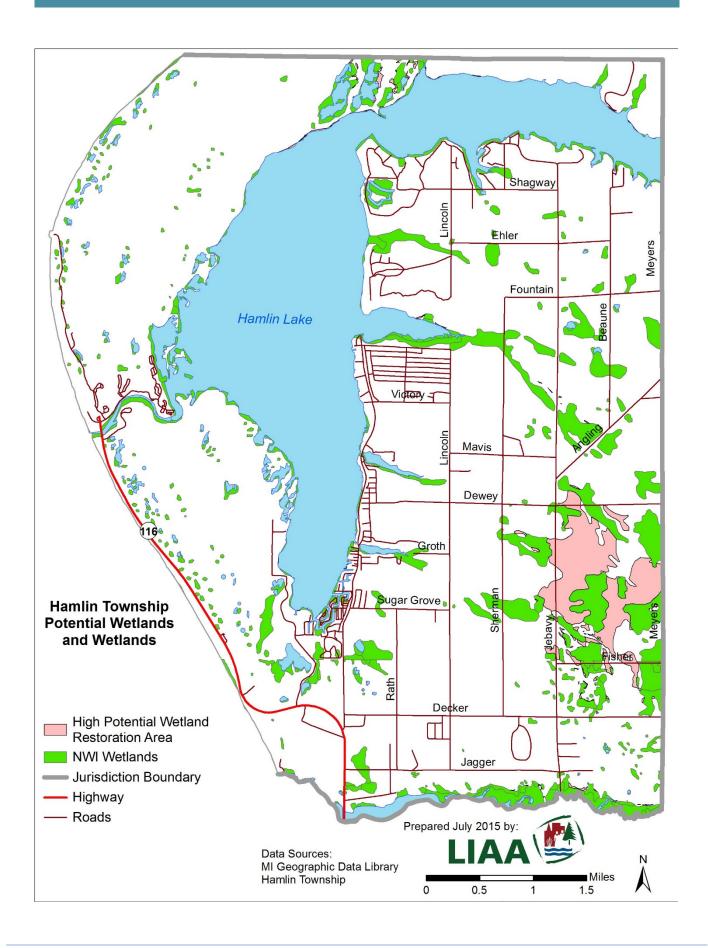
Much of Hamlin Township is occupied by mature forest and both deciduous and coniferous woodlands. By glancing at the existing land use map or aerial photograph one can easily see the extent of wooded areas. The extent of farmlands is far less obvious. In fact, prime soil that support optimum crop yield are all but nonexistent in the township with minor exceptions inland from Lake Michigan. There is a micro-climate zone, however, that supports specialty fruit and vegetable crops. There are few orchards and other truck crops in the central and eastern areas of the township.

Unique Habitats and Species

The Michigan Natural Features Inventory (MNFI) collects, analyzes, and updates information regarding rare and endangered species as well as significant ecological communities. This information is essential when planning for sensitive land development; the conservation and management of natural areas; and the project, permit, and site plan review procedures.

These unique ecological features have state, national, and international significance. In some instances, they may be protected under federal or state regulations. Protection from degradation is however, in most cases, tenuously inadequate. For this reason, site-specific information is regarded as sensitive and will not be presented in this document. This data was used in the determination of future land uses for Hamlin Township in accordance with this plan.

A concentration of these sites exists within the state owned land of the Ludington State Park. This is partially due to the uniqueness of this shoreline community but is more probably a function of concentrated research efforts on state-owned and managed lands. As of October of 1988, 50 elements of either special concern or threatened or endangered species and/or communities were listed by MNFI system for Mason County



PRESERVATION AREAS

Hamlin Township has a very high percentage of unique and environmentally sensitive land types. State and federal protected species and ecologically significant areas are also prevalent. These are important natural features to the township. They include such areas as wetlands, floodplains, lake, river, shorelands, steep slopes, critical dune areas, and forest. They are the primary reason for the quality of life In Hamlin Township and should be preserved or left largely undeveloped.

An important goal of this plan is to protect and preserve the natural beauty and environmental quality of the township. The township's zoning regulations should provide strong regulations to protect natural features and environmentally significant areas. Overlay zones, environmental regulations, and design standards can all be incorporated into the zoning ordinance. The township should also, where appropriate, adopt separate "police power" (non-zoning) regulations. The protection of the natural environment and the retention of open space/undeveloped lands are important elements of this plan.

Sand Dunes

The state of Michigan recently enacted the Michigan Sand Dunes Protection Act. (P.A. 222), as amended, to control use and to preserve critical sand dune areas through zoning regulation. Currently, where critical dune areas fall under the Township's jurisdiction, the review process, according to the provisions of the act, is being carried out by the MDNR.

The majority of the designated critical dune areas lie within the Ludington State Park and the Nordhouse Dune natural areas. Both recreational areas fall under state jurisdiction. Portions of the critical dune areas southwest of Hamlin Lake and are in private ownership. Private lands within critical dune areas are held by Epworth League Assembly, Sargent Mineral Company, and Piney Ridge Resort.



A majority of the Township's sand dunes are located on lands owned by the State of Michigan. Photo source: U.S. Army Corps of Engineers.

Nearly the entire area west of Hamlin Lake is classified as a critical sand dune area by the MDNR and falls under the Sand Dune Protection and Management Act (Act 222 of 1976). As discussed earlier, most of the land falls under state ownership. However, there is a significant amount of private property lying within the critical dune area in the southwest portion of the township. Special provision in the form of permitting requirements and site plan review standards should be developed for this area. The township should consider creating a Lake Michigan Shoreland District in the zoning ordinance that would incorporate necessary development standards and environmental regulation to protect the Integrity of these lands. Site condominium and soil erosion control regulations may be useful regulatory tools for these areas.

Wetlands

A significant area of the township contains hydric soils and wetlands. A large area of hydric soils with an associated high water table exists in the east-central portion of the township. Wetlands lie within this area and are associated with natural drainage corridors to the North and Middle Bayous of Hamlin and Lincoln Lakes. Large areas of wetlands have been lost to development along Hamlin Lake and its drainage area. These wetlands are vital to the environmental integrity of Hamlin Township's surface water hydrology.

The township should encourage a "no net loss" policy for the preservation of wetlands and the protection of surface water quality. A local wetlands ordinance would allow the township to incorporate local review standards and to develop criteria into a comprehensive wetlands program that would include mapping and evaluating wetland functions throughout the township. Hamlin Township should also work with neighboring jurisdictions to prevent degradation of the wetlands from upstream impacts.

Environmentally Constraining Areas

These areas consist of steep slopes, soils having poor septic system capabilities, and floodplains. Limitations to development exist within these areas. Problems associated with erosion, surface and groundwater degradation, utilities placement, and potential property loss can be substantial. Overdevelopment in these areas can be very detrimental to the function of natural systems within the township. This would be in direct conflict with the goals and recommendations of this plan as they pertain to the protection of natural resources and community character.

Site plan review criteria should present detailed information on such things as soli types and capabilities, slope, drainage, and existing vegetation. Soil erosion and stormwater regulations would also aid in minimizing off-site impacts. Areas with severe limitations should remain undeveloped and should be designated as permanent open space.

Agriculture

Much of Hamlin Township is not suited for agricultural production. Only 1 percent of the township is considered to be actively farmed. However, the prime agricultural area is located within Section 11. In fact, over 90 percent of the active farmland can be found in a single section and is entirely in the form of fruit production (approximately 150 acres). The fruit production in Hamlin Township can be classified as unique farmland and should be preserved as such. By designating this area as unique farmland, the township can convey its intention to have it remain as an active fruit farming operation. Provisions should be made in the zoning ordinance to discourage residential development in this area. However, there are 5, 10, 15 acre parcels with single family dwellings. Sections 35 and 36 allows activities such as "U-Pick" operations or fruit stands.

CHAPTER 6 – REGIONAL SETTING AND POTENTIAL GROWTH

When planning for future development in Hamlin Township, it is important to recognize the Township's relationship to surrounding communities, whose growth and development can impact conditions in the Township. Recent development within the Township has primarily been residential in nature, as regional commercial and industrial growth have occurred in adjacent communities. This chapter contains descriptions of existing regional conditions and potential growth that are relevant to planning efforts in Hamlin Township.

NEIGHBORING LAND USE AND ZONING

Land uses surrounding Hamlin Township can best be described as having a very mixed and interdependent relationship. In addition to Hamlin, Grant, and Pere Marquette Townships; the Villages of Custer and Freesoil; and the City of Ludington and Scottville have their own zoning regulations. The remainder of the county falls under county regulation.

The Ludington growth area, directly south of Hamlin Township, has undergone considerable transformation in recent years and now contains nearly one-half of the county's population. Commercial activity has increased considerably immediately east of Ludington, with the development of several large-scale shopping areas and lodging facilities. Industrial activity has also increased within the Ludington and Pere Marquette Township Industrial Parks.

Changes in zoning and land use policy have changed along the US-10/31 corridor more rapidly than anywhere else. In recent years, many acres have been rezoned to commercial use from less-intensive residential and agricultural uses. Commercial activity has extended toward Hamlin Township north along Jebavy Drive from US-10. This area has been rezoned for commercial use by Pere Marquette Township.

TRANSPORTATION LINKAGES

The US-31 limited access highway terminates east of Ludington and just south of Hamlin Township. The eastwest US-10/31 linkage from Ludington to Scottville has recently been upgraded to five lanes to accommodate the northward extension of the US-31 highway. These two routes provide excellent linkage to remaining state and interstate transportation systems. The eventual completion of the US-31, limited access highway between Holland and Grand Haven will have a significant impact on the US-10/31 confluence. In addition, the Michigan Department of Transportation (MDOT) is considering a route study for extension of US-31 north from the existing termination point to the Mason-Manistee County line.

Transportation corridors represent not only the circulatory "spine" of the township but also potential commercial (as well as residential) development opportunities. In some cases, they represent current or potential utility corridors. Policy guidelines for the development of major transportation corridors need to be carefully thought out, especially regarding such things as building setbacks, curb cuts, driveway spacing, strip commercial development, and frontage requirements. It may be helpful to visualize each transportation corridor as a type of development "watershed."

SEWER AND WATER SERVICES

The City of Ludington provides water and sewer to an expanding service area. Pere Marquette Township's portion of this system provides these services to the area north of Ludington to the Hamlin Township line (the Lincoln River). Services also extend east along the US-10/31 corridor and include the City of Scottville. A 4-inch force main along M-116 provides sewer service into Hamlin Township for the Ludington State Park

and the Tamarack Village Trailer Park. The City of Ludington provides primary and secondary treatment for sewage.

The source of public water for the distribution system is Lake Michigan. Water supply utility information shows this service area to be limited to the City of Ludington, parts of Pere Marquette Township, east along the US-10/31 service route in Amber Township, and to the City of Scottville.

REGIONAL PARKS AND RECREATION

Ludington State Park

The Ludington State Park draws about 700,000 visitors per year. This level of activity is expected to remain constant in coming years. The Ludington State Park consists of 5,300 Acres and is entirely located in Hamlin Township.

Nordhouse Dunes Wilderness Area

This area represents a conservation area owned primarily by the State of Michigan. It has the potential to Increase in popularity. The United States Congress designated the Nordhouse Dunes Wildemess in 1987 and it now has a total of 3,450 acres and is managed by the Forest Service.

Over the past 13,000 years, as the level of Lake Michigan rose and fell, winds swept the exposed sand from the lakebed into a series of rolling dunes, some reaching 140 feet in height. Most of the present dunes date back between 3,500 and 4,000 years.

A wide beach lies between the waves of water and the waves of sand. Unlike the vegetation at most active sand dunes, here you'll find woody patches of juniper, stunted jack pine, some small stands of northern hardwoods, and dune marshes with wetland species such as hemlock and larch. Many of the dunes are lightly covered in dune grass. Set along approximately 7,300 feet of undeveloped shoreline, Nordhouse Dunes is the only designated Wilderness on Michigan's Lower Peninsula.

A limited trail system of about 14.5 miles is minimally marked and sometimes hard to follow. The Nordhouse Dunes Trail (1.4 miles) offers the best peek at the dunes. The trails can be accessed from the nearby Lake Michigan Recreation Area on the northern boundary.

Manistee National Forest

The forest provides habitat and, therefore, hunting opportunities.

Camping and Day Use Areas- A wide range of camping opportunities are available on the Huron-Manistee National Forests. There are 37 developed campgrounds and 2 Day Use Areas, in addition to over 25 primitive campgrounds. Dispersed camping in a tent is allowed in most areas of the forest.

Hiking, Horseback Riding - Over 330 miles of trails 'are available for hiking on the Huron-Manistee National Forests. Some of which are shared trails with horses. The hiking and horse trails are often linear, while the interpretive (nature) trails are usually loops of varied lengths.

Biking - There are over 100 miles of bike trails across the forest. Some trails are shared with hikers and horseback riders.

Off-highway Vehicle Trails and Areas - The Huron-Manistee National Forest, in northern lower Michigan, provide ORV enthusiasts an opportunity to ride off road vehicles on superb forest trails. Following the legal guidelines will ensure the ride is safe and enjoyable. For questions relating to state laws and regulations please visit the MI-DNR website, you will also be able to obtain an ORV sticker and maps of state trails from this website.

Canoeing and Boating - There are 4 Nationally Designated Wild and Scenic Rivers on the Huron-Manistee National Forests and many other rivers, lakes, streams, and ponds. Canoeing and small boating (under 20hp and/or 26ft) are the most prevalent boating opportunities on water within the boundaries of the Huron-Manistee National Forest. Please visit the Michigan DNR website for detailed information on what is needed for legal boating in

HOUSING

A land use problem occurring throughout the area is the recent proliferation of small-lot residential development scattered throughout rural areas. This reduces rural character and environmental quality while increasing the cost of providing community services. Hamlin Township's key location and close proximity to the growing economic center of Ludington will likely create an increase in the demand for housing as development continues. Another pressing regional housing issue is the need for additional senior housing. With the area's aging population, local municipalities need to consider ways to provide a variety of housing options to meet the needs and desires of older citizens. The existing development patterns and presence of municipal utilities in the City of Ludington and Pere Marquette Township make these place more suitable for the development of large-scale senior housing developments.

CHAPTER 7 - POLICY, MANAGEMENT, AND RECOMMENDATIONS

Planning, management, and township policies can lead to local programs that identify, incorporate, and utilize natural systems in land use practices. This approach is fundamental to the township if it is to exist as a unique place to live or visit. The natural amenities of the township and their various ecological functions are a high priority consideration.

Planning and management guidelines can be used to maximize the quality of life and provide a more pleasing environment. Without proper planning and management, haphazard development is almost certain to have a negative impact.

By establishing a sound information base and a well-conceived plan, local governments and citizens can provide the best available means for protecting and preserving resources. Such a planning program should encourage and facilitate desirable uses of the environment as well as regulate and limit undesirable land uses and development practices.

WETLANDS MANAGEMENT

Wetlands pose a great limitation to development for several reasons. Their water table makes them unsuited for septic disposal systems, and In order to build on them, landfill is required, which destroys the wetland and eliminates its role in the ecological system. As valuable as wetlands are, they are a declining resource. Nationally, about 50 percent of all wetlands have been lost. Wetlands serve as valuable habitat for wildlife, spawning grounds for fish, water purifiers, groundwater recharge areas, temporary storage basins for stormwater and floodwaters, and for a myriad of other purposes. Declines in certain fish and wildlife can be directly attributable to the loss of wetland habitat.

The following measures can be effectively translated into a sound wetlands management strategy:

- Mitigation is an increasingly common component of applications and permits. Mitigation refers to methods for eliminating or reducing potential damage or destruction to wetlands, ways to repair or restore unavoidable damage, and creation of new wetlands to offset the loss. The most common procedure is to compensate for wetlands destroyed by creating new habitat on site or, where necessary, at another nearby location. A balance between development and environmental protection is what is demanded. Development and Implementation of reasonable mitigation measures Is critical to wetlands protection programs.
- Avoidance, at all costs, is another option in attaining environmental protection and quality land development that proceeds efficiently according to all applicable federal, state, and local regulations.
 Many people believe the easiest way to plan and get efficient development approvals Is to avoid wetlands altogether.
- Wetlands banking is similar to maintaining a bank account. A developer undertakes measures to create, restore, or preserve fish and wildlife habitat in advance of an anticipated need for mitigation for projected construction impacts. The benefits attributable to these measures are quantified, and the developer receives mitigation credits from the appropriate regulatory and/or planning agencies. These credits are placed in a mitigation bank account from which withdrawals can be made. When the developer proposes a project involving unavoidable loss of wetland acreages, the losses (debits) are quantified using the same method that was used to determine credits; and a withdrawal equal to that amount is deducted (credited) from the bank. This can be repeated as long as mitigation credits remain available in the bank.
- Wetland development regulations should be developed as a township ordinance and linked with the MDNR. The primary benefit from development and administration of local wetlands protection program is greater control over the protection and alteration of wetlands within the community. State law authorizes municipalities to provide more stringent definition and regulations of wetlands than

provided by the MDNR. At a minimum, the ordinance should include provisions requiring any proposals for development to obtain the necessary state and federal permits, including any wetlands permits prior to consideration for a zoning permit of any kind. There should be requirements that all newly created lots be buildable (i.e. that lots must have sufficient non-wetlands area to meet minimum size, setback, parking, and accessory use requirements). The review process should guarantee that newly created lots and development applications meet the standards of the term "buildable lot" as defined in the ordinance and a statement that lots created by circumventing this process are not legally developable or eligible for variance review. In addition, the township should consider:

- Ensuring that local subdivision controls require that all lots be buildable and that wetlands be identified on all information that is submitted for review.
- Having available, for display, full size color drawings of township wetlands.
- Establishing, as goals, the concept of avoidance of wetlands for development.
- Coordinating wetlands planning and enforcement with adjacent units of government,
- Appointing local officials to coordinate wetland permit review with the MDNR.
- Initiating improved mapping of wetlands on a parcel-by parcel basis.
- Disseminating wetlands information in a campaign to educate the public.

Wetlands management should be an integral part of the township's goals regarding protection from unsuitable growth and development as well as a means to preserve water quality.

Most of the wetlands within the Hamlin Lake watershed are contiguous to the Big Sable River, Hamlin Lake or minor tributary streams. These wetlands act to cleanse and purify runoff waters in addition to providing cover and habitat for fish and wildlife. The extensive wetlands in the vicinity of the headwaters of the Big Sable River appear to be providing a recharge area that sustains the river's base flow. Considering the impact of the Big Sable River on the water quality of Hamlin Lake, and protection of the wetland area contiguous to the river is essential of long-term water quality protection.

Recently, the Michigan Department of Environmental Quality performed a Landscape Level Wetland Functional Assessment for Ludington area watersheds. The LLFWA identifies the locations of wetlands in the region, where wetlands have been lost over time, and the types of functions that wetlands perform. The LLFWA can be a valuable tool for the Township for managing its wetland resources. The map in Chapter 5 of this plan illustrates the National Wetland Inventory (NWI) data for wetlands within Hamlin Township.

WATERSHED MANAGEMENT

Some evaluation must be made of the efficiency of drainage between watershed and water body. A very small percentage of the total area of a watershed actually borders directly on the body of water, yet the land area that is drained is linked by a flow system that transmits water from all land in the watershed. If, for example, improved drainage channels do not connect the bulk of a drainage basin to the water body, the movement of runoff may be slow, and much of the water may be retained, infiltrated, or evaporated. On the other hand, if the basin is interlaced with channels that together form an efficient flow network that is connected directly to the water body, little water is lost en route. Smaller subbasins with rapid drainage should be protected from their potential to be major polluters by limiting the extent and density of development.

The following is a list of five basic guidelines for subbasin management:

- 1. Prohibit channelization of wetlands.
- 2. Minimize storm sewers, ditches, and channel improvements: instead promote local disposal of stormwater by alternative means, such as natural and regional systems.
- 3. Minimize the total area of impervious surface cover; instead, encourage the use of stone, brick, and similar pervious materials where hard surfaces are necessary.

- 4. Guide development into the higher parts of subbasins, and maintain forest and other natural features in the lower parts of subbasins.
- 5. Where the upland portions of subbasins are steep and linked directly to the lake by a stream, provide some means of reducing runoff (e.g. detention ponds or flow dissipators).

It would be unreasonable to expect a planning program to implement all of these guidelines successfully. The planning objective is to reduce the impact of developments as much as possible, while accommodating development consistent with the established goals.

The subbasin part of a watershed management program should focus on means of minimizing change in the following three components:

- 1. Discharge
- 2. Water Quality
- Flow Efficiency

Although any form of development will inevitably produce changes in these factors, the planning program should strive to minimize the negative influence that overdevelopment has on overall water quality.

One of the difficulties inherent in uniform zoning safeguards is that the Hamlin Lake watershed encompasses several zoning jurisdictions (i.e. Hamlin, Victory, and Grant Townships, the Village of Freesoil, and Mason and Lake Counties). Rather than attempting to work with the various units of government on an Individual basis, the dissemination of information related to water quality protection and environmental planning may be facilitated through establishment of a watershed council. Under provisions of the Local River Management Act (P.A. 253 of 1964), a watershed council can be established by the state Water Resource Commission upon petition of 3 or more local units of government lying wholly or partially within the Hamlin Lake (Big Sable River) watershed. Each governmental unit within the watershed may have a representative on the council. The act enables local units of government to cooperate in planning and implementing water management programs within their common watershed. Specific land used controls and environmental zoning provisions should be drafted; and steps should be taken to promote coordination of environmental planning throughout the watershed. The Township should work with other regional jurisdictions and entities to investigate the creation of a watershed council to promote watershed and water quality within the region.

LAKE MANAGEMENT

Lake management is intended to provide guidelines and outline methods for management of the Hamlin Lake watershed to protect it from degradation, while making it available for public appreciation. Lake management policies should involve implementing a program that actively promotes the use of phosphorus-free lawn fertilizers, proper lakeside landscaping, and septic system maintenance. Specific guidelines for each element of the program can be developed, and this information mailed to all lake residents on an annual basis. Management practices can also be incorporated into Hamlin Township's web site and into future issues of the Hamlin Currents; a newsletter published quarterly by the Hamlin Lake Preservation Society.



Regulations for waterfront properties in Hamlin Township are provided in the Waterfront Overlay District in the Township Zoning Ordinance.

The Hamlin Township Zoning Ordinance provides land use and design regulations for waterfront properties through the use of the Waterfront Overlay District. These regulations are applied to properties in addition to the standards of the underlying zoning district. The Waterfront Overlay district prohibits certain detrimental uses and activities, calls for increased setbacks from bodies of water, and requires the maintenance or implementation of shoreline vegetative buffers. The Waterfront Overlay District standards apply to all properties within five hundred feet of Hamlin Lake, Lincoln Lake, and the Lincoln River.

In-lake improvements are proposed to consist of nuisance aquatic plant control, beach construction in select locations, and limited stump removal. The improvements are proposed to be financed by individual property owners (as opposed to public funds). The Hamlin Lake Preservation Society or Hamlin Lake Board may provide technical assistance and guidance. Specifically, the Lake Board (through its consultant) would provide information on preferred plant control and stump removal methods and MDNR permit acquisition requirements. Again, Information on construction methods and MDNR regulatory criteria would be provided to interested property owners.

Water quality monitoring of Hamlin Lake and its major tributaries is being recommended to expand on the data collected during the Phase 1 study. While extensive sampling of Hamlin Lake and select tributaries was conducted during the course of the initial study, the sampling program was not of sufficient duration to monitor long-term changes in lake water quality. Also, in recent years, invader species, such as zebra mussels, have colonized the Great Lakes. It is likely that Invader species (not necessarily zebra mussels) will soon Infest Hamlin Lake as well. In light of these considerations, the objectives of the proposed water quality monitoring program for Hamlin Lake are as follow:

- To detect water quality trends in the lake's upper and lower basins;
- To monitor current biological conditions and invasions of exotic species;
- To detect water quality trends in tributary waters; and
- To locate and characterize areas for oil, gas, brine, and septic contamination.

The lake is currently being used primarily for residential and resort development. Planning for this increased pressure is a prudent action to prevent problems before they arise. If properly managed and promoted, Hamlin Lake can be unique well into the future.

RECREATION MANAGEMENT

The following enhancement techniques can be used to effectively preserve, protect and enhance the recreational opportunities In Hamlin Township:

- Better Lake Access
- Bicycle and Pedestrian Trail System
- Historical Features Promotion
- · Park Development

The 32 miles of Hamlin Lake shoreline In Hamlin Township are a valuable public asset; but, unfortunately, they are not generally accessible to the public. Public access areas provide this access with a measure of necessary control. Existing road ends have the advantage of access but do little to provide for adequate parking and public control. In most cases, frontage is limited, and adjacent land is privately owned. Access areas on larger tracts of



Much of the access to Hamlin Lake is private. It is important that the Township maintain and improve public access to the Lake and other natural resources.

public land have the obvious advantage of public ownership but normally require greater township commitment.

Individual access areas could be developed to contain:

- A convenient entrance from a public road;
- A parking area;
- Rest room facilities; and
- A sign system to Identify and locate the area along the public road.
- A more elaborate facility might also contain picnic areas, play areas, lighted parking, water supply and shelters.

In many instances, township acquisitions, development, or maintenance of the access areas should be considered. The areas could be developed as strictly lake access or as a basis of a more ambitious township park. Cooperative agreements between the county and township could be arranged to specify individual responsibilities and guarantee permanent public access.

Bike trails provide an excellent method for the public to fully appreciate the lake and travel to and from the parks throughout the area. Located on existing roads and public right-of-way, the bike trail system could be identified now but actually developed over a period of time as roads are repaired and upgraded and land is acquired. The routes should Include Hamlin Lake as much as possible and should provide for various length loops. Highlights along each route could include historic sites, lake access, parks, and varying scenery.

Recognition and interpretation of archeological and historical sites lend another highlight to the trail system. A coordinated "trail of history" that clearly interprets the historical sites, their interrelationships, and their impact on the regional history could be considered. The method for displaying and interpretive material would probably vary from simple descriptive signs to structures with displays and text in park environments. Natural focal points for the "trail of history" could be the Big Sable Lighthouse, the Hamlin Lake dam, the Epworth community, and the schoolhouse on Fountain Road. Interpretive and route information could be disseminated at the Mason County Library, White Pine Village or Ludington State Park.

Several grant programs for the acquisition of sites, as well as the development of facilities, are available through the MDNR. Parks can be developed by local units of government without grants but may be too expensive to become reality. Grant money is available to communities that have approved recreation plan and matching funds. A plan is important and must follow specific guidelines to be approved. Hamlin Township maintains a Recreation Plan that was last updated in 2010. It is important for the Township to continuously review and update the Recreation Plan to comply with Michigan Department of Natural Resources (MDNR) requirements in order to remain eligible for MDNR Trust Fund grants.

STORM WATER MANAGEMENT

Without careful planning, as a community, changes from rural to suburban to urban, storm water runoff becomes an increasing hazard. Natural drainage flows are intensified when rooftops and pavement replace vegetated areas that previously slowed runoff and allowed infiltration through soil. The urbanization process leads to increased flooding problems, degraded water quality, and unstable stream channels.

By planning for a storm water system ahead of community growth, control measures can be implemented at the same time as a new development occurs. An effective management program will prevent flooding problems and will also ensure water quality protection and the maintenance of recreation, wildlife, and aesthetic values of local water bodies.

The relatively low density of Hamlin Township today makes storm water management a realistic and realizable goal. In a typical management program, storm water is stored on site and released at a rate that approximates predevelopment runoff rates. Stored, sediment and attached pollutants may be settled out. When applied throughout a drainage basin, runoff management can substantially reduce major investments

in downstream flood, pollution, and erosion control projects. In addition to providing higher quality surface waters. In general, the amount of runoff increases as the intensity of land use increases. This is related to two facts: (1) Intensive human activities generate large amounts of surface residue, and (2) the impervious surfaces associated with Intensive land uses generate fast-flowing runoff that flushes the residue from the land. Carried to the lake or stream, these residues constitute a serious source of pollution.

Preserving critical storm water storage areas in floodplains and wetlands is one of the most important elements of storm water management. To the extent feasible, it is better to preserve and use the natural drainage system than to replace it with a man-constructed system. Existing wetlands are excellent natural retention areas for storm drainage. Just as a natural stream includes a channel for conveying frequent low flows and a floodplain to accommodate the storm water from infrequent major storms, a community's entire storm water network should include a primary system for the 5- to 10- year frequency storm events and a secondary system for the 100-year event flows. The primary system reduces inconveniences from wet yards, flooded roads, and parking lots. The secondary system is the channel for runoff from major storms. Buildings should not be located in its pathway.

Modern storm water control focuses on watershed management to identify the best locations for effective and efficient storage and treatment of storm water. Often, this permits watershed facilities to be shared by several developments at lower cost than individual on-site retention. Multiple-purpose facilities may require more land area on a site, but community maintenance cost savings may be substantial.

By obtaining information early in the site planning review process, including data on existing and proposed drainage and location in the small subbasin, off-site impacts from new developments can be minimized. It is likely that the local government will have to finance some public works, provide maintenance of the stormwater system, and perhaps establish utility fees for tap-ins and flow contributions. Proper maintenance is crucial to a well-functioning storm water system. Continuing maintenance needs should be factors in the design of storm water facilities. Methods to finance that required maintenance should be established as part of the storm water management program.

Adoption of a local storm water management ordinance can be the first step toward implementing local policies by setting forth requirements for on-site storm water systems. Each developer should be required to submit a storm water management plan for review along with other aspects of the development proposal prior to site plan or preliminary plat approval. The plan should include site data on water resources, topography, soils, existing drainage patterns, predevelopment and post development runoff calculations, general location, and description of the proposed storm water system(s).

Both the primary and secondary systems must be identified. Since storm water management is inseparable from erosion control and use of wetlands, they should also be addressed in local regulations. Requirements for on-site detention may be waived if suitable off-site retention areas are identified. The local regulatory ordinance would set performance standards but would leave the choice of measures up to the developer.

The Township can also work in cooperation with the Mason County Drain Commission on storm water Issues.

FLOODPLAIN MANAGEMENT

In order for a community to qualify for the National Flood Insurance Program, it must commit itself to floodplain management, which protects new construction from future flooding. Floodplain management is an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans and any regulations aimed at the future use of the floodplain. These regulations may take the form of portions of zoning, subdivision, or building regulations or a floodplain ordinance. Minimum floodplain management standards published by the Federal Insurance Administration include review of building permits for all new construction and, when Improvements to existing structures are more than 50 percent of the market value, to ensure that sites are reasonably free from flooding. In floodprone areas, the community must also require proper anchoring of structures, the use of construction materials and methods that will minimize flood damage, adequate drainage for new subdivisions. New or replacement utility systems must be located and designed to preclude flood loss. Zoning is the most widely

used tool to regulate land use within floodplains. Utilizing performance standards for permitted uses in the flood fringe and floodway ensures judicious use of the land compatible with the intention of minimizing potential flood damage.

The floodplain management plan should ensure judicious utilization of the floodplain while minimizing potential flood damage. The following outline provides the measures to implement a floodplain management program:

Improve utilization of Floodplain Areas by:

- Effective floodplain management standards that protect new construction from future flooding.
- Improve Utilization of Floodplain Areas by:
- Identification and detailed mapping of the floodplain to identify the floodway and flood fringe.
- Enactment of floodplain zoning to limit floodplain uses that do not suffer unduly from the action of floods; uses based upon performance standards in the flood fringe and floodway.

Assist Existing Uses in the Floodplain by:

- Continuing participation In the National Floodplain Insurance program and better defining property within that floodplain.
- Publicizing and encouraging citizen participation in the floodplain insurance program.

Encourage the Enlargement of Open Space Areas in the Floodplain by:

- Targeting high flood hazard areas for open space uses.
- Assisting in the redevelopment of these areas through the acquisition of property and demolition of deteriorating structures.
- Capitalizing on the aesthetic assets of the floodplain to obtaining funding to acquire land and monitor open space areas.

GROUNDWATER MANAGEMENT

Groundwater quality should be protected by avoiding undesirable development in recharge areas and wetlands. Good surface water management is the basis for groundwater protection measures. Consideration should be given to the extent of groundwater contamination by septic tanks and the potential for chemical or toxic substance leaks and spills by Industrial or transportation activities.

AGRICULTURAL BEST MANAGEMENT PRACTICES

Agricultural best management practices are farming practices designed to promote soil conservation. At present, runoff from agricultural lands has been identified as a source of pollution for the Township's bodies of water. Steps need to be taken to reduce agricultural runoff to the extent possible. Fortunately, with passage of the 1985 and 1990 Farm Bills, United States Department of Agriculture (USDA) administered cost share programs for farmers are placing additional emphasis on agricultural best management practices that focus on water quality protection. Soil conservation cost-share programs are generally coordinated directly by the USDA's Soil Conservation Service (SCS), the Cooperative Extension Service (CES), and the USDA Agricultural Stabilization and Conservation Service (ASCS). Cost shares for eligible conservation practices can be secured directly through these agencies.

To date, agricultural lands have been mapped, and limited analysis has been conducted on the types of ongoing agricultural practices. The Mason County Soil Conversation District has been involved in several

planning and strategy meetings. Hamlin Township should continue to work cooperatively with the Mason County Soil Conversation District to implement best management practices.

OPEN SPACE MANAGEMENT

A conservation easement is a legal agreement in which the landowner retains ownership of private property but conveys certain specifically Identified rights to a land conservation organization or a public body. Conservation easements provide an extremely effective tool for protecting environmentally sensitive lands, such as undeveloped shore lands, steeply sloped bluffs, and wetlands. Essentially, under provisions of a conservation easement, development and other activities which have the potential to diminish the scenic or environmental integrity of the land are limited or prohibited. Most often, conservation easements run with the land in perpetuity. Provisions that may be included in an easement include restrictions on removal of vegetative cover, limited development of steeply sloped or highly erodible areas, and preservation of river corridors and lake shoreland areas. For the landowner conveying a permanent easement, there may be significant reductions in federal income and estate taxes as well as property taxes.

With regard to water quality, conservation easements can provide a mechanism to reduce runoff and nonpoint source pollution loading by protecting critical land areas in the watershed. Specific areas of concern would include undeveloped lake shorelands, stream corridor areas, and wetlands. The granting of conservation easements in Michigan is permitted under provisions of Conservation and Historic Preservation Easement Act (P.A. 197 of 1980). The prominent land conservation organization In the Hamlin Lake area is the Points Betsie Sable Conservancy.

Conservation easements are a legal tool designed to extinguish most or all of the development potential of land in the interest of conservation. The principle advantage of conservation easement over regulation or public acquisition of land is that easements are purely voluntary. Therefore, they are not subject to the legal limitations or political controversy associated with police power regulations of land. Furthermore, easements avoid the acquisition costs and the costs of maintenance and removal of land from local tax rolls associated with government ownership.

Conservation easements have played a role in land conservation in the United States for over 25 years. Because they are "easements *in gross*" they are not recognized at common law. However, many states, including Michigan, have specifically authorized conservation easements by statute. Michigan Compiled Laws (MCL) 324.2140-324.2144 authorize conservation easements. Prior to 1995, conservation easements in Michigan were authorized by the Conservation and Historic Preservation Easement Act (Act 197 of 1980).

It is estimated that over 20,000 acres of Michigan land are protected by conservation easements. Because there is no central registry of easements in Michigan, the number of acres protected by conservation easements here is not known. These easements are "held" by a number of different private, charitable organizations throughout the state (most known as "land trusts").

Compared to other states (e.g., Virginia where over 120,000 acres are subject to permanent conservation easements) the easement program in Michigan has yet to have a significant impact statewide. However, it is likely that a growing number of Michigan landowners will be interested in using conservation easements to protect the future of their land. This is because of the significant increase in federal tax benefits to the donors of conservation easements and the increase in the number of land trusts in Michigan using conservation easements as a conservation tool.

In order to promote conservation easements as a means of protecting vital lands and preserving water quality, it is recommended that information on the value of conservation easements be presented to interested parties. The dissemination of information regarding conservation easements could be accomplished through select mailings to owners of environmentally sensitive lands and through local township publications. Specific conservation easement agreements could be coordinated and negotiated directly by the Points Betsie to Sable Conservancy or the Land Conservancy of West Michigan.

WOODLANDS AND FOREST MANAGEMENT

The preservation of woodlands and trees benefit the community, the property owner, and the developer in many different ways. Woodland and tree protection prevents a development from completely removing all of the trees and woodlands, possibly creating an undesirable situation, and demonstrates a forward-thinking policy concerning the stewardship of the township's natural resources.

Extensive woodland areas influence water quality by transpiration, reduction of evaporation from soils, filtering rainwater and groundwater, and preventing runoff and soil erosion. Studies have shown that they may Impact air quality by filtration of harmful chemicals. They also provide very effective noise and wind screens. Mature trees and woodlands have been shown to generally increase property values. The primary concern is to not have regulations that restrict development to such an extent that the property rights are unfairly inhibited but to provide for a certain degree of preservation of trees or woodlands.

The residents in Hamlin Township have expressed a desire to preserve the woodland areas of the community. A basic type of protection is focused on saving individual trees. In areas where there are few actual woodlands remaining, township regulations might require replacement of all trees removed on a particular site or might emphasize preserving Individual, mature trees due to the large amount of actual woodland areas.

Woodland protection, as opposed to tree protection, concentrates on the emphasis of preserving larger areas that contain complete environs of ground cover, understory, overstory, wildflowers, shrubs, trees, and wildlife. Within these environs, a multitude of interactions between the living and nonliving components produce an ecosystem that is sensitive to any change. Woodlands protection may evaluate potential impact on a woodland as part of a woodlands permit process. Evaluation of developmental impact might include soils, water, and diversity of species, tree vigor, species tolerance, climatic influence, and wildlife.

Factors that need to be considered when developing regulations are costs, time, inspection, and maintenance issues. Increased costs may be generated by having qualified reviews of site plans that encompass planning, landscape architecture engineering, forestry, horticulture, and wildlife disciplinary concerns. The Site Plan might include a detailed tree inventory of a particular site or, ultimately, the entire township.

Forest land management is proposed to involve maintaining contact with the U.S. Forest Service. To review and comment on forest management plans proposed for lands within Hamlin Township. Forest lands provide a valuable resource to the township and should be protected. Woodlots and significantly mature trees and tree stumps should be inventoried and preserved to the maximum extent practicable.

CHAPTER 8 - LAND USE REQUIREMENTS

RESIDENTIAL AREAS

Historically, residential development has been the primary type of development in the township. The township's proximity to the City of Ludington and Lake Michigan and its location along Hamlin Lake make it an attractive place to live. The primary housing type found in the Township is single-family residential. Lot sizes are generally large, except along Hamlin Lake where lakefront lots are small. Generally, all of the developable shore land around Hamlin Lake has been developed for residential use; thus, additional residential development is expected to be lower in density and more rural.

Building permit data shows that a total of 359 new units were built between 2000 and 2014, which includes doublewide, modular, and stick built homes. The Township issued 80 Land Use Permits in 2014 which is an increase of 7% from 2013. Data shows an average lot size of about 1 acre for homes in the rural residential areas.



The predominant housing type found in Hamlin Township is single-family residential.

Based on current trends, an average of approximately 25 new housing units are being built in Hamlin Township each year. Due to its rural nature, the Township has plenty of land area to accommodate new development, so it is important that Township regulations support residential development that corresponds with the vision for the future. According to input from Hamlin Township residents and officials during past community surveys and the Resilient Ludington planning process, new residential development should be primarily adjacent to existing residential areas, a variety of low- and medium-density housing opportunities should be added to existing housing stock, and single-family housing units should form the bulk of future development.

COMMERCIAL AREAS

The township has historically had little demand for commercial development. Residents are closely tied to the Ludington employment and business center. The close proximity of the township to the Ludington business community provides residents with easy access to extensive retail and service establishments. This attitude was strongly expressed in the 2005 community survey, with 50 percent of the community wanting the amount of commercially zoned property to stay the same.

Currently, the township has approximately 33 acres in commercial use. This is primarily in the form of small, neighborhood service establishments (convenience stores, heating contractor, electric motor business, and a boat shop) and storage facilities. Some resorts also have small shops to cater to their guests. The main areas where commercial activity occurs are at the intersection of M-116 and Lakeshore Drive and along Jebavy Drive north of Dewey Road. These commercial areas should serve the needs of township residents for the foreseeable future. There has been significant growth in the residential sector of the township in recent years. The existing 87 acres of commercial area is more than the regional average for townships of from 2,500 to 5,000 in population. This is, no doubt, attributable to the fact that Hamlin Township is a tourist area.

With the extensive amount of commercial services available in Ludington to the majority of the township residents, the need for commercial land use areas diminishes in the south part of the township. As mentioned earlier, two areas of commercial development currently exist in the east-central and southwest portions of the township. This would seem to indicate that residential areas south of Fountain Road are well-served by existing commercial areas.

The medium-density residential neighborhoods along Hamlin Lake north of North Bayou and along the south side of Upper Hamlin Lake are not well-served by commercial areas to the south and west because of their distance and lack of direct transportation routes. As residential development continues in this area, the need for a limited neighborhood commercial area may arise.



A majority of the commercial development in Hamlin Township consists of small scale, neighborhood service establishments.

INDUSTRIAL AREAS

The standard land requirements for a typical community would be 12 acres for every 1,000 persons. Hamlin Township currently has 120 acres of industrially zoned land available, partially occupied by oil and gas extraction operations. There are no other known legal forms of industrial activity, although extraction wells are scattered throughout the township. Existing land use information shows approximately 35 acres being used for oil and gas exploration. The regional average for townships with less than 5,000 people is 14 acres of industrial land.

Three factors make Hamlin Township largely unsuitable to industrial development. First, the road network is not sufficient to handle the transportation needs generated from industrial activity. Second, no public water service is available; and there are no plans to extend the Ludington or Pere Marquette Township sanitary sewer systems north into the township. Third, the rural, recreational character of the community conflicts with the promotion of industrial development.

The regional demand for industrial development is being satisfied by the three industrial parks of Ludington, Pere Marquette Township, and Mason County. The regional transportation route of US-10 reaches these areas, and all have existing water and sewer service with the capacity for future expansion. Currently, Pere Marquette Township has nearly 900 acres that allow industrial uses (88 acres of designated industrial park), with approximately 288 acres available. The City of Ludington has a 55-acre industrial park, and Mason County has approximately 235 acres of industrially zoned land along US-10.

RECREATION

Demands on the Township for recreational opportunities are great. This comes from the many natural amenities and diverse recreational opportunities available to the public. The 2005 community survey shows that the year-round residents work primarily in the Ludington business area and live in Hamlin Township because of its rural and recreational character. Furthermore, the seasonal population has purchased property to utilize the township's recreational resources and to retire there.

Hamlin Township is truly a regional recreational area. The demands for these services are currently being served by the Ludington State Park, Nordhouse Dunes Wilderness Area, the many resorts on Hamlin Lake, and by the seasonal housing stock, which includes many owners from Indiana, Ohio, and Illinois. There are 3,927 acres (6.14 square miles) of state-owned land open to the public, not to mention the extensive Lake Michigan and Hamlin shorelines.

Because of the abundance of regional recreational resources available to the public and access to Hamlin Lake by the 570 parcels, of which 120 parcels are vacant (per 2008 Hamlin Township Assessment Roll), little attention has been given to developing neighborhood and community facilities. There are no township properties developed for community recreation with the exception of the Township Parks. Also, the township does not own any Hamlin Lake frontage that could be used for local recreation in the future.

Input from the community survey and planning process indicates that residents desire more playgrounds, picnic areas, trails, access points on Hamlin Lake, and swimming beaches. The response largely comes from year-round residents who do not own lakefront property. This segment of the population is the majority of the population. They do not wish to use regional recreation areas, such as the Ludington State Park, which has an annual attendance of 700,000, or would like a quieter, more family-oriented experience.

Recently, problems have arisen from use of road ends as access to Hamlin Lake for swimming and fishing. Standards for recreational development indicate that a community such as Hamlin Township could support from 30 to 40 acres of community recreational facilities. The lack of this land use in the township, along with the expected increase in demand for residential development, indicates a need for local recreational opportunities.

In planning for future recreational needs, the township should provide adequate recreational opportunities for residents and seasonal visitors alike. As the residential population grows, there will be a greater demand on the recreational areas of the township. Growth over the past 10 years has consumed most of the available land adjacent to Hamlin Lake. However, many privately owned parcels still remain vacant and could be used as parkland.

The township should provide for and develop recreational facilities for residents. This should be in the form of smaller neighborhood facilities that would complement the existing regional park system. Township residents have shown a strong desire for more neighborhood recreational areas and trails. Park facilities should be places where residents can enjoy playground and picnic activities.

Current planning standards recommended 10 acres of community parkland for every 1,000 residents. This would translate to a projected need for 30 to 40 acres of community parkland over the planning period. This would be best located adjacent to Hamlin Lake where a swimming beach could be incorporated into the facility. These facilities might also be separated into two 20-acre parcels and be connected by a trail system.

State and federal programs exist to aid communities in financing park and recreation acquisition and development. The three most utilized programs require the community have a 5-year parks and recreation plan. The programs also require the plan be locally adopted and approved by the MDNR.

Hamlin Township should maintain its parks and recreation plan and apply for state and federal grant assistance for the purpose of providing community recreational opportunities for its residents. The township should also consider the creation of a recreation commission to oversee the site selection, acquisition, maintenance, and promotion of a township parks and recreation program.



Township parks provide recreational opportunities to residents and visitors.

CHAPTER 9 - FUTURE LAND USE PLAN AND ZONING PLAN

The development of the Future Land Use Plan and Zoning Plan are important components of the master planning process. The Future Land Use Plan for Hamlin Township was created based on input from public meetings, Community Planning Committee discussions, goals and objectives identified during the Resilient Ludington process, and a series of meetings with the Township Planning Commission. The Zoning Plan provides a comparison between the Future Land Use Plan and the Township Zoning Ordinance and should be used when considering changes to the Zoning Map.

FUTURE LAND USE PLAN

The Future Land Use Plan and Future Land Use Map describe a generalized, preferred organization of future land uses in Hamlin Township. The Future Land Use Plan is a general framework used to guide land use and policy decisions within the Township over the next 20 years. The future land use plan was developed through consideration of a variety of factors, including existing land use, public input from the planning process, analysis of community vulnerabilities, desired community character, impacts on natural features, and future growth. The Future Land Use Map can be found on page 65. The Future Land Use Map shows generalized locations for the broad future land use areas described below.

Residential Areas

The historic residential development patterns of Hamlin Township help create the rural, recreational character that is valued by both residents and visitors. Future residential development should make efficient use of land; protect natural features; and should provide a wide variety of affordable housing choices. Providing a variety of housing options to meet the needs of the Township's aging population is another consideration when planning for future residential development. New residential development should be located and designed so that it maintains the existing rural, recreational character and is compatible with adjacent housing. The following types of residential land use fit with the vision for the future of Hamlin Township.



Low-density Residential Areas

This residential area consists of small lots separated from agricultural areas and adjacent to existing residential development. The intent is to encourage development in areas with good septic tank absorption capabilities. Single-family residences are the primary intended uses, while compatible nonresidential activities, such as schools and neighborhood parks, are also encouraged. These areas are intended to minimize the cost of future public services and to limit the encroachment of higher-density residential development into rural, unique farm, forest, and recreational areas of the community. Because of the

importance of the housing stock of any community, these areas must also be protected from higher-density, incompatible commercial and industrial development through appropriate zoning standards.

In order to maintain and preserve the high-quality, natural and scenic environment of the township's lakes, special attention must be given to these areas. For example, "keyhole" and PUD regulations in the township's zoning ordinance should limit access by large scale residential developments. Keyhole developments allow an unlimited number of back-lot residents to use lake areas by means of a narrow access. Lot size requirements would also help protect the surface water quality of the lakes in areas not accessible to a sewer system. Much of the township's future residential development is anticipated to occur to this area. Lot sizes should be large enough to assure good septic system performance.

The Low-density Residential Areas are primarily located in the central portion of the Township between the Lincoln River and the North Bayou of Hamlin Lake. Additional Low-density Residential Areas are located along the northern border of the Township.

Medium-density Residential Areas

Medium-density areas are generally intended for small lots in existing residential areas. Single- and two-family residential developments are the major intended uses, while other uses, such as apartments, condominiums, senior citizen housing, commercial uses, and resorts could be permitted with proper restrictions. It is recommended that these more intense uses be located within areas intended to be served by a full range of public services in the future. Direct access to major thoroughfares by individual home sites should be minimized through subdivision control regulations or PUD procedures. The Medium-density Residential Area has, for the most part, been comprised of lakefront residential lots, marinas, and resorts.

In areas yet to be developed, lot sizes should not be less than 1/3 acre. Density should consider public service capacities, environmental factors, adjacent land use, and overall design. Like low-density areas, zoning regulations should prohibit the use of "keyholing" to access lake areas. Existing commercial operations within these areas will be allowed to continue without interruption. New commercial development will be very closely reviewed, and only those uses determined to be compatible with the predominant residential character and similar to the types of uses that are currently or customarily and typically found in a lake/resort environment will be permitted.

The Medium-density Residential Areas are primarily located near southern and eastern shores of Hamlin Lake and between Hamlin Lake and Lincoln Lake in the western portion of the Township.

Mobile Home Parks

Mobile homes parks provide an opportunity for the placement of a full range of pre-manufactured mobile homes. The smallest and typically oldest of these generally cannot meet the minimum size and square-footage requirements of traditional, single-family residential areas. Many of the modern, HUD-approved (post 1976) mobile homes can be located outside mobile home parks (particularly doublewides), provided that they meet the basic requirements of residential dwelling. However, mobile home parks can continue to provide a suitable and affordable place for all types of mobile homes.

The two mobile home parks within the township, along with several located in surrounding cities and townships, continue to provide adequate



space and availability to serve the demand for the foreseeable future. Since these parks are now regulated by the State of Michigan's Mobile Home Commission, only modest requirements can be imposed by the local unit of government without specific approval of the Mobile Home Commission.

There are two areas dedicated for mobile home park uses within the Township. One on the southern shore of Hamlin Lake and the other at the northern end of Beaune Road on the shore of Hamlin Lake.

Shoreline Residential Areas

The Shoreline Residential Area is intended to allow for a variety of residential uses on waterfront properties while implementing additional land use and design requirements that help protect the environmental quality of the Township's lakes and rivers. These additional land use and design requirements are enforced through the existing Waterfront Overlay District in the Township Zoning Ordinance and include measures such as minimum shoreline setbacks, required vegetative buffers, and prohibited uses. The Planning Commission should periodically review the standards of the Waterfront Overlay District to determine if the standards are adequate for the protection of water quality within the Township.

The Shoreline Residential Areas are located adjacent to the Township's major bodies of water including Hamlin Lake, Lincoln Lake, and the Lincoln River.

Commercial Areas

There is relatively little commercial development in Hamlin Township compared to the adjacent jurisdictions of the City of Ludington and Pere Marquette Charter Township. There is a desire amongst residents to strictly limit new commercial development within Hamlin Township. However, small, consolidated commercial "nodes" exist in three locations within the Township and provide convenient shopping and service establishments near residential areas, resorts, and Ludington State Park.

Commercial development requires a variety of services and can result in land use changes throughout the township, such as traffic and parking problems and the need for water and



sewer services and street lighting. Furthermore, the existence of commercial development attracts additional commercial activities that may be incompatible with adjacent residential areas. By consolidating commercial development in select areas, public services can be provided more efficiently; and land use conflicts can be minimized. Limited commercial areas are also allowed in the medium-density and low-density, residential areas. These areas are also intended to serve new growth areas or the motoring public. The uses anticipated for these areas are limited to the types of sales, service and convenience businesses already in existence.

The commercial areas are located at the intersection of Dewey Road and Jebavy Drive, the intersection of Decker Road and Jebavy Drive, and the intersection of M-116 and Lakeshore Drive. These locations have traditionally been the areas within the Township that provide commercial services to residents and visitors. The Jebavy Drive commercial locations may permit more general commercial activities to meet needs along this major arterial of the township. Specific regulations still need to address the preservation of the rural character of this area as well as the aspect to having no public sewers.

The commercial area along M-116 and Lakeshore Drive in the southern portion of the township should be developed to meet the needs of the residents as well as the Ludington State Park users. With the introduction of the public sewer to this area, commercial activity could become more attractive. Services such as restaurant or gas station may be allowed within the area with proper signage, design, and setback regulations to preserve the rural and recreational character of this portion of the township.

Industrial Areas

For the most part, the township is not well suited for industrial development. Such developments should be served by public sewer, water, and other services. Currently, the only areas in the township served by public sewers are planned or used for residential purposes. Additionally, residents feel that there should be no additional industrial development within Hamlin Township. The most appropriate areas for industrial development are generally large, level parcels of land with good soils, access to paved thoroughfares, and separated from residential uses. The future land use map identifies the area currently occupied by the gas and oil extraction industry along Angling Road at the eastern fringe of the township as the sole industrial area.

Industrial areas can be desirable components of the township without being undesirable neighbors. Landscaping and comprehensive design can make them attractive working environments and can provide a pleasing appearance compatible with adjacent, less-intensive uses. Well-planned industrial land or industrial parks can be attractive locations for research and development firms and light industrial activities. Industrial uses can also be made compatible with adjacent land uses. Off-site impacts, such as noise, odors, light, and glare, can be prevented through pollution-control measures, setbacks, buffer yards, fencing, landscaping, and other techniques. Unsightly views of parking, loading, and storage areas should be screened from neighboring land uses.

The lone Industrial Area is located on the eastern border of the Township at the intersection of Angling Road and Myers Road.

Recreational and Preservation Areas

Hamlin Township has many natural areas, scenic vistas, wetlands, and other unique natural features. These amenities provide multiple public benefits to both residents and visitors of the area. Parks, open spaces, and natural areas are important factors in determining the quality of life available to residents of the township. There is a strong desire amongst residents to preserve the open spaces and rural character of Hamlin Township. The Township's rural character can be preserved through the provision of open space on public lands and by limiting intense development on properties with valuable natural resources, open space, agriculturally viable soils, and forests.

Agricultural and Forest Areas

The primary goal for the Agricultural and Forest Area is to preserve the township's natural resources and rural character. This area is intended to allow scattered homes on very large parcels of land in locations that do not impact unique farmland or diminish forest and woodlands. Home sites should be placed in such a manner so as not to degrade the rural character of the area, damage natural systems, or create the need for additional township services. The primary uses intended for these areas are commercial fruit farming, animal husbandry, hobby farms, and scattered residences.

The Agricultural and Forest Areas make up the bulk of the eastern portion of the Township between Decker Road and the upper arm of Hamlin Lake.

Parks, Open Space, and Conservation Areas

The Parks, Open Space, and Conservation Areas identify park land, open space, conservation areas, and environmentally sensitive areas within the Township. This future land use designation can also be used to identify potential lands for acquisition for recreational and conservation purposes. Most of these areas are currently under public ownership and are intended to remain in public ownership for the life of this plan. Expected uses for these areas include public parks, campgrounds, wilderness areas, forest lands, public access sites, and dune areas.

The Parks, Open Space, and Conservation Areas make up the majority of the western portion of the Township, including Ludington State Park. Other locations where this future land use designation are applied include the various Township parks.

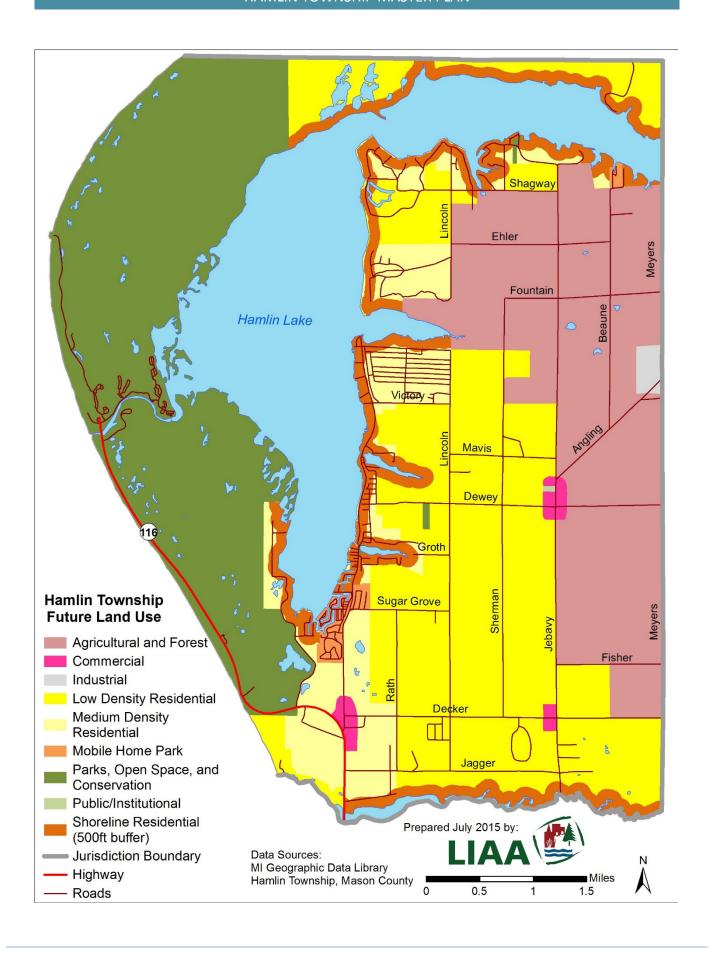


Public/Institutional Areas

The Public/Institutional Areas identify the locations of civic institutions that contribute to the sense of place within the Township and provide services to residents. Land uses within these areas can include government facilities, schools, and places of worship.

The Public/Institutional Areas are located where Township facilities are found, the most notable being the Township Hall location on Jebavy Drive.





ZONING PLAN

According to Section 33(2)(d) of the Michigan Planning Enabling Act (P.A. 33 of 2008), a community master plan must include a "Zoning Plan" if the local unit of government has an adopted zoning ordinance. The required Zoning Plan must contain descriptions of how future land use categories within the master plan relate to the districts on the zoning map, a proposed schedule of regulations by district, and the standards or criteria to be used to consider the rezoning of land. The following pages describe the general purposes and characteristics of zoning in the Township and opportunities for rezoning.

Relationship to the Master Plan

The Master Plan describes the vision, objectives, and strategies for the future development of Hamlin Township. The Zoning Plan is based on the recommendations of the Master Plan and is intended to identify areas where existing zoning is inconsistent with the objectives and strategies of the Master Plan and guide the development of the zoning ordinance. The zoning ordinance is the primary implementation tool for the future development of Hamlin Township.

Residential Districts

The residential zoning districts in Hamlin Township are:

- R-1 Low-Density Residential District
- R-2 Medium-Density Residential District
- R-3 Residential Mobile Home Park District

The main purpose of these zoning districts is to provide a variety of housing options within the Township. The R-1 Low-Density Residential District is intended to accommodate primarily low density single-family residential uses and related public and institutional uses. The R-2 Medium-Density Residential District is intended to accommodate primarily medium density single- and two-family residential development along with occasional multiple-family residential and commercial uses. The R-3 Residential Mobile Home Park District is intended to provide for the development of mobile home parks in limited areas within the Township.

Commercial Districts

The lone commercial zoning district in Hamlin Township is:

• C - Commercial District

The purpose of the Commercial District is to accommodate a variety of commercial and service uses intended to serve people residing in the surrounding neighborhoods. Development in this district is intended to be compatible with surrounding residential uses.

Industrial Districts

The lone industrial zoning district in Hamlin Township is:

• I - Industrial District

The intended purpose of the Industrial District is to accommodate a variety of industrial and manufacturing uses in limited areas within the Township. Additionally, the Industrial District allows for the establishment of all uses allowed within the Commercial District.

Special Districts

The following are considered "special" zoning districts in Hamlin Township.

- A Agricultural, Rural, and Open Space District
- PR Public, Recreational, and Open Space District
- Waterfront Overlay District
- Historic Property Overlay District
- Mobile Home Overlay District

The A Agricultural, Rural, and Open Space District is intended to protect the rural character of the Township and accommodate primarily agricultural and low density residential uses. The purpose of the PR Public, Recreational, and Open Space District is to designate areas for publicly owned lands intended for recreational and conservation purposes. The purpose of the Waterfront Overlay District is to protect the environmental quality of the Township's lakes, rivers, and watersheds by instituting additional land use and design regulations on waterfront properties. The Historic Property Overlay District and Mobile Home Overlay District are intended to allow uses open to the public on historically significant properties and provide an area for mobile homes to exist outside of a mobile home park, respectively.

The following table illustrates the regulations of the various zoning districts in the Hamlin Township Zoning Ordinance.

Hamlin Township Zoning District Regulations

Zoning District	Min. Lot Area (S.F.)	Min. Lot Width (Ft)	Setbacks (Ft)			Maximum		Max. %
			Front	Side	Rear	Building Height (Ft)	Min. Floor Area (S.F.)	Lot Coverage
A - Agricultural, Rural, and Open Space	43,560	165	25	12	25	28	900	25
R-1 - Low-Density Residential	15,000	100	25	12	25	28	900	25
R-2 - Medium-Density Residential	15,000- 20,000	100	25	12	25	28	900	25
C - Commercial	10,000	80	25	12	25	28	N/A	25
I - Industrial	43,560	200	25	25	25	35	N/A	25

The following table outlines the designations in the Future Land Use Map and the comparable zoning district(s) in the Hamlin Township Zoning Ordinance.

Comparison of Future Land Use Map Designation and Comparable Zoning Districts

Future Land Use Area	Comparable Zoning District(s)				
Low Density Residential	R-1 - Low-Density Residential				
Medium Density Residential	R-2 - Medium Density Residential				
Mobile Home Parks	R-3 - Residential Mobile Home Park				
	R-1 - Low-Density Residential				
Shoreline Residential	R-2 - Medium Density Residential				
	R-3 - Residential Mobile Home Park				
Agricultural and Forest	A - Agricultural, Rural, and Open Space				
Commercial	C - Commercial				
Industrial	I - Industrial				
Parks, Open Space, and Conservation	Public Recreational and Open Space				
	Public Recreational and Open Space				
	R-1 - Low-Density Residential				
Public/Institutional	R-2 - Medium Density Residential				
	A - Agricultural, Rural, and Open Space				
	C - Commercial				

Opportunities for Rezoning

As development occurs within Hamlin Township, rezoning requests may be made by property owners and developers. The Township should consider such requests carefully and keep the goals of the Master Plan and desires of residents in mind during the decision making process. Generally, it is intended that a majority of the land within the Township provide for low density residential development while preserving open space and rural character. Rezoning of properties from residential to commercial in the areas of the Lakeshore Drive and Decker Road intersection and the Jebavy Road and Decker Road intersection could be considered if a need for additional service and commercial activity is identified. In order to preserve open space and rural character within the Township, the rezoning of large unfragmented parcels from and of the residential districts to Agricultural, Rural, and Open space could also be considered.

CHAPTER 10 - IMPLEMENTATION

As the Township develops and as people continue to move into the Township to live and recreate, there will be an increasing conflict between development and quality of life issues. The intent of this plan is to allow development to occur, provided the growth does not destroy the quality of life that encouraged people to move to the township In the first place. This section discusses some of these issues and presents recommendations for proper site planning and design.

LAND SPLITTING

The unrestrained division of parcels of land can result in a complex pattern of narrow, tiered lots, creating illogical development. This not only consumes valuable open space and potential productive farmland; but it also creates problems for land owners, emergency vehicles, road maintenance, and access in general. This can generally be prevented by requiring a reasonable lot width and frontage on a public or well-designed and constructed private road, lot depth-to-width ratios, prime and unique agricultural land preservation, and PUD and private road provisions.

SIGNAGE

Commercial development in the township will mean an increase in the amount of signage. However, an abundance of signs can create an unsightly appearance and can detract from the residential and rural character of the township. Too many signs can also, in the long run, create an unattractive business environment that would discourage quality businesses from locating in the township. Therefore, township regulations should control the size, type, and location of signage. The regulations should be flexible enough to allow businesses to attract customers but not allow the signage to destroy the character of the community.

CURB CUTS

Curb cuts providing access onto individual properties from public roads can create serious traffic safety and congestion problems. Each curb cut creates a "friction point" where traffic must reduce its speed, often resulting in accidents. The intent of this plan is to encourage M-116 and Jebavy Drive to remain major thoroughfares serving the transportation needs of the township. Therefore, curb cuts serving each and every parcel located on M-116 and Jebavy Drive are discouraged. Alternatives to individual curb cuts should be encouraged. These alternatives include shared driveways, shared parking areas, service drives, rear entrance drives, and access off of secondary roadways.

PARKING AREAS

Adequate off-street parking should be provided to serve local businesses and to keep parked vehicles off roadways. Parking areas, however, should be properly designed to protect neighboring properties and the environment. Adequate screening should be provided from road rights-of-way. Storm drainage control should also be implemented through the site plan review process to minimize environmental degradation. Large parking areas should not be allowed entirely in the front yard, as this creates an appearance of a "sea of asphalt," Rather, parking areas should be placed in side or rear yards where they can be partially hidden by the building they serve.

SETBACKS

Proper setbacks from property lines and the right-of-way should be provided for all uses in the township. Setbacks are necessary to maintain the character of an area, protect natural systems, and buffer adjacent land uses. Setbacks in commercial areas should be wider than normal when adjacent to residential areas.

SCREENING/BUFFERING

Higher-intensity uses, especially those with outdoor sales or storage, should be screened and buffered from the view of motorists and adjacent residential homes. Screening refers to screening devices such as walls, fences, and compact planting of vegetation. Buffering refers to separating land uses, either through the use of setbacks or through transitional zoning.

LANDSCAPING

In order to ensure that the built environment is as attractive as possible, landscaping requirements should be Included in the ordinance and site plan review process. Required landscaping could take the form of grass cover and/or shrubs and trees. Parking areas exceeding a certain size should contain some landscaping. Parking lot landscaping, usually in the form of islands, can be used to improve the internal circulation of the lot. Front, side, rear yards should also be landscaped with at least grass cover to improve appearance of high-density residential, commercial, and industrial areas. Maintaining a portion of the lot in a green space will also reduce the rate and increase the water quality of stormwater leaving the site.

HOUSING

A serious concern as rural areas develop is the quality and condition of the housing stock. In order to protect the township and its residents from housing stock deterioration and related problems, the plan recommends that the zoning ordinance include regulations for all new dwellings located in the township. Such regulations should include a minimum dwelling size and/or dwelling Width, minimum enclosed storage area, adequate anchoring, aesthetic compatibility, and conformance to appropriate building codes. For mobile homes, the ordinance should also require wheels be removed, that no towing mechanisms be exposed, and that mobile homes shall meet all United States Department of Housing dwellings in the township maintain the public health, safety, and welfare for existing and future township residents.

JUNK/JUNK VEHICLES

The zoning ordinance should also restrict the unsightly accumulation of junk and junk vehicles. The accumulation of junk creates public health and safety concerns, as the junk creates habitats for rodents and insects and creates dangerous environments for children. In addition, junk causes deteriorating property values and generally makes the township a less desirable place to live. Outdoor storage of junk should be prohibited in all residential areas and should be properly regulated (e.g., fenced and screened) in agricultural, commercial, and Industrial areas.

The zoning ordinance, however, cannot regulate junk problems that are already in existence. Therefore, the plan also recommends that the township adopt a "police power" (non-zoning) ordinance to regulate existing junk and junk vehicle problems. (Hamlin Township Zoning Ordinance currently allows a property owner to have one unlicensed vehicle).

HOME OCCUPATIONS

Home occupations are necessary business uses conducted in a home, usually by the residents of the home itself. Home occupations currently exist within the township. The intent of this plan is to allow these uses to continue, provided that the character of the home and the residential neighborhood is maintained. Regulations regarding signage, outdoor storage, off-street parking, and permitted size of the home occupation should be Included in the zoning ordinance.

BASE MAPS

A GIS is an analytical tool that can produce maps and drawings from computerized data. As part of the Phase 1 study, a database was created for the entire Hamlin Lake watershed utilizing MIRIS land use/cover data and soil information from the Mason County Soil Survey. The GIS was used to analyze land use types, soil conditions, steeply sloped areas, and environmentally sensitive lands. In addition to the GIS analytical capability, maps that detail land uses, highly erodible and poorly drained soils, excessive slope areas, and other conditions in the watershed can be computer-generated. The GIS will prove extremely useful in analyzing the impact of land use activities and planning for future development throughout the watershed.

In 2007 Hamlin Township flew digital aerials of the Township. The Township has been working with Progressive Engineering on implementing these aerials with the current GIS system. When completed, the GIS system will allow the Township to have parcel lines, roads, parcel sizes, zoning, wetlands, dune areas, environmentally sensitive areas, etc., all on each parcel in the Township. When completed this project will be a great asset to the Township.

IMPLEMENTATION TOOLS AND PRACTICES

Zoning Ordinance Standards

The Hamlin Township Board of Trustees and Planning Commission may consider amending the Zoning Ordinance to require design and management standards that reflect the future vision for Hamlin Township. Zoning amendments could address land uses, building location, building orientation, and signage. Potential amendments should be focused on creating more walkable and pedestrian oriented development, protecting natural resources, and preserving the character of the Township. Building design guidelines (discussed below) could be encouraged or required in the Zoning Ordinance as well.

Design Guidelines

To help preserve the rural, recreational character of Hamlin Township, the Hamlin Township Board of Trustees and Planning Commission may establish a set of design guidelines for buildings in the commercial areas of the Township. Guidelines should address building location, orientation, bulk, entrances, facades, roof lines, window placement, and building materials. The Township should collaborate with local property owners during the creation of the design guidelines to ensure support for the proposed recommendations. Design guidelines are not regulatory documents, but can serve to inform any future zoning standards related to building design and aesthetics. Similar guidelines could be applied to the residential neighborhoods as well as to help maintain their character.

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program was authorized under Section 1122 of the Federal *Moving Ahead* for Progress in the 21st Century Act (MAP-21). Under the Program, each state Department of Transportation is required to allocate 2 percent of its total Federal Highway funds for programs and projects defined as

HAMLIN TOWNSHIP MASTER PLAN

transportation alternatives. Examples of transportation alternatives include non-motorized trails, sidewalks, transit stops or stations, and education and safety programs such as Safe Routes to School. This is a potential funding source for transportation related improvements in the Township. Coordination with the Mason County Road Commission is important when considering potential transportation projects within County road rights-of-way.

Natural Resource Funding Sources

The Michigan Natural Resources Trust Fund (MNRTF) provides funding assistance for state and local outdoor recreation needs, including land acquisition and development of recreation facilities. This assistance is directed at creating and improving outdoor recreational opportunities and providing protection to valuable natural resources. Development project grant amounts range from \$15,000 to \$300,000, with a required minimum local match of 25 percent. Trails and greenways are a priority project type for MNRTF grants. The Township should pursue these funding sources in an effort to support trail and other recreation projects in the community.

The Michigan Department of Natural Resources' (DNR) Land and Water Conservation Fund provides funding to local governments for the acquisition and development of public outdoor recreation areas and facilities. A local match of at least 50% of the total project cost is required. Grant amounts range from \$30,000 to \$100,000. This funding source could be used to support trail development and the acquisition of properties to expand local recreational opportunities.

The DNR also provides Waterways Program Grants to local governments for the design and construction of public recreational marina and boating access facilities through the Michigan State Waterways Fund. Grant priority may be given to projects where a local match of 50% or greater is made. Grants can be used for design and implementation of new marina or access projects or infrastructure improvement projects. This funding source could be used for the development of improvements to public water access points within the Township.

Hamlin Township Resident Survey of 2005

Note to Residents: This survey is your voice for input into the Hamlin Township Land Use Plan. Please use it wisely and return this survey by September 15, 2005.

The Zoning Ordinance, Land Use Plan, and Zoning Map are available for purchase or viewing at the Hamlin Town Hall, 3775 North Jebavy Drive

The Zoning Ordinance in Adobe PDF format as well as other Township Information is available at http://www.hamlintownship.org

Please be aware that while many of the topics listed below are regulated by other government agencies, townships have the authority to enact more restrictive requirements. The Zoning Ordinance contains a section on definitions for those who need to familiarize themselves before completing this survey.

Rev. 58/12/2005 bbm

Introduction: The Land Use Plan of Hamlin Township is used to guide the creation of zoning ordinances by the Planning Commission. It is revised on a ten year basis to reflect changes that occur in the township. Opinions collected by this survey will make it possible for the revisions in the Land Use Plan to more accurately reflect the views and concerns of the residents of the township. Your answers are completely anonymous. Please feel free to comment on the last page or elsewhere as appropriate.

Instructions: Each adult (18 and over) may answer by checking the appropriate box. There is room in each category for three opinions. If more adults reside within the household and wish to respond, you may add additional boxes. You do not need to answer every question.

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Appendix A

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137	Ability to rebuild house or structures on no	on conforming lot it	destroyed			•
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144 145	Residential Land Use:	1. Much Less	2. Less	3. Same as now	4. More	5. Much More
146	Mobile home parks	1.000	2000	3000	4000	5.000
147	Single family houses	1 000	2. 0 0 0	3. 🗆 🗆 🗆	4.000	5.000
148	Duplexes	1 0 0 0	2,000	• • • • • • • • • • • • • • • • • • • •	4. D.D.D.	
149 150	Apartments or condominiums Seasonal or vacation homes	1 0 0 0	2. 0 0 0 2. 0 0 0	3. a a a 3. a a a	4. a a a 4. a a a	5.000 5.000
151	Adult foster care	1 0 0 0	2. 0 0 0	3	4. 0 0 0	5.000
152	Assisted living) to o o	2:000	3.000	√426666	5.000
153	Clustered housing with open space	: (1-0-0-0)	2,000	3.00 <i>0</i>	4.000	5.000
154 155	☐ Other (circle and describe) 1 2 3 4 5		465 (14 946) 3 (17) * 14 (14 5)	enspire profesioner Desperanterior	ringisk filosofi Romanika	Parasite :
156	Commercial & Industrial Land Use:					
157	Hotels, motels, resorts	1 000	2. 0 0 0	3. 🗆 🗆 🗆	4. 🗆 🗆 🗆	5. 0 0 0
158 159	Small shopping centers Convenience stores	1 000	2. a a a	3. a a a 3. a a a	4. 0 0 0 4. 0 0 0	5. a a a
160	Office or services use	1 000	2. 0 0 0	3. a a a	4.000	5. 0 0 0
161	Storage or wholesale facilities	1 000	2. 0 0 0	3. 🗆 🗆 🗆	4. 🗆 🗆 🗆	5. 🗆 🗀 🗖
162	Light Industrial		2000	3.000	4.000	5.000
163 164	Wind energy generation facilities Other (circle and describe) 1 2 3 4 5	1.000	2:000-	3 D D/D.	4600	5.000
165 166	Natural Resource Uses:					
167	Commercial agriculture	1 0 0 0	2. 🗆 🗆 🗅	3. 🗆 🗆 💆	4.000	5. 0. 0 0
P. 7.1	Open fields and other open spaces	1 000	2. 🗆 🗆 🗆	3. 🗆 🗆 🗆	4. 🗆 🗆 🗆	5. 0 0 0
(Park lands	1 0 0 0 1 0 0 0	2. a a a 2. a a a	3. a a a 3. a a a	4. 🗆 🗆 🗆	5. a a a
171	Forest lands Sand, topsoil, and gravel mining	1 0 0 0	2.000	3. 🗆 🗆 🗅	4.000	5. 0 0 0
172	Conservation easements	170003	2.000	(14. .3.0.0-0 €0)	4.000	5.000
173	Wetlands	1:000	2000	9.66 6	-4.0.00	5. 🗆 🗆 🗆
174	Non commercial agriculture (horses, etc)	THE PERSON NAMED IN THE PE	2:006	3.0 E.D	- ,4: □ □ □ □ " 4 □ □ □	5.000 5.000
175 176	Other forms of non development: Other (circle and describe) 1.2 3.4 5	** 10 0 U ***	·2. 🖸 🗗 🗇	3 (10 (1)		
177	The state of the s					
178	Recreational Uses:	1 000	2. 0 0 0	3. 🗆 🗆 🖸	4. 0 0 0	5. 🗆 🗅 🗅
179 180	Golf courses Cross country ski trails	1 0 0 0	2. 0 0 0	3. 🗆 🗆 🗆	4. 0 0 0	5. 0 0 0
181	Snowmobile trails	1 0 0 0	2.000	3. 🗆 🗆 🗆	4. 🗆 🗆 🔾	5. 🗆 🗆 🗆
182	Off-road vehicle trails	1000	2000	3.000	4.000	5,000
183	Quiet, low impact areas	1 0 0 0 1 0 0 0 x	2000 2000	3 0 0 0 3 0 0 0	4 0 0 0 4 0 0 0	5.000 5.000
184	Bike paths Hiking/Nature Trails	12000	2000	3 0 0 0 3 0 0 0	4.000	5. D D D
186	Horseback riding trails	1000	2.000	3.00a	4.000	5.000
187	☐ Other (circle and describe) 1 2 3 4 5	S Team GA				
188 189	6. I would be willing to pay fees or taxe	s in the following	categories to	support		
190		1. Much Less	2. Less	3. Same as now	4. More	5. Much More
191	Maintenance of recreation activities & sites Purchase of recreational activities & sites		2.000 *2006	3. 🗆 🗆 🗆	4. 0 0 0 4. 0 0 0	5.000 0000
192 193		1000	-2.0.00	3 0 0 6	4.000	, 5 ,000
194		713606	2.000	a. 🗇 🖸 🖯	4.□□□	ुं. 5. □ □ □
195	Improving the transfer site	1.000	2.000	3.000	4.000	5,000
196	Supporting a lownship clean up day	•	2000	3.000	4000	ි ං 5 ල ල ල 5. ල ල ල
107	Supporting public transportation Other (circle and describe) 1 2 3 4 5	1 000	2. 0 0 0	3. 0 0 0	4.000	J. LI LI LI
1						
200 201	☐ Other (circle and describe) 1 2 3 4 5			······································		

7. In order to address the many concern developing new policies and regulations	P	ease indicate	how you feel abo	ut the following.	als may have to co On a scale of 1 to	onsider
1/Str Community Image:	ong	lly Disagree	2 Disagree 3.	No Opinion	4. Agree 5. St	rongly Agree
Require new development to "blend in"	4	000	2000	3:000.5	4000	5.000
Protect scenic views	1		2.000	3. 🗆 🗆 🗇	4. 🗆 🗆 🗆	5. 🗆 🗅 🖂
Preservation of scenic rural roads	1	000	2. 0 0 0	3. 🗆 🗇 🗇	4. 🗆 🗇 🗇	5. 🗆 🗆 🗅
Stricter junk & blight ordinances	1	000	2.000	3. 🗆 🗇 🗇	4.000	5. 0 0 0
Other (circle and describe) 1 2 3 4 5						
Environmental Protection: Control burning of						
Trash & garbage	.7	000	•2.0 0.0 € · (8,0000	4.0000	6.000-
Leaves	4	000	2.000	3.000	4.0000	5,000
Brush and stumps from development	1	ooo:	2,0000	3.000	4.000	5,000
Campfires	1	000 "	2.000	3.000	4.000	5. 🗆 🗆 🗇
Sticks and twigs from yard maintenance	1	000	, 2, 0 0 0	3. 🗆 🗆 🗆	4. 🗆 🗆 🗅	5. 🗆 🗆 🗆
Reduce & control light pollution & trespass	1	000	2. 🗆 🗆 🗇	3. 🗆 🗆 🗆	4. 🗆 🗆 🗆	5. 🗆 🗆 🗀
Require open space for development	1	000	2. 0 0 0	3. 🗆 🗆 🗆	4. 🗆 🗆 🗈	5. 🗆 🗆 🗅
Stricter shoreline zoning	1	000	2.000	3. 🗆 🗆 🗆	4. 🗆 🗆 🗆	5. 🗆 🗆 🗆
Protection of farm and forest land	-1	0005	2,000	3,000	4.000	5,000
Develop more parks	1	000	2,0,00	3.000	4000	5.000
Adopt groundwater protection measures	1	0.00.00	2.000	3.000	4/0,00	5.0.00
Adopt wetland protection measures	1	0.00	2 0 0 0	3.0.00	4.000	5,000
Adopt sand dune protection measures	1.	0002	2.000	3.000	4.0.00	5.000
Develop sewer and water system	1	000	2. 🗆 🗅 🗇	3. 🗆 🗆 🗆	4. 🗆 🗆 🖂	5. 🗆 🗆 🗆
Reduce/Control noise pollution	1	000	2. 🗆 🗆 🗅	3. 🗆 🗆 🗆	4. 0 0 0	5. 🗆 🗅 🗅
☐ Other (circle and describe) 1 2 3 4 5						
Growth Management: Larger residential lots	iodan endir	o.e.o	2 0 0 0	3.000°	4.000	5/0.00
Smaller residential lots Require adjoining non-conforming lots unde	r si	在一个工作的。				5.000
	31.1	0.00	2.000	320 D D	4.000	5.000
Expand public transportation	-		2.000	3:000	4 0 0 0	- 5:
Residential zoning too restrictive		000-	2.0000		4. O O O	5 .0.00%
Residential zoning is not restrictive enough	1		2.000	3.000	4.000	5.000
Concentrate development to preserve open space	1	000	2.000	3. 🗆 🗆 🗆	4. 0 0 0	5. 0 0 0
Limit Strip development	1	000	2.000	3. 🗆 🗆 🗅	4. 0 0 0	5. 🗆 🗆 🗅
Other (circle and describe) 1 2 3 4 5						

Please include any additional comments you have below. Note the category you are commenting on. If you need more space or require privacy for your comments please use separate sheets of paper and enclose inside.

The Hamlin Township Land Use Advisory Committee wishes to Thank You for your input. It is greatly appreciated. Please fold along previous fold lines TAPE closed and return this survey by mail or drop it off at the town hall by September 15, 2005.

Hamlin Town Hall 3775 North Jebavy Drive Ludington MI 49431

> Place stamp here

Survey Hamlin Town Hall 3775 North Jebavy Drive Ludington MI 49431

2005Survey Comments

Seasonal Property Owners

Line 26:

- -Family.
- -Fire Department.
- -Location to town. Nice neighborhood and schools.
- -Recreation Scenery Lifestyle.
- -Beautiful clean safe lake.
- -Clean, friendly, beautiful area.
- -Love the area and lake and residents.
- -Liked the area, like the fishing, hunting, golf.
- -Liked the area.
- -Rest vacation beauty.
- -Liked the area.
- My grand parents then parent then I owned and vacationed at Hamlin since 1915.
- Thought I sold that cottage I purchased another one.
- -Our family has vacationed at Hamlin Lake in Hamlin Twp. since 1960. Were able to purchase our cottage in 1983 a dream come true. Our family absolutely loves Hamlin Lake The grand children especially. It is a very significant part of our lives now and for future generations.
- -Location.
- -Family owned lots on Hamlin Lake for fifty years. We own several lots (wet land) beautiful.
- -Just a nice quite place.
- -Good lake for playing and fishing. Family lives there. Hope to become permanent resident in 3 years. Spent summer here my whole life.
- -Summer Home.
- -Great recreation Create family time, legacy for children.
- -Love the area.
- -To enjoy the lake.
- -It has been a great place, now is leading to very trashy.
- -Rural, quiet, lake environment, trees.
- -I love Hamlin Lake.
- -Nice place to live.
- -It's home.
- -It's the closets to Hamlin Lake that I can afford to live.
- -Family
- -Love Hamlin Lake.
- -Proximity to Hamlin Lake.
- -Recreation Family tradition.
- -Recreation values.
- -We own a home on lower Hamlin Lake that we use seasonally.
- -Opportunity to live on a clean, beautiful lake.
- -Somewhat "rural" outdoor activity availability.
- -Lake property.



- -Move here to retire. Scenic beauty of the area.
- -Enjoy Lake Hamlin and peace of life in Ludington.
- -Beauty of the area, recreational opportunities.
- -In 1969 we wanted a place for our children to enjoy. AT the time of my retirement, I made this my home.
- -Nice wooded area close to town and State Park and Lake Michigan.
- -Bought resorts here and live on lake. Continue to live here because of lake not Twp. cooperation.
- -Because we found a house and liked it, and it's on 5 acres surrounded by woods. Did not want to live in the City.
- -We had vacationed in the area 20 years and decided to buy on Hamlin Lake. This will hopefully be our retirement home.
- -Great area close to town. Property values increases annually.
- -Move here because of beautiful (almost) 1 acre parcel with existing home and detached garages we wished to purchase. Continue to stay because we can have our dogs and enjoy the wooded areas.
- -Quiet, rural, open, wildlife, lake.
- -Like living in the woods and being close to Hamlin Lake.
- -I have always lived in Hamlin.
- -Enjoy the acreage with horses. Peaceful. Hamlin Lake nearby home.
- -I like the Lake (Hamlin).
- -Retirement.
- -We like the area.
- -Lansing want to retire here.
- -Enjoy Hamlin Lake.
- -Hometown.
- -To get away from the noise of living in the City. (Only to have 2 barking dogs next door who are outside 24/7 and no barking ordinance to control it).
- -Because of Lake.
- -Cottage on the Lake. Wonderfully restful.
- -Rural living, natural scenery, water sports and recreation.
- -Nice area to live in.
- -Future retirement home.
- -Closer to work, family in area.
- -Proximity to Lake MI and Hamlin Lake. , rural setting, land acreage, ability to see the stars in the night sky.
- -Cottage has been in our family since 1971. This is our weekend get-a-way and retirement summer home.
- -Location is nice & school district.
- -Close to Ludington, beaches, Hamlin Lake and State Park.
- -Natural beauty.
- -My grand parents purchased the land and home. It has been in my family for approximately 50+ years. My children and grand children are not using our home.
- -Family Home. Moved here to take care of elders. Continue to reside because of quality of life, including character of people and environment. Lake quality is important.
- -Beauty quiet lakes.

- -Love Hamlin Lake and rural surroundings.
- -We wised to live on Hamlin Lake. We like living on Hamlin Lake.
- -Family cottage.
- -Born at White Birch Inn, Middle Bayou.
- -Recreational & future retirement.
- -Enjoy nature.
- -Good real estate.
- -I transferred to Scottville for work from Spring Lake, MI area. 21 years ago moved to Hamlin Twp. for Ludington school system.
- -Beautiful woodsy setting close to proximity to City.
- -Enjoy the Lake (Hamlin).
- -Family cottage on Upper Hamlin Lake. We recently moved into a year-round home in Ludington, but summers are at the cottage.
- -Location near Ludington; Development on Hamlin Lake; Peace and Quiet!
- -We enjoy the rural country living, quiet and peaceful.
- -Rural experience
- -The Lake, nature.
- -Current 2nd home which may become permanent sometime in the near future.
- -Vacation use.
- -We began coming in 1998 and bought our home on Hamlin Lake in 1983. It's a beautiful lake for boating, and the park and dunes are wonderful.
- -Vacation home.
- -To live on Hamlin Lake.
- -Wonderful Place.
- -Enjoy lake, scenic beauty, hiking, state park and national forest trails.
- -Enjoy Hamlin Lake and proximity to the Manistee National Forest and Ludington State Park.
- -Hamlin Lake.
- -Quiet and rural setting. Safe and beautiful environment for children to grow.
- -Quiet area usually.
- -Enjoy Ludington, the people and Lake MI. Beautiful sunsets and plenty to do.
- -We liked the area.
- -Have not found the right place to move yet.
- -Rural, quiet and clean air.
- -By chance, it's a home.
- -Cottage.
- -We love Hamlin Lake.
- -We like it here, by the water. Hamlin and Lake MI and also the woods and wildlife.
- -Started coming to Hamlin Lake as a kid. Moved to Hamlin Twp. to be on Hamlin Lake.
- -5 Acres, wooded, rural, access to Ludington (hometown family both) Hamlin Dunes, beaches, Lake MI and State Park.
- -We loved the area and still do.
- -Live in the country yet close to town.
- -We chose a subdivision in Hamlin because of the "rules" in Association. (We were native). Love our home.
- -Great location.

- -Summer get-a-way for weekends & vacation for 1 or 2 weeks at a time.
- -Family lives in area. To be close to relatives.
- -Employment at the time (1951) hunting and fishing. I like a small town.
- -We love the area.
- -Peace and quite.
- -Have vacationed here for years.
- -Because of the lake.
- -Quality of life.
- -The lake.
- -Job.
- -Went into Resort business.

Beautiful, peaceful area to live.

- -Owned business for many years. Reasonable regulations earlier now changing. Appreciate Hamlin Lake and country atmosphere.
- -To enjoy our retirement.
- -Beautiful Hamlin Lake, access to Lake MI, lots of hiking areas, Ludington State Park.
- -Camped many years at Ludington State Park. Always loved the area. Have one family member living in Ludington.
- -Love being close to Lake MI and out of the hustle and bustle of city living.
- -Excellent lakefront location.
- -Hamlin Lake.
- -Sold primary residence to children, updated and remodeled cottage home to full time residences for retirement yeas. Has been a summer resident for 15 years.
- -Lake and beaches.
- -Because of Hamlin Lake.
- -Summers since 1945. Year around 1968. It is a good place to get away from the madding crowded and my parents started this trip in the 1940's after relatives move up here.
- -The South (South Hamlin) is excellent. Just a nice place to live.
- -Natural beauty of the surrounding area. Lower population density. Proximity to State Park with opportunities for hiking, kayaking, skiing.
- -For the peace and beauty of the area. Like area less people than Chicago area.
- -Hamlin Lake proximity. Nice woods/rural area. Profit potential in home.
- -Very good question (Why did you move to Hamlin Twp.)
- -Like the area and proximity to recreational opportunity.
- -Retired to vacation property.
- -Marriage Grew up in the house.
- -We have been coming to Hamlin since a child.
- -Close to Lake Michigan and Hamlin Lake.
- -Love the area.
- -Hamlin Lake.
- -Retire.
- -H20 Recreation.
- -To live on Lake.
- -Very nice area to raise children. Close to Lake Michigan and Hamlin Lake outdoor activities.
- -Hamlin Lake and State Park.

- -Great vacation spot Hamlin Lake, Lake MI and State Park Nordhouse Dunes Nat'l Forest and Ludington Manistee good golf.
- -Rivers, beaches, lifestyle, proximity to children/grand children.
- -Married Hamlin Twp. resident. Divorced started over in Hamlin Twp.
- -Natural beauty of the area.
- -Like the area.
- -Born and raised in Hamlin. Nice area.
- -It's home now. Hamlin Lake and my home.
- -Liked the area.
- -Need a place to live, country like atmosphere and now I live it here.
- -Don't want to live in town. Don't want to live in housing community.
- -We vacationed in Hamlin for over a decade. Moved from Chicago in 2000 to escape the crime, traffic, etc.
- -We moved to Hamlin Twp. to retire and live on Hamlin Lake and to escape the rat race in the Metro Detroit area.
- -We love the lake.
- -Country feel, not to crowded with people. Low traffic. Continue to live here because have not found any place better, yet!
- -Proximity to Lake Michigan and Family.
- -Affordable. Home is paid for.
- -Lake living and the quietness.
- -Close to town. Still some acreage.
- -To live on Hamlin Lake.
- -Quality of life. Hamlin Lake Low cost housing and golf.
- -Found a house and like it happened to be in Hamlin.
- -Just like it here.
- -Hamlin Twp. Hamlin Lake, Ludington has been a vacation get-a-way area for us for a lot of years.
- -Nice area less populated.
- -Solitude Natural beauty climate Lake MI and Badger.
- -We purchased a home in Hamlin Twp. to be close to Lake MI.
- -Love the Lake.
- -Hamlin Lake Home.
- -The beauty of Hamlin Lake, availability of quality fishing & hunting. Peace and tranquility.
- -Liked the area.
- -Job brought me to Ludington.
- -Because it's away from town.
- -We came because of the beautiful natural landscapes and low population density. We stay for the same reasons.
- -Wanted more space love the area don't like all the new bickering at monthly meetings.
- -"It's a bright spot that's a shade better" A great place to retire.
- -I enjoyed the woods. Now there are a lot of habitat houses. HA!
- -Quiet rural community.

- -We live in Tamarac Mobile Home Park on Hamlin Lake. We love to fish and since retired Tamarac is a great place to be.
- -The right house and property
- -Moved after retirement.
- -Beauty.
- -My family has a home and large property holdings since about 1918. We are still here because of the natural beauty, wilderness areas, clean lakes, rural atmosphere.
- -Location, location, location.
- -We love it.
- -We like the area and closeness to Ludington.
- -Wanted kids to attend Ludington school. Liked area.
- -Because four of our daughters live within 15 miles.
- -Quality of life.
- -Hamlin Lake and the beautiful surrounding area.
- -Rural characteristics listed below; proximity to Hamlin Lake plus only 8 miles to town.
- -To retire to a preferred location. Geographic, economic, social and climatic factors considered.
- -Employment in Ludington.
- -We built our retirement home on Hamlin Lake.
- -It is beautiful, has a rural feel with many conveniences (gas, cable). Has good zoning ordinance that protect land owners.
- -Cheaper taxes Nice Township.
- -Love the area.
- -Get out of large city Ludington area is lovely location.
- -Left Chicago Love the weather and dunes.
- -Large yard for children to play in, quiet, not a lot of traffic.
- -Close to Town. Nice Area. Hamlin Twp. is not rural.
- -Employment.
- -Do not live there. We own a house there.
- -Born and raised in Ludington. Have traveled extensively both in the USA and various parts of the world. I have never found a place I would rather retire too. I love the seasons here and the lack of over population.
- -Moved to area for my current employer. Moved to Hamlin for larger lot size, access to Lakes, yet still close to town. Availability of homes.
- -Out of city, more rural character.
- -It was a quiet rural area when I moved in. Now it is getter populated.
- -Work.
- -Purchased business. Later sold business and continued living in Mason County (Hamlin).
- -Rural feel of area.
- -For the rural, quiet, recreational setting. Climate influenced by Lake Michigan.
- -Vacation and recreation area.
- -Land Value. Wooded Setting.
- -Our house sold so fast in the 4th ward, we only had 30 days to find a new home. Hamlin home put up for sale two times Taxes too high will not sell.

- -You could use property for anything now there are so many codes and permits. The last straw is permit for a gas tank LP, well, septic and move out of Hamlin.
- -Rural, woods, wildlife.
- -Nice, friendly and quiet.
- -Quiet, rural, small, open to cultural, ethnic diversity and affordable to middle-income.
- -Job, beauty of area, small town, the people.
- -It is a beautiful area, nice wide open spaces, lots of tree, nature, animals, etc.
- -Inherited the home.
- -We love the South Bayou and enjoy living there.
- -Great beaches and area.
- -I wanted to retire in Mason County.
- -Family home since early 1900's. Retirement home.
- -The lake.
- -To own and enjoy our acreage sufficient to hunt, raise horses with neighbors of like persuasion. Wildlife abounds. New development has destroyed wildlife created excessive traffic and crowding.
- -Found a home on the lake.
- -Husband born her. Good style of living. Wife important 20 years. Good investment.
- -It is lovely here nature. A retirees we are close to a small town w/doctors, hospitals, senior housing, senior helps, sufficient shopping.
- -I like the area and my home.
- -Recreation Housing level- Rural Character.
- -Born and raised in Hamlin Moved back to raise our family in Hamlin (we wanted acres, woods property) not subdivisions.
- -To get out of town (Ludington) to have more privacy and live in woods close to Hamlin Lake.
- -Wanted to be out of City.
- -We moved out here to enjoy the open space and recreation opportunities.
- -Moved here following retirement.
- -The convenience of close to school, beach and state park.
- -Rural Close to Town.
- -Country.
- -Like the area.
- -Like the area.
- -To get away from the noise and to have to look at your neighbors yards full of crap. Privacy.
- -Location Not too far from beach, state park, town, etc. Beautiful, natural surroundings.
- -Our house is here.
- -Natural surroundings, near Ludington, near State Park and Hamlin Lake.
- -Love my home and yard.
- -It was close to my work, we liked the house.
- -Built new home.
- -Location.
- -This is where the house was located the best for me of the 4 available in my price range when I had to find a house in 10 days. It has been satisfactory.

- -Like the area.
- -I enjoy the space, not subdivisions like in town. The nature and the fact that people owns property and want to keep it beautiful. Also, the proximity to Hamlin Lake. Not too many businesses, more of a country community.
- -Enjoy living in quirt woodsy area.
- -Enjoy Hamlin Lake.
- -We like our home here.
- -Close to Ludington and is a rural setting.
- -Peaceful small town area.
- -Great environment, lots of woods, wildlife, proximity to Hamlin Lake. Not close to city limits, but not too far out.

Moved out of City of Ludington. Like the quiet.

- -Love it.
- -Price of lot. Too lazy to move.
- -Location.
- -Because of lake. No other reason.
- -Returned to area after death of my husband and built a home in Tall 'Oaks. Have family here.
- -Family property, built home, raised family, great location.
- -I live on Hamlin Lake and love the area.
- -I moved here because my home location fit my likes. Why I continue living here is questionable. The taxes will soon be to great for my income.
- -Wanted to return to Ludington area and found suitable home with garden space in Hamlin Twp.
- -Quality of life.
- -We like it here in Ludington.
- -Close to work.
- -Like it here in Ludington area.
- -We didn't know it was Hamlin when we moved here. We continue because we love our home and have no desire to move everything we own.
- -Child hood dream to live on Hamlin Lake.
- -Family homestead.
- -Grandfather bought cabin and I love Hamlin Lake.
- -My wife and I lived in Hamlin Twp. until marrying (20 years) Just returned to our hometown 6 years ago.
- -Close to work in 1965. We continued to live in Hamlin cause the house is handicapped equipped.
- -Close to town, the land we bought was on a paved road, natural gas and cable available.
- -Rural setting that lacks the oppression of city government.
- -I like it here.
- -Closeness to town.
- -Moved to present location with parents. Continue because I like the area.
- -Location, Location, Location,
- -Nice area.
- -Location of our property.

- -We moved to Hamlin to get away from crowded city living and city schools. Now we have lost control of rural schools and Hamlin is getting over crowded.
- -Quiet, peaceful and nice people
- -We moved from Ludington to get away from City life when it is crowded and have privacy.
- -Close to Town.
- -Hamlin was my summer home during youth. Family owned business on the Lake. I loved it and moved here after graduating. Plan to stay here until I die. Hopefully for another 45 years.
- -I bought the property in 1985, planning to retire here.
- -Lake/Beauty.
- -Like the location of our home.
- -Liked the Area.
- -Location Close to work and town.
- -Peace & quiet; Low traffic; Easy access to town and Lake Michigan.

Closer to Family.

Family Ties - Hamlin Lake & Manistee National Forest

Like Area - Born in Ludington.

- -We knew a family here, visited and brought a cottage for vacation use solid it & 7 years later purchased a home here. We like Ludington, Hamlin Lake the woods and river and people.
- -Hamlin Lake, Rural Character.
- -Liked the area.
- -Location.
- -Seemed like a good idea at the time; Own a house here otherwise Hamlin twp. has no particular attraction.
- -Lake property.
- -We moved to Ludington for the school programs and the beauty of the environment for raising our children.
- -Moved as a family Even with the high taxes, I guess I like my house.
- -Less noise, more privacy and space.
- -Family owned cottage since 1930's. Were going to retire here, but decided to live here sooner.
- -Rural acreage
- -Vacationed here for 60 years and decided to retire here.
- -We have acreage for animals.
- -We enjoy living on Hamlin Lake and do fishing as well as boating. We also like the peace and quiet of the lake.
- -We wanted to be just north of town and closer to the State Park.
- -We enjoy Hamlin Lake and surrounding area.
- -Enjoy area.
- -Moved for 2 yr job opportunity; Remain for country setting close to recreation.
- -Bought property and built a home.
- -Moved here for relaxing; Moving out because of taxes.
- -Country feel, but near town. Hamlin Lake, quiet, animal life.

- -Previously owned adjoining resort and had to sell when wife became afflicted with ms and passed away in 1989. WE now plan to become permanent residents net year after we sell our home in ILL.
- -We love our neighborhood. It's peaceful.
- -Found a house in a subd. w/stick rules regarding vehicles in yards; building size, fences, etc.
- -Bought rental property
- -To own land.
- Why did you move to and why do you continue to reside in Hamlin Township?
- -Natural beauty, clean water, recreation.
- -Retirement summer home.
- -Lake Access.
- -Rural experience
- -Vacation home
- -Vacation
- -Love Hamlin Lake
- -Enjoy the area like the lakes and parks like the weather have come to Mason County for vacations for over 50 years; when a chance came to buy land and home within our means we "jumped" on it.
- -Property on Hamlin Lake; love the lake and the area.
- -Hamlin Lake, Lake MI, State Park, Nordhouse Dunes, Federal Park, Ludington. Sailing, canoeing, beach, hiking sand dunes, pier walking, etc., Summer cottage built 1910 by my dad: Memories, star gazing, light free to sound.
- -Lake activities and golf. A quiet retreat.
- -Summer Residents
- -Large lake; Friends in area.
- -Our family history visiting & living on Hamlin Lake dates back to the 1930's. My parents have owned a house on the narrows for 20 years. I just bought my dream cottage this month. There is no place like Hamlin Lake. It's magical.
- -My parents first bought our cottage in 1962. We have been coming up to our cottage every summer for 6-10 weeks since.
- -The Lake.
- -Our cottage is on Hamlin Lake We reside in ILL.
- -The Beauty of Hamlin Lake.
- -Property kept in Family and will stay.
- -Our house and property reflect and remain a big part of our lives.
- -The water! Many things to do.
- -Like the area.
- -I've been coming to Ludington since before I could walk, my parents, aunts, uncles and friends would come for summer vacations. My parents, uncles and an aunt move to Ludington after retiring. Myself and 2 other brothers own undeveloped property near my parents and uncle.
- -Investment.
- -Our Home and lots are a very important part of our family heritage and memories. The 4th generation is now enjoying vacations and holidays there.
- -Like the area.

- -Family history.
- -To build on undeveloped land. Possible retirement home.
- -Thought Ludington area was a great place to raise a family and receive an education.
- -Bought property because of the natural beauty Lake Michigan and the State Park. The town of Ludington is awesome.
- -We moved from Hamlin because there were no jobs at the time. We did not move back because someone burned down our home.
- -Wildflowers along roadway.
- -Should be grand fathered in, the lots with homes that are smaller than what we propose for the future.
- -No communication towers.
- -Low density housing.
- -I don't understand all these questions. I just want to be able to lot off my property if I want to someday.
- -Very limited Commercial development! Area around Hamlin grocery to the West on Dewey is already a mess. Boat storage is a poor use of land near residential homes.
- -More need to noise limits and hours of lake use (with motor boats or personal crafts).
- -No housing developments.
- -Multi-family housing can be valuable if carefully developed.
- -Quiet surroundings.
- -All of the above Lets keep it that way.
- -Quiet allowing lot of land to be subdivided to allow homes to be built on smaller lots.
- -No street lights.
- -Able to maintain the "step back in time" quality on the lake look cottage should be able to re-build on lots due to fires, etc.
- -We have 10 Acres Large enough NOT to see either neighbor.
- -#16 An over statement (stars visible) Too much light pollution even in Hamlin Twp.
- -Private yard security lights permitted within limited watts.
- -Hamlin is not rural character. Move to Logan or Eden Twp. if you want Rural.
- -Very few communication towers.
- -Not of the opinion that all of Hamlin Twp. needs to be "rural".
- -New commercial besides small grocery stores like Hamlin Grocery.
- -Stars Visible Definitely needs to be addressed around upper and lower Hamlin Lake.
- So many all night and year around yard lights One can no longer see the stars from Lakeshore unless one goes back on the sand dunes.
- -Very limited commercial, industrial zoning and only basic social services (gov't offices) in Township.
- -Property tidiness and pride of ownership.
- -Minimal traffic.
- -The secret is out we don't need more people.
- -No noisy animals rooster crowing 24/7. No noisy parties People like to sleep with their windows open. Roosters should go to farm. Live band practices should go to the studio.
- -Limit noise from generators, etc.
- -No congested traffic, no stop lights.

- -Is there a light interference ordinance in Hamlin Twp? My neighbor's outdoor lighting is very interfering.
- -Eliminate trash filled premises in rural areas.
- -Need more lights at road intersection. A safety necessity.
- -Need more boat ramps on lower Hamlin Lake at State Park.
- -Hamlin Lake.
- -We bought our house 5 years ago and my husband lost his job downstate so we are now living here and trying to sell our house downstate.
- -Wanted rural setting to have horses and raise kids. Lots of woods and open spaces Houses on 5-10 acres or more. Lots belong in the city. We need houses on acres not lots. -Away from the city.
- -Close to Lake Michigan, nice vacation area.
- -Had to live within Twp. area to be on the Fire Dept. We like the area but would like to more enforcement on keeping your property looking nice and keeping it clear of old junk cars, etc.
- -Own second home residences for 28 years because wife's relative were 40-50 year owners.
- -2nd home (keep is open all year and use it as we desire).
- -Beauty of area. Convenience to town.
- -Hamlin Lake.

Line 38 Other descriptors of "rural character"

- -Wildflowers along roads; quiet, wild animals, birds.
- -Orchards.
- -Tamarac Mobile Home Park.
- -Existing and older structures that lend rural and lakeside community, sense of place, history and memory are allowed to co-exist with newer, "slicker" structures.
- -Areas of low noise few motors airplanes, boats, jet skies.
- -No more habitat for humanities homes in Hamlin Lake Estate. If these people who build these homes need to build one next to theirs. Need to change size of lots in Hamlin Lake Estates. Need to have at least 100' wide roadside to build on.
- -Wild flowers peace and quiet. Acres and distance between houses.
- -I would like shoreline rules enforced. They are NOT and owners of properties are getting away with not following DEQ requirements.
- -#14 only if you have large acreage to make it safe; Able to hunt on your property.
- -Yes to all, Rural character depending on proximity to others.
- -Low traffic, which unfortunately isn't the case where we live.
- -Even farmers need lights #16 is not relevant here on this contract.
- -Able to live on our properties without being restricted by the Twp. constantly.
- -Able to use lots that were plotted years ago. New lot in developments need to be big.
- -Remote from City.
- -No noise!
- -Being able to use land without over regulations by way of ordinances, for example using property at waters edge that is now considered non-conforming in lot size.
- -Minimal towers, (cell phone, cable, wind). No many already.

- -Able to have and own animals.
- -Enjoy quiet environment.
- -Housing projects/cul du sacs need to be outlawed. Too many too close No hunting within at least ½ mile of schools (deer rifle.) What do you consider to be low housing density? 20 houses on 20 acres.
- -Quiet No loud dogs, music, homes, cars.
- -Roads should be adequate to handle traffic.
- -Natural lakeshores may be desirable but Hamlin, it is necessary to have seawall!!
- -Re-zone building codes to minimum 4 40 X 100 lots to build or construct.
- If natural includes break wall, than yes. #4 I do not know your definition you may go overboard. #10 & 11, I do not know your definition. Lake, friends, want ½ Acre lots and \$4,000,000 homes.
- -Quiet no loud hard rock music, no loud neighbors. Only loud machinery which would be working machines like chain saws, tractors, mowers, etc.
- -Leave natural vegetation at lakeshore when people or developers build.
- -Low vehicle traffic.
- -Do not agree with rural character.
- -Mature trees, birds, eagles.
- -I like all the cottages around.
- -Lots do not describe rural. Acres Do. There should be a limit as to the # of subdivisions on any given road. Jagger, Decker come to mind. Filling in wet land areas should carry million dollar fines.
- -Too many deer.
- -Lot set backs 25' from front and back are ok. Sizes 12,000 to 15,000 sq. feet ok.
- -Wild life in natural surrounding.
- -Everyone wants country, but they don't want to pay taxes.
- -Neat and clean home fronts NOT junk yards with trashy homes ready to fall over.
- -Limit ATV Use.
- -Peaceful, quiet, low traffic volume.
- -No Litter on roadways. No heavy industry. Minimal noise pollution. No "puds".
- -Oniet
- -Few towers through cell phone service should be improved. Limit commercial development.
- -Limit shopping malls/strip malls. A well developed downtown with "real"shopping stores.
- -Very few people; Forest. Like 1 Family per 40 acres or more acres.
- -Roadside trails for walking and riding bikes to promote safe environment of natural and rural areas.
- -You are considering property not people. I would strongly urge your to consider rural character from the aspect of people (being friendly and relaxed) rather than just property aspect.
- -No industrial property. No noise from equipment. No odors from any development. No heavy vehicles on roads.
- -Low noise level. Ease of working with local government.
- -No off road vehicles.
- -Low commercial business; No industry.

- -No subdivisions. Rural means farms acres between house, natural settings, no poisoning of foliage by road, no mass cutting of trees.
- -Acres not lots. Min. lot size R-1 3 Acres. Agr. 5 Acres.
- -Quiet, ability to keep noise at a minimum.
- Cottages, vacation sports, quiet roads, enforced slow speed limits, no mansions, public parks. Public beach on Hamlin. Shoulders paved on Lakeshore Drive, pedestrian/bike friendly roads.
- -Bought resort and residence.
- -I was raised in Ludington 1945 my parents are buried in Ludington, my brother and his son live there. Our family has been Ludington (Hamlin) since 1965. My grand father Henry Malliett was a Twp. Supervisor in 1903 (Hamlin).

Line 82 Maintaining and Protecting

- -Enforce stringent junk & nuisance's codes on individual property owners.
- -Lots of trees, orchard.
- -W. Nurnberg needs to be paved!
- -There must be rules because just because someone wants to use his property as he sees fits should not be written as a plan or ordinance.
- -Volunteer Fire Department.
- -People could leave buffer by roads where 10' or so. Wildflowers by meadows, woods or whatever was natural. Leave trees in front of home to screen lake shore is wooded. Buffer of "wild" area adjacent to water not all moved lawns!
- -We need stricter zoning or what builders do; Natural buffers. This does not unduly reduce freedom or rights. The lake areas begins to look to suburban. Some homes on lake cut trees. Rest of us do not want the unscreened view of these homes.
- -Shoulders paved on roads/slower speed limits.
- -Limiting noise pollution barking dogs Harley Davidson at 3:00 A.M.
- -Public should be able to vote on issues such as the zoning ordinance.
- -Total freedom is a nice theory. Might work on mars. We need zoning.
- -The Township does not enforce encroachment issues. Makes me wonder why we pay salaries for some agencies.
- -The state park provides us much of the forest and wet lands.
- -I want roads unpaved!! Very important NOT to pave.
- -Enforce the noise ordinance.
- -Black topped.
- -Ability to get state funds to match state taxes paid. Don't be a "donor" township.
- -Some restrictions should apply to how an individual uses his own property.
- -Too restrictive on acreage is very unimportant.
- -Enforce RV laws on Black Bass Bayou project and roads. Have consideration for neighbors and wildlife.
- -Keep small scale for roads.
- -Persons who have land can enjoy the same use for many years to come.
- -Be able to rebuild on non-conforming lots.
- -Professionally ran Township meetings. Limit the lengthily comments by the Township officials.

- -Right to use property within reasonable guidelines.
- -The issue of noise guns firing close to residence.
- -Need dog/noise ordinance (barking)
- -If I want a garage, why ask my neighbor.
- -Maintain township hall as long as taxes are not raised.
- -Low population density no increased density on Hamlin Lake.
- -Zoning ordinance need voter approval.
- -Paving streets in Hamlin Lake Estates would provide cleaner air and have more pride of ownership.
- -Noise Ordinance.
- -Too much house building!
- -A place for disposal (free) of yard waste (leaves, limbs, grass)
- -Jagger Road is a mess You can spit thru it. Winter it is a dangerous because of the potholes.
- -Any enhancements to facilities should be voted on by Twp. residents.
- -Repaving Jagger Road
- -With restrictions and reasonable limits to use your own property as you see fit.
- -#79 within reason so as not to cause pollution by fertilizer, or unsightly as junk and health hazards.
- -We have a real nice hall.
- -Police and fire protection, EMS.
- -Size of new construction consistent with existing structures.
- -Controls needed to protect others, the environment.
- -Clean up day every year.
- -Preference of planned growth and strong business district.
- -Clean up weed problem in Hamlin Lake and Fix Dam.
- -Garbage pick-up.
- -Natural gas lines should be brought into. Eli mate LP Gas tanks and associated noise and activity.
- -Noise pollution.
- -Dredge bridge underpass for boats at Middle Bayou and other access areas that need this.
- -Roads very important.
- -Make Twp. and Hwy. Commissioners more responsive and available to property owners.

Attempt to keep them from allegedly hiding in meeting for 2-3 days at a time.

- -Uncontrolled poisoning and misuse of individuals property should be controlled (illegal dumping/burning).
- -Maintain property values.
- -Sewers NOT septic systems.
- -#79 Use of conformity within ordinances.
- -Governing bodies responding to the will of the majority of the residents.
- -Regulating eye soars & junk.
- -Quaint homes of different sizes and character.

Line 96 Current and Potential Issues – Lakes and Streams

- -Water quality, weed control in lake.
- -Maintaining the dam.
- -Lake monitoring by law enforcement & h20 quality monitoring and planning needed.
- -Encourage owner responsibility without excessive costly studies and regulations.
- -Limiting boat access to bayous off Hamlin Lake. Maintaining current bridge size.
- -Eliminate zebra mussels.
- -Charging a fee at Wilson Hill Park to launch boats.
- -Lake weeds.
- -Lake owners' right preserved.
- -Maintaining lakeside public facilities, etc.
- -If you want to stop over crowding on the lake, close the State Park!
- -No more mobile homes.
- -Gravel road erosion, entering the lake (Hamlin) Control of personal water crafts! Inspection of local septic systems;
- -Jet ski are becoming a nuisance.
- -Maintain a clean environment/lakes and streams.
- -Regulate noise on lakes (jet skies)
- -Keep the Lake Michigan shoreline open and available to all of the public.
- -Stop putting salmon in Lake Michigan.
- -Please do something to minimize the nasty weed infestation on Hamlin Lake, especially upper Hamlin Lake.
- -Overcrowding from trailer parks on the lake.
- -Require larger lots to build on. No selling of small lot.
- -South Bayou becoming overgrown with weeds.
- -Stop sewage from flowing into Hamlin Lake.
- -Fix Hamlin Lake Dam and Clean up weed problem.
- -Provide control for milfoil for lake as a whole not piecemeal efforts by smaller groups of homeowners.
- -Maintain high quality of all surface & ground water.
- -#89 Hamlin Lake is not controlled.
- -#90 Large homes should be considered as over development as much as small homes.
- -Being able to re-build on our property.
- -Current residents (both seasonal and residential should be allowed to make improvements on their property regard lets of lot sizes.

Line 106 Current and Potential Issues - Image

- -Wind energy could be in a less crowded and less recreationally important area away from lake.
- -Allowing "cozy" lakeside cottages and smaller homes to remain.
- -Need more cell towers.
- -#104 Wind Energy is already decided right?
- -Should have controls about out of state boats using our lake bringing in unwanted species & vegetation.

- -Noise from wind energy systems.
- -Wind energy systems, outlaw them.
- -Wind energy systems are a good idea.
- -Keep vacation resort image/family.
- -Alternative energy resources are critical to the nations future. Wind farms if strategically located would not have a significant impact on the science beauty of the area.
- -Barking dogs a problem.
- -Old cards for parts are not junk.
- -Too many homes for sales signs. 3-4 on each road corner.
- -Prohibit selling vehicles by parking on right of way.
- -Individual owner responsible for cleanliness.
- -We should have the rights to put up a wind generator on our property with the correct set backs and noise levels.
- -Those with money should not be allowed to dictate to others whether or not they should be allowed to generate their own energy.
- -Power lines unsightly.
- -Need to see Decker, Jagger more bike friendly (A shoulder on either side)
- -Have productive township meetings, and the embarrassing bickering and become more professional.
- -100'- less development.
- -Need more communication towers.
- -No Wind Energy Systems Keep them Out!
- -Roadside trash dumping.
- -Clean up Lakeshore Drive old falling down structures (Quonset hunts, junk piles, etc. should be removed.)
- -More roadside cleanliness
- -More wind energy systems.
- -Maintain rural/wilderness character and uniqueness.
- -Ludington needs to upgrade the downtown & limit "mega" store" sprawl.
- -Why don't you enforce the rules and laws on junk and nuisances.
- -Allowing use of one's own property.

Line 117 Current and Potential Issues - Transportation

- -Bike trails would be good for out children not to ride in the roads.
- -Use of lake for airplane landings.
- -We live on Neil Speed 25 mph/ped. Traffic. We regularly see cars at 50 mph & higher.
- -Summer traffic terrible; speeding, loud music from cars.
- -Pave shoulders/enforce lower speed limits.
- -Deal with badly maintained properties.
- -Pave Nurnberg Road and other heavily traveled roads.
- -Lack of enforcement.
- -Bike lanes on more well-traveled roads.
- -Too many RV's using roadways and trails on private land as their own.

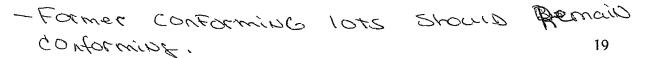
- -Congestions not the correct word? It should be "control"
- -Is there any year round traffic congestion?
- -Improve No Name Road.
- -Very, very loud motorcycles.
- -Bike paths Lincoln Duneview.
- -Need more speed control on Lakeshore Drive. Motorcycles, doing 70-80. It's dangerous living on this street.
- -Fixing the bad plowing jobs on the newly paved portion of N. Sherman. Pot holes started just weeks after it was supposedly finished in 2004.
- -Bike paths would be nice.
- -We need county wide dial-a-ride option for families with kids and senior citizens.
- -Need more traffic speed signs and more patrolling.
- -Need bike lanes on major road (Lakeshore Drive)
- -We could use more commercial growth.
- -Need bicycle space Paved on Jebavy.
- -Too many unpaved roads. Inadequate shoulder, road width for bikes, runners, etc.
- -Jebavy and Shagway speed is out of hand and passing on double yellow lanes.
- -Bike/pedestrian paths
- -Walking paths safe from traffic. Lakeshore Drive needs speed limit signs and enforced.
- -More pedestrian/Bike trails.
- -Parks become cruzing zones for kids need to limit/control.
- -Need some sidewalks on Lakshore Drive.
- -Lack of bicycle lanes.

Line 124 Current and Potential Issues - Housing

- -Too many cul du sacs!
- -Let economic forbes dictate this, if there is a need, they will come. Tax abatements work.
- -Should have some affordable low and moderate housing.
- -No more housing! Especially low and moderate or multiple units.
- -Each of these permitted in controlled amount (Adult Foster, Assisted Living & Moderate housing).
- -These facilities belong near town, hospitals, etc. Not in a rural setting; (Adult foster cares, assisted living and low & moderate housing).
- -This is handled in Ludington adequately.
- -Need to encourage some restaurant/"destinations" for boaters on the lake. Just a couple would be welcome business.
- -Need stronger zoning ordinance to limit junk in yards.
- -No services for young adults w/disabilities. Need housing for them.
- -I am totally ignorant on these. I though most or all was moderate and more affordable. If I can afford you would think the majority of Ludington can too.
- if i can arrord you would mink the majority of Eudington can to
- -Seems anymore you have to be rich to live near Hamlin Lake.

<u>Line 141 Current and Potential Issues – Growth</u>

- -Any land owner can re-build on said property.
- -Grand father rights.
- -Non-conforming lots should be "larger" less population around Twp.
- -Township move to waive easements on non-existing roads north of Duneview.
- -Definitely should be able to re-build whether non-conforming.
- -Need noise ordinance also need clean up acres that have trash stored for years and enforce strongly.
- -No mansions on lake.
- -Being taxes too much without. Taxation without being represented.
- -Let people sell land in parcels separate from main house.
- -Signage when spraying lake.
- -One should be allowed FULL use of their property. If you TAX it one should be able to use it.
- -W need our grand father clause. What you are doing is wrong!!
- -Lots need to conform if not why have any zoning?
- -Existing structures should be allowed to grand fathered in on all lots.
- -The two regulations cause tremendous financial and emotional hardship on a lot of people. # 137 and #139.
- -It seems to me that a compromise is in order. Grand Father in owners if home is destroyed. Do not allow to sell off of small lots.
- -Ability to have the same rights as conforming. Lots as far as repairs or improvements.
- -Non-conforming lots large issue for existing homes.
- -Ability to make improvements and repairs on existing properties conforming or non-conforming lot sizes.
- -Must be able to rebuild (on same foundation) same size if house is destroyed.
- -Residents should have at least a half acre to build on.
- -Appropriate lot sizes for new construction.
- -You would see the mother of all law suits if we were not allowed to rebuild. We should be "grand fathered" in.
- -Control size, limit size of new dwellings.
- -Large lots allow more wild land, large homes destroy too much wild land.
- -Commercial growth should not be at the expense of other items.
- -Allow taxpayers to continue to enjoy a "get away" home if disaster stakes what they have and have been paying for.
- -Ability to rebuild existing without restrictions.
- -Grand father in what we have.
- -Non-conforming lots should be able to rebuild.
- -#139 I think people should be able to do what they need to do with their own home and property no matter how big or small.
- -Non-conforming lots should be grand fathered in.
- -It is very important to have sufficiently large lot sizes to protect water quality and efficiently process septic waste.
- -The right to sell excess lots off same property allow.



- -Very poorly wooded section (#135 thru #140)
- -Use the laws the same for everyone.
- -Non-conforming lots re-built what they have (sq. footage)
- -Look at what is appropriate on residential lot sizes.
- -Local government has no right to deny them reconstruction on non-conforming lots, or stop collecting property taxes now!!
- -Should not be able to sell non-conforming. Only re-build non-conforming houses.
- -Able to sell but not as building sites.
- -New housing being built on non-conforming lots.
- -#136 Need to be larger. #139 No- Do not allow.
- -If they pay taxes on a lot they should be able to re-build on a non-conforming lot.
- -Persons with 50 feet lot given to many variances.
- -Nurnberg Road should be looked at.
- -#137 House was there Rebuild no Bigger.
- -#137 Addresses the most ridiculous current ordinance if effect. MUST BE CHANGED. It is the only fair thing to do.
- -If someone loses a house that was built prior to the ordinance they should be able to rebuild
- -Change laws in Township immediately to allow anyone previously refused to rebuild on non-conforming lot. This is their property.
- -By act of god should have option to rebuild.
- --Ok if not for purpose of building new.
- -#137 and #140 is the biggest interest Very important.
- -Very productive land should be maintained. Develop unproductive land.
- -Planned communities with green space and large lots. Housing specifications should be required to improve property values.
- -Should be able to re-build home or repair it on non-conforming lots.
- -Lots should be 100' feet where there is no public sewer.
- -Cut through red tape, make exceptions to set rules.
- -Maybe grandfather on approval by a hearing not automatic.
- -Non conforming should not rebuild.
- -Rebuilding of non-conforming buildings should be allowed.
- -Sub lots should be ok to build on
- -Have the ability to re-build on non-conforming lot.
- -Do not allow any small 65' or less to be built on or sold. Min. lot size is 100'.
- -RE-building on non-conforming lots restricted.
- -Can sell even if it isn't non-conforming lot.
- -Definitely should be allowed on N# 137.
- -Must stop over use of non-conforming lots.

Line 154 Future Land Use – Residential Land Use:

- -Single family homes on acres 3-4 min.
- -Like present conditions.
- -Stop mobile home parks.
- -No wind towers, unless it benefits local residents.

- -Less density.
- -Big subdivisions they are pushing out wildlife.
- -We support rental units such as cabins/cottages not individual ownership of small unconforming trailer lots.
- -The ability to sell non-conforming adjoining lots separately should not be allowed.
- -Don't know ordinances or zoning on these issues -
- -Homes with acreage (all family homes)
- -No subdivisions.
- -Planned mobile home parks would be ok.
- -Single family homes only.
- -No condos or clustered housing or mobile homes.
- -No opinion on most of #145 153 Residential land use.
- -All types of housing kept neat and clean. A small cabin, shack, mobile homes, mansion, maintain and looking sharp all have a special place.
- -Should be managed to improve property values. Quality housing.
- -Plan the community Don't just let it happen. In new development require green space and housing codes.
- -Why only concern for adult foster. There is a big need for all disabilities.
- -Not familiar with the need or demand for this use.
- -Every piece of land doesn't need a building on it.
- -Personal pets (dogs) more control.

Line 164 Future Land Use - Commercial/Industrial

- -Hours of operation.
- -Would depend on location wind energy systems.
- -Gas station badly needed.
- -Wind None at all.
- -Serve a purpose but look like h____; Make them landscape and light attractively; shopping centers/convenience stores.
- -Become part of solution No roadblocks for wind energy's.
- -Restore R4 Zoning as this is a "tourist" town and basis for Ludington. Income.
- -Too noisy.
- -Wind energy good, but not in view from lake.
- -No Industry.
- -Need convenience/gas stations.
- -Only in non-desired residential areas for wind energy systems.
- -If wind energy bread in power cost for residents.
- -We could use a few gas stations between Hamlin Lake and Ludington metro area.
- -No more resorts or motels.
- -No wind energy systems Keep them Out!
- -Small and medium businesses are very important, but not high rise buildings. Never develop the beaches.
- -Unfamiliar with these; seems sufficient but I am not sure.
- -Health facilities/Medical Centers.
- -Nuclear Plant.

- -Would need sewers for some areas.
- -The above depends on demands Commercial and industrial uses.
- -Solar generators, if it would work, hydro.

<u>Line176</u> Future Land Use – Natural Resources

- -Schedule of actions be taken.
- -No pig farms, No poultry farms.
- -Horse farms and quality residential don't mix!
- -Planting of trees as other are destroyed.
- -Easements and unused roads should be saved, not given away. Protect these for future.
- -No pig farms.
- -Always keep the beauty of this tourism area.
- -Same as now.
- -Green belt designation.
- -Les yard fertilizer run off.
- -Let's not go overboard on golf courses!

Line 187 Future Land Use - Recreational

- -Clean up after usage.
- -Noise/Speed limits for boats.
- -Ability to walk on roads without almost being killed.
- -Set aside new woods partly put trails in these but no more trails in National Forest or State Park.
- -Fewer off road vehicles and snowmobile trails, they are loud and despoil the environment.
- -Draw dam water on Hamlin Lake later in year to promote recreational use.
- -Use separate areas for 179-186 when they conflict.
- -Snowmobiles don't obey laws.
- -If there's a need for more rec. areas; I am not aware.
- -Fitness centers and paved skating areas (smooth asphalt)
- -more noise reduction no ATV's.
- -Cleaner boathouses, trash pick up on beaches.
- -Walking, biking, jogging are popular on Shagway, Jebavy, Barnhart Road's now narrow, busy with traffic and thus dangerous a white line lane widening recommended.
- -Hamlin future is with year round tourism and clean industry.

<u>Line 198 AND Line 200:</u> Future Land Use – Would be willing to Pay fees or taxes to support:

- -Ramp Fees.
- -Off road vehicles.
- -Each of these could be a hugh presumes separate mileage, part of Hamlin's future.
- -Much more on #192 196 with sunsets provisions;
- -Taxes currently too high.

- -Taxes are too high.
- -Fire Department.
- -Move recyclables taken, better system.
- -My taxes are too high now. Summer taxes went up over \$125 from last year. I can't afford the continued increases. I know people who move from Hamlin because they were taxes to death.
- -Sewers.
- -Permit fees.
- -I don't see much from the high taxes we pay now!
- -I pay way too much in taxes. Can work smarter with money you have now.
- -Uses fees fro recreation and parks/No new taxes!
- -For repair of Hamlin Dam.
- -Our taxes are way out of line now! Are you people crazy?
- -Can't vote locally.
- -Mandatory fee for launching boats at Wilson Hill Park.
- -If held on a weekend so seasonal resident could participate.
- -Sewer system is needed for Sunset Bay and Indiana Pete Bayou.
- -Developing a leaf and brush dumping site.
- -Taxes are high enough!!
- -Already paying taxes for everything else.
- -Do not want new tax bills Have increased enough.
- -Creation of more lake access areas with easy access.
- -Property valuation is presently exorbitant therefore each of these 191 199 should be covered by present taxation.
- -Road maintenance.
- -Continue with transfer site as it.
- -Not for supporting a bus that only goes up and down US 10. What about the out lying areas?
- -Removal of overhead power lines.
- -Join Ludington and most other townships and pay annual fee one time to cover all Hamlin Twp. kids participating in sports. Would be cheaper for twp. residents per City of Ludington and allow ever increasing number of twp. kids to all participate in 3 sports program.
- -We need bike paths along roads for safety. At very least shoulders on all major roads like Decker, Dewey, Sherman, Lincoln, Jagger, Etc.
- -Support rec program without pay to play.
- -We are satisfied with what we have.
- -Improving Roads and maintaining.
- -Limited income Taxes are already too high.
- -Animal control! Barking dogs; loose animals are problems.
- -Purchasing Public Land
- -Forest planting, flower planting.
- -Purchasing Public Waterfront
- -Animal Shelter.
- -Paved roads and develop sewer and natural gas service.
- -Maintain water quality in Hamlin Lake.

- -More natural science in the schools.
- -Services for all individuals' w/disabilities.
- -Boat permitting fees fro Hamlin Lake. Increase enforcement for boating regulations.
- -Good maintenance of what we already have.
- -We need curb side recycling program/yard waste program thru West Shore.
- -Repaving Jagger Road.
- -Don't Hamlin residents pay enough in taxes.
- -Hamlin Lake Boat usage.
- -It is important to have a clean up day every year.

Line 210 New Policies and Regulations - Community Image

- -Maintain current quietness.
- -Strictly restrict new developments, no more like N. Lincoln, too many too close.
- -Keep area clean.
- -Dog barking.
- -I have junk, but not nearly as much as my neighbors.
- -Too many junk cars parked in yards -5.
- -Parking trailers along the roadside.
- -This will be difficult; Who is in charge; Officials will need courage; Community Image.
- -But, must not be done at property owners expense "condemnation"
- -Protect the easements on the lake and bayous that our township is giving away.
- -Non-conforming lots: Owners to be allowed to re-build on same foot plan if home is burnt or destroyed.
- -Bike shoulders on roads! Lower speed limits.
- -The old cottages are not the problem. The massive new homes on Hamlin Lake are the problem.
- -Stricter junk and blight ordinances are needed.
- -People should not have junk card sitting in their yard. It brings property values down for others.
- -Thanks for action taken as a result of last survey (Decker Road).
- -I'm tired of trying to maintain and beautiful my property only to have neighbors with 4 or 5 junk cars sitting around plus trash piles, etc.
- -Require full cut off lighting for all exterior light.
- -Please end the 3-ring circus act which is clouding the Twp. meetings. Other communities are laughing at us.
- -Not to overstep owner's right on above (Community Image)
- -This s tough issue; But manufactured homes are not good for our community.
- Architectural design ordinance should be implemented to guide exterior design, materials and fixtures.
- -People allowed to fill easements with trailers.
 - -The old cottages are not the problem. The massive new homes on Hamlin Lake are the problem
 - -Get community image improved Stop restrictive nightmares when homeowners want to improve their property.

- -#209 Junk It is a real problem. Need to ticket offenders and institute strict codes for all.
- -Sewers/water on Hamlin Lake. This must be done.

Line229 New Policies and Regulations - Environmental Protection

- -#214, 214, 216 because of limited oppo.
- -Control speed and noise of PWC's on Hamlin Lake.
- -Secure roadways (gravel) that wash into Hamlin Lake.
- -Sanitary sewer system.
- -Develop lake wide sewer system.
- -Barking dogs a problem.
- -Camp fires on front of smaller lots on lake where other have homes (comes excessive noise and smoke).
- -Natural Gas access.
- -Lake quality of water.
- -Jet skies should operate only at schedule times.
- -Encourage wind generators.
- -Tie into Ludington water and sewer around south, east, west side of Hamlin Lake.
- -Reduce dog noise.
- -Need a sewer along Lakeshore Drive.
- -I (we) believe home owners can use common sense and control their own use on the
- "disagree" items. Give people a chance to be responsible and let them think for themselves.
- -All burning must meet DNR safe burning requirements.
- -Believe sewage system might improve Hamlin Lake.
- -Require aerial crop dusters spray early morning only, by 8:00 A.M. and post date in newspaper to warn surrounding residents.
- -Not aware this system is required or necessary. Perhaps we could hear more about the current need.
- -Sewer System Lakeshore Drive and Hamlin Lake.
- -Lakeshore Drive should be the showcase of the area Clean it Up Falling trees, debris, etc., needs cleaned.
- -Fireworks control.
- -Compost leaves, don't burn.
- -Recycling requirements.
- -Develop and enforce garbage and disposal areas.

Line 242 New Policies and Regulations - Growth Management

-#232 – 241 are all open ended and ambiguous. These scenarios have to be dealt with on -an individual basis. Everything is not black and white. My cottage and property has been owned by my family for 50+ years. Hamlin Township's problem are the new construction of home, cutting roads through forests, etc. to develop new tax bases and destroy the rural way of life most people want to enjoy.

- -Zoning may depend on persons situation.
- -Control wave runners.
- -Stop variances that are based on "he's a good guy".
- -Some of the questions were not written clear enough, on what was wanted.
- -Let people re-build on non-conforming lots.
- -Measured strip development needed, have to travel too far for everyday items.
- -Larger or smaller residential lots depends on location within Twp. Certain areas are fine w/smaller lots; Use good, sound planning measures.
- -Larger residential lots for future construction. You can't retroactively zone!
- -Smaller non-conforming properties should be grand fathered in AS IS and not limited as to anything that way.
- -Create public areas of quite zones.
- -Trailer parks must be taxed and comply with zoning.
- -No re-building on non-conforming lots.
- -Ability to re-build.
- -Enforce the laws that are present now & enforce them.

Line 245 - Additional Comments

- -Land use laws are fun to enforce. State is broke. Tax trailer parks, campgrounds.
- -This survey involves complexities and cannot fully indicate our wishes. I made an effort to answer on some issues of which I am inadequately informed.
- -Do your best to have a vision into the future to try and balance what we have now but will still bring in the funds so we can survive and grow steady. Thanks for allowing us to have input.
- -Don't ruin a good thing, maintain existing character. Balance Growth must be allowed along with appropriate commercial development, but I come here from the suburbs of Chicago and I don't want it to look like there, here. Be reasonable On size does not fit all. There must be room and allowance for reasonable exceptions.
- -I support creation of a sewer system to serve Lakeshore Drive and lower Hamlin Lake.
- -Most of Hamlin Township is not rural. Too many people. You have an impossible job. Good Luck.
- -Control Growth, try to keep the rural atmosphere, try to preserve low taxes. We strongly feel if a residence is accidentally destroyed, owners should have the right to rebuild it like original.
- -Non-conforming Lots: It is ridiculous to not let someone rebuild their home because their lot is non-conforming. Worse than ridiculous it is just wrong and very un-American. Grandfather in any existing properties (they should have been all along) and allow people the rights they deserve.
- -My biggest concern by fair is #137. I have a beautiful home on the upper Hamlin on 50' feet of frontage. It is unimaginable to me that in America such an ordinance exist that would deny me the right to rebuild a similar house to one that was destroyed. This needs to be changed. I paid a lot of money for my piece of paradise, and I pay taxes to support the Township. Please support me in return. Thank You.

- -I feel strongly that lots have been in the family for years should be allowed to upgrade facilities and property as appropriate as long as the septic and well systems are upgraded to modern standards. I respect the good of preserving clean water, but building new structures does not impact water clarity, etc. New structures merely add to the community and tax revenues. New developments should comply with new restrictions, but older lots should be grand fathered as long as septic systems are appropriate.
- -Control sprawl. Be sure any development pays at least it own way which means some must bring more than enough tax base to allow for the cost of some desirable but not tax paying uses.
- -We feel we are not getting services we need from the township. We are adamant about this. We have a high tax base on upper Hamlin lake. We don't even have a paved road to get to our property. We have no garbage pick up. The road we now have destroys our vehicles because of the condition. We are going to form an association and hope to annex from the township. Shame on you.
- -Hamlin Estate and the Hamlin Lake area are experiencing the highest growth in Mason County. Developing Natural Gas and sanitary sewer is an immediate need. The longer we wait the more homes that will be built with LP gas appliances and septic systems. As the area builds up with old systems, it becomes an impediment to change and we will be stuck with this situation for generations. We need immediate action to bring in natural gas and sanitary sewer systems to Hamlin Twp. if we hope to have planned, safe growth that preserves a safe and rural lifestyle.
- -We own several lots in Hamlin Lake Estates and hope that the zoning is not so restrictive that we could not build on them. Size concern- We own 4 joined lots but they are small. Home to build should fit. Lot size small! But hopefully we could still build there with restrictions.
- -#79 As he sees fit within reasonable ordinances. Use your property as you see fit.
- -#195 Have pick up during summer when all Hamlin Twp. residents can use it. (improving the transfer site)
- -#234 Do not understand exactly what it means. (adjoining lots).
- -#236 If we're going to pay taxes on it make sure it expands into Hamlin Twp. (bayous, etc). Public Transportation.
- -#79 (Question on clear) Reasonable ordinances.
- -#195 Clean up day should be in July when all Hamlin Owners can participate. We never receive any notice on this years clean up day.
- -#234 Not clear what does it mean.
- -#236 If we are paying taxes to support than access should cover all on Hamlin, esp. bayous' etc.
- -I brought this property approximately 10 years ago for possible investment/built site for vacant home or retirement home. At one time there was a home on this property but it burned down. I believe the property size is 80 X 100 which means it don't meet the requirement for a new home being built which makes this property totally worthless for investment or vacation/retirement home building site. If I was aware of this, I would never have purchased it. Why should I continue to pay property taxes on something that is totally worthless.
- -Taxes too high. I am seriously thinking about selling and buying in a cheaper twp.

- -The growth within the twp. should be well planned with parks and green space. Store signage should be limited and fit with the environment. More downtown stores less sprawl stores. Reduce noise and require people to move junk from their property.
- -This a beautiful area. That's what people come here to see. Don't ever develop that away. Let the little people build up the area. Not big rich businesses, small businesses. Not too many regulations and cops. Some jobs are needed. But not too much.
- -Everyone wants to move out into the Country, and they want the city to move with them. They can't have those things unless they are willing to pay a much higher tax for sewer water, etc. If they want city services they should stay in the city. I want people to keep off my property and not burn down our houses Better protection of private property.
- -Allow non-conforming lots to be built on. Stricken the rules on septic systems. .
- -If planned controlled growth is followed, the beauty and serenity may be maintained. People move away from the city to get away from congestion and get back to the natural beauty of nature.
- -Are we to assume that growth and interest in Ludington has increased to the point that new policies and regulations are now necessary.
- -I would like to know where the Hamlin taxes-go and whey they are so high.
- -The non-conforming lot problem has many pit falls that we the public had nothing to do with. If you create, a non-conforming zoning, you will obviously create many enemies moving the existing tax; paying public.
- -I think sewers along the lake and reduction of fertilizers from the lake and up river are important. Water Quality is a big issue.
- -I think residents should be able to rebuild the same sq. footage home if it is destroyed. I don't think empty lots that are adjoining should be sold.
- -I feel we should be able to do what we want with our own property. We should be able to lot it off and sell the lots if we want to or build on them.
- -We live off Numberg Road and see no real benefit to living in Hamlin Twp. No water, sewer, paved road, fire department, etc. We just pay the taxes and are year around residents.
- -Come up with ideas to turn Decker freeway back to Decker Road. Convince Sheriff Dept. to ticket ticket and ticket. 45 mph drivers in the 25 mps zone at S. Hamlin School. (lots of luck).
- -Too many zoning and use restrictions prevent growth and/or development. Miniscule growth/development constricts the expansion of the tax base, thereby making it difficult for the Twp. to provide even the most basic services, let along develop government-sponsored recreational facilities.
- -Commercial growth is a problem. Not enough zoned commercial.
- -Zoning should be restrictive to protect neighbors and neighborhoods. However, when reasonable requests are made that do not cause issues for others the zoning commission should allow property owners to proceed and grant the variance. A hearing to restrictions when the situation doesn't warrant doing so is excessive exercise of power over property owners and owner's rights to quiet use of enjoyment. A fair process and due consideration is very important.
- -Disregard any responses already entered. Land use will be changed to fit the needs of developers as always. Special interest groups will continue to dictate policy.

- -More control on trailer parks and rec. park such as septic control and garbage. Weed control on Hamlin Lake. Dennis road washing into Hamlin Lake and other washout going into Hamlin Lake.
- -Growth management; Upload its wishes of local residents when approving variances. You paid no respect on Dalhke Rd., Laws are made for everyone, not pick and choose.
- -Growth management; Uphold the wishes of local residents when opposing variances and not give in under threat of law suits as you did on Dalhke Road! Laws are for everyone not just for those who can't afford to go to court.
- -I do believe that the board needs to work more closely with the county boards. Also, do a better job of communicating w/community. It seems that when a few voters show up at a meeting, board just caves in and does whatever to avoid real answers to issues.
- -#137 I have owned a house on a non-conforming lot for 30 years. It is on lakefront and I have installed above ground septic system and a new deep well. Would like to replace if had to be.
- -Eliminate refuse transfer site and prove curbside garbage pickup s many Twp.'s already do. Focus on Hamlin Dam Safety and Replacement. Allow more commercial zoned land along Lakeshore Drive. This is a high summer traffic area and could provide income that's much needed to some.
- -It's a Twp. Leave it a Twp. Don't make it North Ludington unless you want North Muskegon.
- -We must have a balance of rural character and economic growth. Those of use who live here need jobs and access to recreational facilities.
- -To be denied the right to rebuild after your home is destroyed by fire or any tragedy, is wrong. Many people with non-conforming lots, love their homes as I do. This law needs to be changed. No one should ever be told they must move because of a fire or any incident they could not control.
- -There are enough restrictions on property owners. Let them think for themselves. They probably have good ideas and most want to keep their property looking and working well if given a chance. If people were not taxed for every home improvement we think there would be a lot more. If doesn't take a lot of money to make things look nice. But to be paying extra taxes for it isn't very encouraging.
- -Suggest, not require adjoining non-conforming lots to be under single ownership.
- -I don't want to pay any more taxes for anything!
- -The #1 priority should be Hamlin Lake. #2 thing should be fixing Jagger Road.
- -Public transportation is critical for aging population in Hamlin Township.
- -Ordinances are worthless if there is no enforcement of them.
- -I have owned property on Hamlin Lake since 1968 and find it appalling that you can tell us we can't rebuild on our lot if something were to happen to our home because we don't have a "conforming" lot. In addition, I see many homes going up using the entire lot Remember who pays the highest taxes in Hamlin the riparian owners.
- -We need limits and controls on private property (very important.)
- -We need and want larger lots. No selling of small lots or splitting off larger lots to sell small lots. The importance of Hamlin Twp. is the Lake without Hamlin Lake, the Twp. would be not too important.
- -People purchased property on smaller lots many years ago. How can you take away their rights to re-build. Grandfather them in but keep up the 100' frontage plus fro new

homes. You are almost like Israel in the Gaza Strip. This is a democracy not a board dictatorship. I think one of the biggest over crowding problems are the trailer parks on the Lake. Are there septic systems ever checked? Laman's spills sewage in the Lake and has too many boats for its shoreline. Plus, it's garbage smells up the area. Do you just ignore them.

- -Commercial & Industrial land use: I believe wind turbines have no place in Hamlin Township. Residential land use: I would like to see less subdivision development utilizing small lot sizes. Minimum lot sites in non-waterfront sites should be 1-1.5 acres. -Areas that are well lighted deter crime and therefore make living in Hamlin Twp. safe. Public transportation is needed to assure the well being of the health and safety who otherwise are impeded by its lack of service as of now!
- -It's important to me to keep this area natural and beautiful. Not to allow private land owners to run commercial businesses off their property especially when it is destroying the land by cutting trees, digging large holes in the ground or polluting by noise, light or the water. I know we must do things to bring in people and generate money and create biking trails and hiking trails and some ATV trails. The people will come to use and with appropriate fees.
- -Township meetings offer too little opportunity for public comment or questions and no one on the Twp. staff seems interested in the opinions of the people. They represent, despite the survey.
- -Road repair Repair of Jagger Road has been languishing for a long time. It is a disaster right now and dangerous for a travel. Shrubs along roadway make for very poor visibility for merging traffic.
- -Would be nice and convenient to have a Hamlin Twp. park that will accommodate the following: 1. Multiple family picnics (picnic tables, grills, etc.); 2. Shelter from rain (where picnic tables can sit below). 3. Multiple baseball diamonds (at least 2) so Hamlin Twp. kids who participate in baseball have fields to practice on. Large groups picnic patrons could also have games too. 4. Adequate parking.
- -Make our roads safer for pedestrians (bikers and kids).
- -County gravel roads should be better maintained. Grading, brining, mowing along sides.
- -Stay out of people business! You don't need to be telling people what to do!
- -Rural character: Many of us moved out here to enjoy the rural setting yet as I look around. Everywhere there is 20 acres or more there seems to be a housing development starting. The rural character will soon become a thing of the past if we don't put restrictions on the amount of those. Few are filled yet we allow more to be built.
- -Animal control is not strict enough.
- -Along Lakeshore Drive; Water shed expand "city septic" H20. Existing lots: House need to be grandfathered in No 53% restrictions.
- -Township has great need for stricter control of barking dogs! Also, for people who parks, public property for "dog runs".
- -If you are going to limit noise control on wind generators to very low levels Then you will have to support some kind of noise ordinances. And control barking dogs gunshots loud dirt bikes and etc. I support wind generators with limits to #'s and setbacks. We need more energy in this country and each family can help with policies set in place. I would like to know more and would help draft policies in this area. Ask for help from the people and more people will step up to the plate.

- -Let people re-build or remodel cottages or homes on non-conforming lots. Not to build bigger. Must use original footprint. Reason for my thinking Loss of taxable People were in courage to come here Don't chase them away The rules now are wrong and unfair. All new development is different.
- -Please make the year round residents a bigger priority to the rules and regulations than the part-time residents. We live here!!!
- -Patrol Decker Road and catch the speeders and loud trucks and cars the more will go the speed limit. It's dangerous to cross the road to the mailbox.
- -Remove approval of adult entertainment from present ordinances. They are not good for either children or adults.
- -Survey too long.
- -Control and limit (restrain) growth! Mandate adequate impact fees for development and new construction of residences and new businesses, offices, professional, etc. Paid up front!
- -Everyone is worried with what their neighbors are doing or what they are not doing. People should go about their own business and appreciate what they have. Most people given the chance want to keep their property looking clean, however cases arise where someone might get behind in the upkeep. People should talk to their neighbors instead of going to zoning to solve their problems. If ones goes to Zoning, it is just an expense to the Twp. Rather we can use that money on roads or recreation.
- -Too many subdivisions or lot homes; Need an Assessor who does his job before tribunal not AFTER or for the tribunal. No poisoning of road side foliage; No paving of road with only few homes no matter who owns them; No mass cutting of trees around utilities trim only; Recreation fee for children paid by counties WE are the only ones that does not pay it!
- -Line 163 if tightly controlled. The reason I moved and live in Hamlin Twp. has ceased to exist. I can't wait to move but selling land is very difficult. The Twp. officials have sold out to the developers and failed to protect the present residents ability to enjoy their property. Your Low Density housing is a joke. Large cities are less crowded than you allow. New development should reflect existing development.
- -There is a need to regulate the height of chimneys from free standing wood home furnaces. Suggest a minimum of 20 feet tall.
- -Growth management. Treat everyone equal with zoning and not buckling to threat of law suits as you did on Dalhke Road.
- -Roads are in need of repair, even gravel roads need gravel not sand. Some areas of Hamlin are beautiful while other are unsightly from junk cars. Hamlin needs to look at itself and its neighborhoods, some development should have never been allowed to been put in the way it was or you should dictate your need to conform with rest of neighborhood. Quick looking at your tax base and start cleaning up and improving what you have now before you look at future, enforce zoning in place.
- -Existing homes on non-conforming lots should and must be grand fathered.
- -Zoning is too restrictive. It's expensive with the Zoning and attorney. Also, people in Hamlin Twp. are to concerned with what their neighbors are doing. If they were not so worried, it would save the Twp. monies. Those monies could be used for other things, not fighting your battles with your neighbors. Non-conforming lots should be able to rebuild what they have.

Contiguous lots which were under separate parcel numbers and not combined by the owner should be able to be sold again.

- -Hamlin Twp. should pave it's roads (which are an embarrassment to our community) and encourage wind generators.
- -Would prefer bond issue instead of permanent tax. Let major development (condos) build in Ludington, soon we may not see the Lake. Need some major road repairs.
- -Lot sizes should remain the same as they are now. Lots smaller than 60 X 150 should not be built on and if the homes on them are destroyed they should either not be allowed to rebuild or have to follow setbacks and septic system requirements.
- -Pave dirt roads in Hamlin Lake Estates. We pay a lot of tax, to have the worst roads in mason County. No more modular homes on other trailer homes. Make modular be up to code with stick built homes, not trailer codes. No more habitat homes. No homes on less than 4 lots.
- -Need program to pave streets in Hamlin Lake Estates Dust is really a problem with resident density; 2 cars in each family. 10 Acre sites no problem; Small lot suffer. Maybe paving one road a year program in HLE. Would like roads paved. Zoning is for our protection. Dogs barking are a problem.
- -Many things you have in this survey is controlled by other staff agencies. Also how can you enforce everything without adding taxes on home owners. Remember we are not all wealthy and tax burdens can cause problems.
- -Lakeshore Drive has turned into Lakeshore Speedway, should be better law enforced day and night. We have seen to many cars in transfer site with no car stickers. Why should we locals pay for stickers and tourist not have to pay.
- -This survey is confusing! Appears leading.
- -Your efforts to increase lot sizes are discrimination against existing lot owners. This should apply only to new developments and to those who volunteer, else it smells like a taking.
- -Please look into waiving easements at one time and get those non-existing roads off current maps! (Section 4 and others) See boogie satellite, for example.
- -Anyone living on Hamlin Lake, and owns houses on that property should have the right to re-build if they burn down or all storm damaged. They should also have the right to sell any cottage to someone else that may be on their lot as a separate house.
- -This is far too long- too many of the same types of questions. Just slow growth, make lots larger to give us some space. That's why we don't live in the city.
- -Preservation of open space and Hamlin Lake is critical. The preservations of wetlands is critical for Hamlin Lake.
- -You should be able to do anything on your own property as long as you don't infringe on your neighbors rights to do anything on their property. Once again Roosters crowing 24/7 so I can't sleep with my windows open. Live bands practices so I can't put my toddles to bed before dawn.
- -We live in American. We do not need all our freedom restricted. I believe we can live in a comfortable community without it becoming a dictatorship township.
- -It is my opinion that the north end of Hamlin Lake should not be part of Hamlin Twp. because we get very little services paid for. Roads leading into our place are in Grant Twp. and of course they could care less about us too. Fire and EMS services are supplied from Grant Twp. Have Transfer Site closer to all of us.

- -Jagger Road needs repair badly and speed limit should be posted. Also, a bike or walk lane would be good for safety of those who walk and bike along Jagger. Posted 45 mph, 34 mph from Maryland to Lakeshore Drive. Trim trees 50 yards from X. Someone is going to get killed.
- -This survey is a bit too long parts could have been consolidated to be more "accessible". Be careful of large lot zoning. It is the fastest way to eat up your open space that remains.
- -Environmental concerns destruction of trees, wetlands, etc and contamination of water sources need to be of utmost concern.
- -We believe overnight parking (not in front of one's property) not be allowed. If no parking off road is not available, then we should limit to 2 or 3 the number of vehicles.
- -House lights on all night are not necessary and waste electric. When houses are as tight as they are or the tree streets, a porch light is like a spot light and a dog barking is as loud as your alarm clock. More residents just need to be more considerate. Speed limit is way too low on Lakeshore Drive.
- -In their interest of safety get a street light on the corner of Jagger and Lakeshore Drive. Also, at Golfwood Drive. If these star people want to see the stars build out in the woods. Safety of people should come first!
- -No Name Road needs to be upgraded. Mud in spring, dust summer & fall. Crushed asphalt, gravel? Anything but mud!.
- -Environmental protection: Reduce control noise pollution. Due to growth in population and the buildings of more residential homes rifles and hand guns, target practicing, should be limited due to long hours of practicing and the noise occurred from these weapons. Also, the safety of walking on my property which I have 10 acres.
- -Proving that what the individual sees fit is not an eye sore to the community.
- -This form is too redundant.
- -I checked "agree" to both because zoning is applied so inconsistently that some residents are not restricted enough while some are too restricted. For instance, the \$300 variance fee is the same whether you are asking to put a wood shed, fence, porch, etc., as it is to put up a \$1.2 million dollar house, the matter leaving more for the zoners to review (and probably not know about or get around to checking on, etc) The matter is more likely to get approved or the hidden zoning violations than a simple building request and also cuze it looks so good on a blueprint and for the tax base. Much easier to hassle the small, incremental do it yourself building/homeowner than a fancy construction company and the landowner who can afford it. I'd be happy to give you specifications, examples for illustration.
- -Most people knew when they purchased a non-conforming lot what the restrictions were. Allowing them to override the rules leads to increased congestion and pollution. It also makes a mockery our Township Board efforts to preserve land values.
- -To have the right to re-build on a non-conforming lot on the same foot print. No large but the same size structure.
- -I own a "non-conforming" lot (small) and if it did become destroyed, I feel I should be "grand fathered" in so as to allow me to rebuild at the same time, add value. To Hamlin Twp. I am not against limiting development on non-conforming lots going forward.
 -Residential lots should stay the same or be larger.

- -Again, the water on Hamlin Lake should be drawn later in the season to allow hunters and fisherman use of the lake. Impossible when you can't use the boat launches because of water levels.
- -Transportation/Recreation; A paved shoulder or bike lane could be used on Jebavy, N. Lakeshore Drive, Decker Road between Jebavy and N. Lakeshore, and Dewey Road between Jebavy and N. Lakeshore Drive.
- -With all the subdivisions now in Hamlin the Twp. should limit hunting to 20 acres before someone die's from a rifle or shot gun or bow's.
- -Lot sizes should be a minimum of 150' wide in order to build on!
- -Lot size should vary by area. Subdivision smaller than rural areas. People who previously owned land for investment or home should not necessarily be held to current standards/methods for exceptions/excluding large tract development.
- -Environmental protection: A sewer system around Hamlin Lake would keep the lake environment cleaner. The use of Hamlin Lake increases each year and it is the gem of tourist draw to the area which keep people coming back, and buying homes in the area.
- -We have concerns about the condition of the dam on Hamlin Lake and also preservation of the dunes. We do not want any drilling or mining or pulling stumps.
- -In July 2005, we discovered that our Hamlin Lake property is on a "non-conforming" lot" We have been owners for well over 20 years and we were never advised of this rule. WE believe it is totally unconscionable that the Hamlin Lake Zoning Board prefers that this rule not be common knowledge and that to this day prospective buyers of these lots are not informed of it before they purchase such property. How can it possibly be legal to keep homeowners and/or buyers in the dark on this point?
- -Non-conforming lots should be grand fathered in. It is a taking of property to not allow re-building and I would sue the Twp. if not allowed to rebuild. Limiting new development is fine but abusing current property owners is not fair.
- -Preventing someone with a non-conforming lot from re-building or preventing sale of adjoining non-conforming lot/home deprives one from property rights. Future building and development can be better managed. You're stuck with existing home if you allowed them to be built originally.
- -I do not like the fact that I could not get a permit to re-build if my house was destroyed. I am on a 50' wide conforming lot. I would be happy to be able to re-build on the old foot print. I would not expect to be able to build a bigger house.
- -We live on Hamlin Lake. We strongly feel that our neighbors with non-conforming lots be grand fathered in the allow division, sale and re-building.
- -We feel there should be more speed limit signs on our rural roads. We moved here for the quiet/out of the hussle and bussle city areas.
- -One problem in our area is the smoke from wood burning furnaces no control high stacks? Another big problem is creation of a bike and walking trail safety purposes and place for tourists and locals to be safe and travel without congestion. I would be interested in being on a committee to explore a bike trail and grants.
- -As a lakefront property owner, I find government in my face about everything I try to do. But government can't even support an annual clean up day. You can see continued tax increases and no additional services or interest in preserving the lake or its resources. I'm waiting now for someone in government to suggest lake owners should pay for the repair of the dam.

- -No dove hunting, neuter/license/restrain (no free roaming) immunize cats.
- -Growth Management: When purchased a non-conforming lot adjacent to your lot, the property should not be rolled into one property. If you purchase that lot and want to sell it, you should be able to do that.
- -Be more small pet friendly. Dogs should be able to walk and swim with owner if attended.
- -There should be rules about owners renting out private residences by the week and advertising them on the internet.
- -Residential zoning too restrictive in certain areas. #137 (ability to rebuild on non-conforming lots) and #139 (ability to sell non-conforming, adjoining lots separately).
- -#137 We have strong concern that our dream home would not be able to be re-built in the event of a fire. We hope to pass this home down to our next generation. Pre-existing homes should be protected and not taken away by the Twp.
- -The lake seems to be getting busier and busier. Has the township considered charging non-township resident for lake usage?
- -#137, I feel very strongly that non-conforming lots should be grand fathered in if a lot is less than 60 X 100 and the home is destroyed by fire, lighting, etc. I believe it would be very unfair if we were forced to walk away from our home and lot if it were destroyed without ability to re-build. It would have been legal at the time of building and should be grand fathered in.
- -Hamlin Lake residents as well as the public should have lake access.
- -Many of the questions asked are better answered by residents in and around Ludington and other developed areas. As a seasonal resident on the north upper lake, I cannot comment on these that are unanswered.
- -Control on residential homes being used as resort in residential areas without sufficient land to support it.
- -#109 & 110 Traffic congestion is an important issue, but no a problem at this time.
- -#162 Light industrial would help to diversify local economy with low environmental impact.
- -#137 Feel strongly that existing residential uses should be allowed to re-build. Current zoning requirements are too restrictive.
- -Perhaps Hamlin Twp. could publish zoning ordinances on the web? Or are they already there? Sorry for not doing my homework.
- -Current homeowners on lots less than 100' feet should be able to re-build should be new homes only! Agree!
- -Environmental Protection: Need to control noise pollution. Garbage, bands, music, fireworks.
- -#137 Rebuilding homes on non-conforming lots The Twp. allow for these properties to be sold but if you own one that has been there for 90 years, you are not allowed to rebuild it. That's is wrong and seem illegal. We bought our cottage 5 years ago and knew nothing about this until you sent this notice out. It is wrong!!!
- -Don't make people pay more to have a permit to recycle at the transfer site. Taxes should not be raised on everyone based on selling in area.
- -No one should lose their home twice!
- -Hamlin Twp. is a wonderful place to live simply because of it's openness, so far. It is close enough to Ludington that services can be utilized, yet far enough out that a guy can

have a good sized garden out back. It, in my eyes, is rural and I feel it should stay that way. Also, Line 208, which asks about the "preservation of rural scenic roads", I strongly disagree with the paving of Nurnberg Road. Paving will only increase speeds, raise car-deer accidents and promote more traffic. Keep it rustic.

- -Hamlin Lake needs some sort of remedy for weed control. Dam needs repair ASAP. Stix bar needs some sort of patrol for loud vehicles a/k/a motorcycles late into the night. on a street that has very expensive homes (Golfwood), some have been left to deteriorate.
- -Note the survey is not very clear!! The Twp. should provide land use plan; zoning ordinance, zoning map and we the tax payer pay for this information. The above information should have been furnished with this survey.
- -Too many restrictions.
- -Hamlin Twp. government needs to keep in mind that not all residents of the Twp. live on Hamlin Lake. The issues surrounding Hamlin Lake should not be the only focus of the Twp. Also, taxes are very high here. We moved here from Ludington City and were shocked at how high they were. Finally, fix Jagger! It is a disgrace.
- -We need to allow people who bought their property before non-conforming restrictions and zoning to be allowed to re-build if necessary.
- -We think grand fathered lots should be able to re-build on non-conforming lot. If you purchase a lot that is adjoining a non-conforming lot, you decide to sell the property you should be able to sell how you want. Even if its non-conforming if it is built on.
- -It is not right to tell someone on a non-conforming lot that they can not re-build!!
- -I wonder if it really matters what we put on this or if the commission will listen to what people ant more then what the commission wants? By the way this reads Land, open space, horses and scenic views mean more then people.
- -Against #137 Need larger lots. No re-build don't sell separate adjoining parcels.
 -Lake is very important to our current and future. Please take steps to control pollution of the lake as a result of sewage, fertilizer overuse near the lake, over development of the

land around the lake.

- -Protect rights to re-build house if destroyed. We have been paying taxes for years on non-conforming lots sizes.
- -In the past couple of years we have lost the wooded setting that drew us to this area. There is building going on all around us. We've lost the privacy that was so appealing to us. If we could afford it, we would buy all these wooded lots around us and leave them "as is".
- -Township is becoming far to powerful in deciding what property owners can or can't do with their own property. "That gov't which governs least governs best!.
- -Category Non-conforming lots. When we purchased our year round home it was not disclosed to us about it being a non-conforming lot. I would like to know that I could rebuild our home is there was a fire or other damage destroying it. Why in the world are we paying taxes on something if it would potentially be taken away from us? That certainly sounds illegal or communistic or both.
- -Previous administration promised repair to paved roads. Instead, most of our tax money was spent on the township offices and fire dept.
- -We need housing on acres not chop up acres into city size lots. If people want lots, let them live in town!!
- -Why were separate lots (adjoining) put on one deed without notifying the owners?

- -I feel very strongly about 79, 137, 139. This is a free country and we should be able to use our properties as we see fit as long as it does not affect the health and safety of others. I definitely do not feel a few people should determine we should be homeless if an unfortunate event destroys our home on a 50 foot lot #137.
- -#135 139; As the owner of a non-conforming lot, I believe a grand father clause needs to be put in place to protect the original residents of Hamlin Twp. It is unthinkable and un America to discriminate against long time home owners because the lots their homes were originally built on (when there were no restriction to lot sizes) do not conform to the new restrictions. Telling someone who has a life time of memories that they can't rebuild their home in case it is damaged is absolutely WRONG and total un American!!

 -I am concerned about the family property we own. It was original 3 63.3' (on lake channel) and was conforming in its original. Now it is now. This will prove to be an unfortunate situation for my family and I would be very disappointed if we were not allowed to use the property we own.
- -I believe it would benefit Hamlin Lake a great deal to have public sewers installed since so many riparian owners have out-dated septic systems/drain fields. I also believe there should be substantial fines for owners who use fertilizers and other chemicals on their lawn when they live on the lake.
- -Present owners should be grand fathered if they have lots under 100 X 145 feet to be able to rebuild if property is destroyed. If eel that questions #237 and 238 are very ambiguous and therefore difficult to answer??
- -Residential zoning is too restrictive for existing homes and not restrictive enough for new development.
- -#137 People who currently own residences on non-conforming lots should be allowed to rebuild on same footprint of house if severlyseverely damaged or destroyed.
- -#139 Adjoining lots should not be sold separately of non-conforming. They should be permanently joined.
- -I believe a person should be able to rebuild a house or cottage on a non-conforming lot if the building is destroyed. #137 A person should not have his god given right taken from him to rebuild his house on a non-conforming lot. I believe we are loosing our freedom. I believe it's more important to keep our properties neat and not look like junk yards.
- -What a great problem! Please publish complete results (at a fee if necessary) for computer illiterates and give us periodic (1X year) updates on progress.
- -I bought my house in 2001 and was not aware of restrictions on 50 foot lots at that time. I would like to live there permanently in 3 years. I need to know my home is secure. The state park provides us much.
- -Grand father in existing structures on 50 foot lots so they can be re-built in case of catastrophe.
- -Re-zoning should not affect houses and lots that people already purchased (like if a house burns down).
- -#137 is a bad law.
- -#237 too restrictive due to the non-rebuild of structures on non-conforming lots!. #138 not restrictive enough due to the hugh houses being built on Hamlin Lake & and the excess of shoreline trees being cut down for views. Smaller home sizes? Burn_down rule waterfront home size restriction.

- concerns. We are retired and know we pay a proportionately high tax without getting many services but we appreciate your desires to plan and provide.
- -We desperately need LMTA to come out into Hamlin Twp. I fully expect that Hamlin Twp. board to behave in a professional manner and would hope that family fighting can stop being the issue and to concentrate on township opportunities and ways to repair Hamlin dam.
- -Those of use on the north shore of Hamlin pay a great deal in taxes yet don't get all services Our only access to property is via Grant Twp (Nurnberg Road). Grant Twp. won't listen to us because Hamlin get our money. Maybe annexation should be considered.
- -Environment protection; Eliminate use of all night mercury lights. Would rather see motion detector lights or low voltage ground lights.
- -Some members on zoning board have dictatorial and arbitrary attitudes. Need experienced members with common sense.
- -A family that owns a non-conforming lot should not be punished because of a catastrophe and definitely allowed to re-build! That would be a double loss!
- -I don't feel the township should prevent single family development on private property lots. Especially after the loss of a structure due to fire etc.
- -Need to learn more about the zoning. Newsletters have been great. Appreciate news also in newspaper about Hamlin area.
- -No strip development.
- -New construction on new lots can be built on new requirement. Old buildings need to stay within a small building. Loss of a building form fire or storm are always grand fathered everywhere else in Michigan and all the other 52 states. Why is Hamlin Twp. any different then any other area in the Country.
- -Buildings built back in the 1900's thru 1950's have nation wide in the Country, rights to re-build if destroyed by fire or disaster. The majority need to stay with the same foundation sq foot as before. This is handled all over with no problem. Lakes in southern Michigan are fare more congested than Hamlin Lake, but these lakes allow for grand father rights. We need to do the same.
- -We need curbside trash pick up. Not a transfer site. More paved roads, culvert on N. Sherman.
- -Zoning ordinance should be revised to allow re-building on non-conforming lots in the event of fire or natural disaster; within building guidelines.
- -Hamlin Twp. must be more sensitive to our road maintenance. Mason County Road Commission is not using the money it receives from the State on Hamlin streets. They always fudge the funds from one twp. to another. Hamlin Twp. officials must hold the county road commission responsible.
- -Need to quit pandering to vocal minority and look at what is best for majority. Fixing Mavis Road for six people was wrong and a waste of our resources.
- -Jagger Road condition and all the development along Jagger.
- -Lower Taxes! More police patrol. Commercial uses lower residential taxes.
- -Vacation home pay taxes without using schools. No development means no jobs. There are State and Federal agencies to protect our wet lands and water supply.
- -Paved Nurnberg Road.
- -Would like to see wider shoulders or paved bike paths on Jebavy, Dewey, Decker & Lakeshore Drives. With school on Decker and many kids riding bikes could be a safety issue. Many joggers, cycles, stroller with dogs, kids in wagons, etc. cause traffic issues

on these 4 major roads. We have enough subdivisions. We need larger spaces — We are not an extension of Ludington but a rural area — Let's keep it that way!

TOWNSHIP BOARD:

PLEASE AMEND THE

ORDINANCE ON NON-CONFORMING PROPERTY! OWNERS SHOULD

PEFFINATLY BE ALLOWED to

PE-BUILD. MY LOT! HOUSE ARE

KEPT NICE (PER SO ST) AS

ANY ONES!

THANK JON

We are the owners of an older cottage on a lot approximately 40' x 500'. We understand under the current policy that we do not have adequate frontage to rebuild our home in the event it is destroyed. Yet square footage-wise, we have more land than is required to build a new home under current zoning. This makes no sense.

We've been told that we cannot rebuild or add on because of health department concerns regarding the distance between the well and septic system. This also makes no sense—there is approximately 500' between the road and the lake—more distance than many newer lots provide.

The township, many years ago, set up these 40' and 50' lots for housing. People were allowed to build. Now, years later, the township regrets allowing these small lots and wants to eliminate them. However, these are people's homes; many have invested a great deal of money in their property. For the township to decide they are no longer "legal" is ridiculous.

People should be allowed to rebuild if they wish. These properties have been zoned residential by the township. The township should set lot sizes for future building and leave historical sites alone. We are sure that in the years to come many smaller neighboring lots will be bought by people willing to tear down the older homes and build larger homes. This is fine – let "nature take its course". But give people a choice!

If property owners are not allowed to rebuild their homes after a disaster, their property is virtually worthless! What better way to encourage arson in the township – if you want to build, just burn down two adjacent cottages. The owners will not be able to rebuild and will have no choice but to sell to someone able and willing to buy two lots and build a large home.

Please allow existing small lots to continue to have value - allow rebuilding (at least on the same size foundation). There is a great variety in lot size and situations along the lakeshore. Please look at individual lots and give consideration to each situation - not just a blanket NO with no variance allowed.

HAMLIN TOWNSHIP SURVEY OF 2005

To the Zoning and Planning board of Hamlin Township, we would first like to say thank you very much for the opportunity to give our opinion regarding land use in Hamlin Township. We hope that all residents realize the privilege of giving input and will respond to the survey. We also thank you for the information at the beginning of the survey that tells us how the Zoning Ordinance and Land Use Plan may be purchased or viewed. It is nice to know that such information is so readily available to us.

We were often confused and disappointed by the format of the survey. We would suggest that in the future it be made more "user friendly". We would have liked the opportunity to answer some questions beyond the importance in order to reflect if we supported the issue or not. Our confusion began with section 3 line 79/80. "Please mark the importance of maintaining, and protecting the following in Hamlin Township. (79) The individual's right to use his property as he sees fit." As property owners, how we use our property is very important to us. As part of a community here in Hamlin Township, we understand that our use might be restricted for the good of the whole area. So Very Important says that we want a say about our property. It does not say that we will expect to be able to do anything in spite of how it affects our neighbors or the community as a whole.

The section that we found most confusing was section 4. We are asked to indicate how important various issues that Hamlin Township is facing now, might be to us. We feel that any one of these issues could be very important to us but is it so because we want it to stay as is or because we want to change it.

Most of our answers of section 4 from 88 through 141 are important or very important to us. On number 88, access to shorelines and beaches is very important because we want to maintain what is available not to decrees or change. How does this survey tell you what we want? Number 130, 131, is Very Important to us because we do not want to see and increase in suburban sprawl or commercial growth. How can we be sure that our response is not mistaken for the issue being of importance because we see it is time to change the commercial opportunities in Hamlin Township?

Our answers for #4, 119 Housing, are that the issues are unimportant because we do not strongly support an increase in adult foster care, assisted living or low and moderate housing. By responding to these issues (120,121,122) that they are unimportant how do you know that we don't wish to see an increase in any of the above? It could be interpreted as unimportant because we don't care how many adult foster care homes are allowed.

Most important to us and to several people at this time is section 4,137. We have responded to the "ability to rebuild house or structures on non conforming lot if destroyed" as Very Important. We are concerned that this will be interpreted to mean that we support it. WE DO NOT. We want the zoning to stay as is. If a house is destroyed by fire, then review each situation one case at a time with input from the community of Hamlin Township residents.

Section 4, 139, the "ability to sell non conforming, adjoining lots separately, is another issue that is Very Important to us. We again are concerned that our response will be taken as the importance is because we agree to this zoning change. WE DO

NOT. This issue is important because we believe that the only way to bring all lots up to the zoning of today and to decrease the overdevelopment of the lake shore (#4, 90) or prevent the continuation of small lots and work toward the growth management into larger lots (#7, 232) is to stick with the present ordinance. No matter how change is made or when it is made, someone is going to be adversely effected. If someone is willing to purchase a lot that is called non conforming, they ought to be prepared for what that might mean.

Again, WE DO NOT support the group of people that have been working to change the ordinances in place regarding non conforming lots. We received a notice in the mail that said it was "Paid for by many Home Owners in Hamlin Township" We are not part of this group. The flyer mailed by this group states, "to #137....Please mark <u>Very Important</u>, this will let the zoning board know what the people of Hamlin really want." Will it really? We have checked Very Important but we do not support the thoughts or desires of this group. We want the zoning left as is.

Again, we thank you for giving us this opportunity to voice our opinions.

though the lots were originally legally apportioned. Clearly the township is opening itself and its taxpayers to numerous potential lawsuits—including the possibility of a class action lawsuit—by failing to either grandfather in existing nonconforming lots when the rebuilding rule was passed or requiring disclosure of the rule when any nonconforming lot changes ownership.

Since we personally have talked with no one who was apprised of the rule when purchasing Hamlin Lake property, it is reasonable to assume that most affected landowners were similarly uninformed. It would take only one such landowner who needs to rebuild after a fire to cost the township considerable legal expenses—a landowner motivated enough to hire a serious attorney, find an attorney to work on contingency, or raise the money from other affected homeowners to help fund a lawsuit. Just one such lawsuit could easily cost the township more than the current rebuilding rule is worth. The potential of a class action lawsuit could well make such a case attractive to attorneys.

In addition, it is simply not right to take away landowners' rights in this manner. If a home on a nonconforming lot were to burn down, and the board refused permission to rebuild, that lot would become nearly worthless. Since the only potential buyers would be the owners of adjacent lots, the seller would likely not be able to recoup anything near the actual value of the land. If the board merely requires disclosure of the rebuilding rule for future sales, the board will also be damaging the value of the land for current owners.

The board should grandfather in all existing nonconforming lots, both to be on the morally defensible side of this issue, and to protect its taxpayers.

Hanren 10 mings was west sedement

I continue to make Ludington (Hamlin) kind of a second home now. It was my first home until I went into the U.S. Marine Corps in January 1945. It was a perfect place for a kid to grow up and enjoy a loving family and friends as well as the outdoors with its scenery and activities. The Malliett family first came here from France in about 1860; since then members of the Malliett family have continued to live here. When my great grandfather, Francis Malliott settled in Upper Hamlin, he worked at lumbering and farming. He had two sons, Frank and Henry, both carpenters and builders. Later my grandfather, Henry Malliett was elected as Hamlin Township Supervisor in about 1903 at the age of twenty-six. In 1928 he and most of the Malliett family moved to Florida; at the same time, my father Maurice H. Malliett and his new bride, Inga Hanson, and their one year old son, Lowell, moved to Ludington. Maurice was a "finish" carpenter and builder. Another son, Frederick, continued to make Ludington his home. He would raise a family of four children, a son Randy is a well known area builder and developer in the Ludington and Hamlin. All the Malliett men, it is said, were born with hammers in their hands. All of us are always building something, even I have had a major role in building three of my homes as well as a church while a minister. Fred has built and lived in at least six houses he built while acting as both his own contractor and builder. THIS IS WHY OUR LITTLE HOUSE IN HAMLIN ACTS AS A MAGNET AND KEEPS DRAWING US BACK TO THE LUDINGTON AREA.

we were both raised, grew up in Hamlin. My parents still live in Hamlin. We moved into town for a few years and saved up money in order to come back to Hamlin and raise our children. The changes to the township were scarey! Tamarac trailer park had grown and continued to spread like a disease. Yresidential Estates? That use to be woods and trails! Now It's a modern trailer park and you can hardly Find a tree. A blight church trailer now sits a top Jebauy bridge were there used to be wonderful woods. Some Scenic View we got there! Subdivision have poped up every other 10 acre parsel? We may have to move back into town for more property. Kural & we live on 10 acres on Jagger, our property backs Tall Oaks (subdivision) Now Ben has bought the 15 acres on our left, what onext the 10 on the right? We will be completely surrounded by subdivisions! Crazy! I enjoy lagger road, traffic and road maintenance has become a real issue, partly do to the subdivisions! I don't want Hamlin to fix the road-making it into a major highway for the ease of traffic. The potholes slow the traffic, new pavement and signs won't - someone will get killed. A not to the knowse family across the road, please don't ever sell your 40-80 acres. We will move.

I think Folks like Krause and Sandretto who have a lot of acres 80 on more should be allowed to put up wind energy. Help them to pay all their property taxes. Amenica needs alternative energy it is the Future. Hamlin should take the torch and start that rather than more 'housing' developments. I'd rather look out my window at a wind generator than a subdivision or another presidental estates! Now as for individuals right to use their property as they see fit.... Subdivisions have ruined that right. I'm afriad that because of the population sprawl and growth' property owners can no longer safely hunt their own property. Jacquer Decker, Lincoln, there are just too many houses. when we were growing up this was not an issue, there were trails, woods, Fields and you could hunt - snowmobile - vide dirtbikes or stand naked in your backyard. That is Rural Hamlin has given up much of that in the last decade. And for safety, issues like hunting must now be limited. I would also like to see subdivisions pay more taxes. Maybe it would discourage developers and encourage More single homes on 10 acres. No 10+5, 5 acres or more for each new home. That would be the "direction" Hamlin should take. Not allowing

suburban sprawl' would-should conserve a more rural community and preserve our scenic woods and lokes. We've already lost individual property rights, it used to be use knew every owner of every house up and down the entire road, now it's like subdivisions are their own 'gated' communities and there is not the same sence of neighborhood as when we open up here. Restrictions must be put into place or use will end up with more growth, more population than our neighborhoods can handle. Subdivisions are killing Hamlin township

SURVEY RESULTS

Should Hamlin Township increase lot size for new construction to 1 acre in residentially zoned areas and 5 acres in agriculturally zoned areas?

All Passages For Yes/No Responses

		All Responses	For Yes/No Responses
Yes	291	57.1%	61.1%
No	185	36.3%	38.9%
Other Respon	9	1.8%	-
No Response	25	4.9%	-
Total	510		

On a scale from 1-10 with 10 being the most important, which type of development would you prefer to see encouraged in Hamlin Townshin?

prefer to see encouraged in Hamlin Township?											
	Least in	east important					Most Important			Total	
	1	2	3	4	5	6	7	8	9	10	Responses
Agricultural	51	11	18	24	68	49	43	51	18	80	413
Commercial	141	29	37	20	60	37	20	31	6	30	411
Environmental Preservation	18	6	6	4	23	31	21	62	41	213	425
Environmental Protection	20	7	11	7	29	22	22	51	24	213	406
Residential	44	14	20	21	81	37	38	61	21	83	420

Grouped Responses								
	Not Important	Neutral	Important					
Agricultural	80	184	149	Not Important=sum of responses				
· ·	19.4%	44.6%	36.1%	1, 2, or 3 above				
				Neutral=sum of responses 4, 5,				
Commercial	207	137	67	6, or 7 above				
	50.4%	33.3%	16.3%	Important=sum of responses 8,				
				9, or 10 above				
Environmental	30	79	316	,				
Preservation	7.1%	18.6%	74.4%					
Environmental	38	80	288					
Protection	9.4%	19.7%	70.9%					
Residential	78	177	165					
	18.6%	42.1%	39.3%					
	. 0.0 / 0	,0	00.070					

Statistical Mea		madian	Rank Order	Relative Score
Agricultural	mean 6.13	median 6.4	4th	94
Commercial	4.02	3.5	5th	61
Environmenta Preservation	8.25	9.5	1st	126
Environmenta Protection	8.08	9.5	2nd	124
Residential	6.23	6.4	3rd	95

2010 Survey Comments

Raising Lot Sizes for New Construction

Yes, I think it would lead to more quality construction, too. Also I think agricultural areas 2 to 3 acre sites would be sufficient to accomplish septic systems.

Yes but not for land that has already been subdivided!

Yes, exceptions: current land owners under one acre who have not yet constructed, subdivisions with "common" land of one acre;home

Yes, only concerned about environmental impact and learning to live in compliance with what's best for sustainable land - wet or forest because once it's gone, it's gone! Yes, we would be in favor of lot sizes increased to 1.25 (res.) and 6 (AIA).

Yes, I can see exceptions to this with creeks and other obstructions with odd sized lots.

Yes, less home and people, make space between home. Awesome!

Yes, I would recommend a 2 acre minimum for new residential lots.

Yes, the larger the lot size, the more the watershed is protected.

Yes, it is difficult to sell a house in the AIA. zone with 1 acre. Most people who wish to live in AIA need more space for barns, shed, play areas, etc. We need to make sure setbacks and zoning codes keep up with greater development to include larger lot sizes, etc.

Yes, 1/4 or 1/2 would be better.

Yes for preservation and protection of the environment. Residential with increase lot size for new construction to 1 acre.

Yes, do not allow any reduction in lot sized that are now 5 acres or larger.

Yes, and 100 ft. setback form rd. plus no homes should be built on lots smaller than 200 ft. by 200 ft especially on lake shore.

Yes, no more housing "projects". Do not develop forest (i.e. Lincoln rd project) and/or wetland.

Yes, with the exception of lake front property, Hamlin Lake.

Yes, if not a platted area.

Yes, absolutely. This is not the city!!! 5 acres would be even better!!

Yes, residential areas should be more than 1 acre.

Yes, sounds like a good idea.

Yes, severely limit commercial development.

Yes, every piece of land does not need a house on it.

Yes, the exception would be for those who have land and pay taxes on small lots on the lake.

Yes, providing exceptions are made for replacement of existing structures lost to fire or naturally occurring damage or destruction, we would support increased lot size limits.

Yes, isn't it already 5 acres in agricultural zoned? A.E. had to have us sell him 2 more acres when we had already had sold him 3 before he was allowed to build his house (about 20-25 years ago).

Yes, maintain environmental quality.

Yes, my concern is affordable housing. For many this may be too restrictive.

Yes, with possible exceptions of some lake front lots.

Yes, around Hamlin Lake - good idea

Yes, one acre

Yes, existing homes should have the right to rebuild. I would hate to see you prevent reconstruction or improvements.

Yes, for all newly acquired or developed lots - grandfather those already privately owned for residential use.

Yes, we risk allowing the creation of ""trailer park" like" properties. I don't see that area as suitable for that.

Yes, actually 2 and 20 would be better.

Yes, Brighton township (our residence) did this for many years. It was challenged and Brighton township reverted to 2.5 acres residential. Too much development leads to too many problems.

Yes, we have summer property here because we enjoy the woods and recreational opportunities. We would like to see these areas preserved and maintained for the future enjoyment by our our grandchildren.

Yes, the lake is our most important asset. We need to protect it!

Yes, with grandfather clause for existing lots.

Yes, by increasing lot sized to 1 acre helps preserve the natural forest that surround our homes today.

Yes, I think this would help to increase home values by limiting small lots with mobile homes.

Yes, the preservation of ground water assets such as swamps, ponds, and marshes which filter the water should never be compromised either by septic systems or wells that are too close together as it can be in a developed parcel of land.

Yes, how would this effect existing smaller vacant lots for future building?

Yes, too populated already, especially by the lakes areas.

Yes, lots that have already been permitted and plotted should still be legal for development and the rules apply to new permits.

Yes, allowance must be made for conservation housing.

Yes, spreading things out lessens the impact on the environment.

Yes, the rules should be tailored to what and where the land is, topography, trees, etc.

Yes, two acres for lot size

Yes, 1/2 to 1 acre.

Yes, any change to grandfather existing lots or developments

New construction on already subdivided lots or new construction in new subdivisions? I own one 80x100 foot (8k sq.ft... lot/site). Would I not be able to build on it if I wanted? I've had it for forty years.

2 acres per lot in agriculturally zoned areas being developed as subdivisions. Lakefront new construction should take into consideration lot depth as well as frontage i.e. total square footage, and setbacks requirement. Size depends on lot and usage.

Possibly, 3/4 to 1 acre lot, not less than 3/4 acre.

I'm not sure I have enough knowledge to comment wisely - although it makes sense to limit construction by increasing lot size.

Qualified No

No, actually it should be 10 acres in agriculturally zoned areas and 2 1/2 acres in residentially zoned areas

No, Hamlin Lake Estates should be 6 lots to build. 4 lots is too small and 1 acre is too much.

No, one acre across the board, but only if existing lots are grandfathered.

No, perhaps road frontage should be 150 ft. most people cannot conceptualize 1 acre. 150 ft wide would be adequate.

No, it should be by feet size, not acreage. What is the city of Ludington and Scottville lot requirements.

No, I believe some or most should be 1 acre, yet not all developments should be required for this size. Not 1 size fits all.

I believe the location is an important factor in this decision. If you require a yes or no response I would have to say no. I believe in balanced zoning. All are important to the success of a thriving community.

No, people should not be limited to just one acre and more for their homes.

No, the lot size for a home should be the same in all areas.

No, it's unrealistic that a house built on farmland should require 5 acres; one acre would be more than reasonable to allow family members to build a new home.

No, stop increasing house size on non conforming lots with inadequate septic systems like on Lakeshore Drive. Bigger house means more pollution for the lake

No (maybe). If tracts are restricted to x number of sites within a given area, lot size wouldn't matter. It depends on what the tract is surrounded by.

No for 5 acre agricultural. Yes for 1 acre residential. May need exceptions in overlay districts. 5 acres seems a bit too large. Maybe 2 or 3 acres.

No, unless you are willing to grandfather people in who do not have a full acre or who do not have 5 acres.

No, it wouldn't be fair to the people who purchased 2,3, or 4 lots and have 100 ft. to build on when they retire. Would they be grandfathered in so they could build?

No, we should try to accommodate land owners so they can build on their properties. Development in subdivisions can be increased.

No, not everyone has an acre lot. For residential lots increase should not be raised. Agriculturally zoned areas should be.

No, yes if your grandfather current owners. They bought under a rule that should not change.

No, prefer higher requirements. How else to protect our ground and surface water?

No , 1 acre if on the waterfront of Hamlin Lake. It should go by designated frontage no less than 100 ft. - otherwise 1 acre OK.

No, an increase, but to 1 acre is too large an increase.

No, define "new construction". If I want to build a garage or pole barn on my lot next to me, will this be considered new construction?

This is hard. People with less than one acre will have a rough time with zoning. 1 acre is good for septic code. My city has 1 acre zoning but we have had it for over 50 years. It is very nice but hard for city all developed.

Specific No

No. If the smaller lots are already created will the owner be allowed to build on property they have or will it become worthless?

No, discourages growth and development for ordinary people

No, if you own it sell it the way you WANT

No, we need the tax base to support our future. Development provides that tax base.

No, land in Hamlin Lake is limited already and we bought the land and maybe intend to build a little small house for retirement and the new lot size would not let us.

No, we own a lot on N. Marilyn Dr. and it is 40,650 sq. ft. 1 acre is 43, 560 sq.ft. This zoning change would render our investment useless.

No, 5 acres may not be affordable to most people. If these areas are mostly cleared, old pasture land then a 1 or 2 (?uneven) should be issued. We are lucky to have such a nice area so close to town. We have to do what we can in increase usage because it would help with the tax burden on residents.

No, 1) Owners that have currently "legal" residential lots would economically suffer and would in effect make lots under 1 acre legal "non-conforming" lots. This would hamper the resale or construction on these lots. 2) Owners not capable of installing a septic system should have option of installing "storage" tanks" for disposal purposes.

No, people need affordable housing,k small lots are ok if we save some bigger areas for public use and protection.

No, your suggested size would be too big to mow and too small to plow!

No, lets try for less governmental controls and more freedom for citizens.

No, the land I have was going to be a development two lots. At the time it cost more than it's worth now if you change it I won't be able to build when I retire. Don't you want more people in your township? I live in Kent county and you don't have to have 1 acre to build on. If you change things I won't even be able to sell it. You should make it easier then hard to live in your township Will this land to grandfathered in so I can sell it and someone can build on it?

No, I own two 3 lot parcels and one 8 lot parcel. This would render all this property as useless and of no value.

No, if the focus is environmental impact; specifically septic systems, let the Health Dept.

regulate.

Residents with homes on less than an acre would not be able to rebuild should they lose the home to fire, etc. Maybe in the future but not now.

No, it's too much government and unnecessary power. Let each case stand on its own merits. What the Planning Commission for?

No, 1/2 acre is adequate in currently populated areas- along Lakeshore Dr. Jebavy, Decker, and around the bayous. There are parts of the township.

No, people like myself who own a lot on Hamlin Lake should be "grandfathered in " to still be able to build on smaller lot. Any new purchases should apply accord. Our lot would be worthless to anyone else.

No, they are already too restrictive to allow needed, reasonable development around the lake.

No, larger lots increase the use of more land causing them to be split into smaller parcels thus increasing impact on wetlands.

No, out total lot size is just over 1/2 acre with homes already built on each side. If this increase goes through then our land will be useless to us.

No, I have 3/4 acre lot which I have been paying taxes on for 35 years. I plan to build on it after I retire. Please don't change lot size.

No, too much regulation!

No, stop slowing growth - back off.

No, even if i purchase adjoining property to mine, it would not equal an acre and setback from roads/property lines makes a difficult build.

No, people who own lots and have not built will now not be allowed to build on them? No, this would make my property totally useless. I also know others in area that have less than i acre. Some plan on building in future.

No, an arbitrary size of 1 acre doesn't necessarily improve environmental duality. If the lost is all turned to grass and over fertilized it could do more harm!

No, 1/2 acre is ample in our opinion. It's worth mentioning that we presently live in Tamarack and previously on 2 lots on the lake shore.

No, Hamlin township also has many vacation homes which are not used year round. It has been a vacation community in addition to year-round for almost 100 years. How will this be accommodated/preserved?

No, because those of use who live in Hamlin Estates couldn't sell our small lots.

No, Hamlin residents are subject to excessive zoning already and this lot size change would adversely affect families choosing to have future generations build on familyowned parcels.

No, one acre is too big for many to afford.

No, we have been through enough on this issue.

No, if your have 2 or 3 lots what good (?) they be for resale. I think that 2 or 3 lots would be ok for well and septic.

No, there is no magic number about 1 acre r 5 acres.

No, this is a naive and simplistic "solution". The township needs to use 21st century techniques to make our township better.

No, it seems illogical to restrict or set lot size on AIA. zone. The land may be better suited for housing than many others. Why hurt a struggling farmer who may wish to sell.

No, does this mean that my property which is under 1 acre (used to be buildable) becomes worthless!

No, if new construction lot sizes were increased 40 acres there would be a grandfather clause allowing lot owners who have undeveloped property which is less than 1 acre to be allowed to build on that property.

No, the present size requirements have served to this date.

No, blanket regulations can effect lots that really don't need it.

No, where would tax dollars come from - most areas are smaller than one acre sites - this land would be useless and people would not pay tax on useless land. With this area as depressed as it is - how can anyone think this is the right move.

No, the "keyhole law" that prevents parcels of land that have interior building sites with common lake front use (like Partridge point) are completely wrong as well as a large tax base loss to the township! Especially with many miles of state park frontage and unlimited public access at public ramps.

No, this would reduce the value of existing lots of less acreage. This is a bad time in the U.S. or Michigan to devalue people's property.

No, we own 8 lots in Hamlin Lake Estates and with this increase we would not be able to rebuild on it or sell it.

No, when the township approved the subdivision of this land into these small parcels they gave no consideration of septic systems then, why now?

No, many parcels would lose value, better to limit % of impervious area on each parcel.

No, this course of action could decrease current owners' property values.

No, land is to be used effective, land cannot be made. It cost more to service big lots for gas, water, electric, roads, and landscape.

No, doing 1 acre lots would not allow me to build my cottage on Hamlin Lake. My current lot size is 150 lakefront x 200 deep plus a septic easement of Silander property.

No, it would make property investments worthless. I have 8 lots ust under an acre and I wouldn't be able to build?

No, the lot size is determined by rules already established. The owners and/or builders will know if water quality is suited or septic systems can be installed. Let them voluntarily adjust to accommodate what is needed. If it is not broken, don't fix it. There are areas that are still for sale when they make them too small to build

No, that would eliminate any new development and further depress an already depressed area.

No, should increase outbuilding footage for storing toys, etc.

No, a farmer wants to sell his tillable acreage to another farmer and keep his house and a building. A yet vote would mean that the farmer would have to keep 5 acres.

No, bought 4 lots with intention to build future home on. this would make my land useless unless you want to give me enough land to do this.

No, I bought a lot to build on. It would be unfair to prevent me from building after I bought the lot.

No, having a broad brush lot size requirement across the entire township is not the correct way to solve this matter. Minimum lot sizes in other parts of the state have proven to take up precious land resources for the future. Let's develop a long-term master plan including sewer line extension and not drive up land prices and take up land by increasing lot size.

No, I'm not sure what our lot is zoned, but if it is agricultural we would not be able to build on it (Lincoln St.). It was only 4.632 acres when we bought it.

No, leave the zone the same as 2010.

Assorted Topics

Trees

New housing is needed for all people. With that in mind remove as few trees as possible to provide a home.

We need the woods for the wild animals and it helps to keep our home cool in summer and less snow and wind in winter!

I would like to see the woodlands protected but do not believe in counting trees.

Weeds

Weed control.

Weed control on Hamlin Lake. Could it be connected to the pollination problem? Weeds in Hamlin and water quality issues are really big! There are still still homes right by the water that have no natural area (buffer zones), green lawns with no weeds (fertilizer).

Are we sure our new golf courses are not causing the problems in Lincoln Lake? Do something about the rice in North Bayou. It is killing the fishing and filling in the bayou with sediment.

Weed control in the North Bayou.

Floating seaweed on the upper (mostly) and lower Hamlin - especially to practice of floating the seaweed back out into the lake from breakwalls.

Septic

Address the septic tank/sewer problems on the lake. The health department won't do anything unless someone ELSE locates a problem with pollution and signs a complaint form. Would you like to sign a form and live next to your neighbor?

There needs to be more proof of adequate septic systems when a property is sold. We should have a long term plan for township sewer. Our waters are our greatest asset

High density development belongs in areas where these is a water/sewer infrastructure in place.

We need an inspections process for septic systems.

Check all septic overflowing into Middle Bayou. All you need is dye and you'll see which one has overflowed.

I'm for issues that don't take from our freedoms. Example. We feel we are intelligent enough to figure out when to have our sewer system checked and emptied without the township telling us.

Limiting lot sizes on the Hamlin Lake shoreline for septic concerns is environmentally sound, however current zoning adversely affects owners whose parcels do not allow rebuilding after fires or natural disasters.

I would like to see sewers put in around the lake and stop the draining into the bayous from the farms.

More control on trailer park (sewage) and environment.

A major concern of ours is the number of out-of-date septic systems, around the lake especially. We do understand that the Health Department has jurisdiction over septic and water and inspection of each and every septic system is not feasible. Is there a way that Hamlin Township and/or the Health Department could require that septic systems must be verified as adequate (functional/legal) when property is sold or ownership is transferred in any way?

Long range - install sewer systems to Hamlin Lake!

We do not need a public water/sewer system.

No new development should be allowed on Hamlin Lake until it is sewered.

Fish

Hamlin Lake habitat improvement and fish stocking.

Add small fish to the lake.

Fish stocking programs should be established.

Parks

Upgrade North Hamlin launch. It is essentially unusable.

The North Bayou Park is a JOKE. You can't even launch a boat from it. Why not fix it and build a launch or Jack?

Put 4x4 posts on the south side of South Bayou Park so people have to enter the park at the entrance not south of there, messing up the grass.

Change the name of the long skinny park.

Wilson Hill parking needs to be expanded into the field.

When will the baseball backstop be replaced at Wilson Hill park?

The township should actively seek to develop more parks. Use is only gluing to increase and as nice as our current parks are, more are needed.

How about a fishing dock off Long Skinny Par? It would be wildly popular.

Public dock space on Hamlin near North Bayou, Duneview launch area. Any chance?

It would be nice to have a place to launch a boat on middle or lower Hamlin that was a public area for those of us that have places in Hamlin Lake Estates or along the other residential areas in the area.

We need more spaces for residents to park for fishing at Wilson Park and others. We pay the taxes, but the tourists take our parking. That is not Fair! So us who live here, can't fish - on weekends and can lose out if we don't pay for their pleasure - since we pay so much for property tax we should at least be able to use our own facilities to park, fish, etc. - beaches, etc. Township folks should have a free sticker to park our trailers for boats. Tourists can pay extra or find another place - besides Wilson Park - who comes first, tourists, or us folks who live here and pay so they can enjoy what we cannot?

More parking (car - boat trailer) at Wilson Hill Park

Trailer Parks

No trailer parks, no trailer on lots, no medium or large scale camping/part-year developments.

Don't want any more year round trailer parks.

No RV parks!!

Township should embrace tourism/tourist activities instead of fighting (ex. RVpark. We need to welcome our seasonal visitors; visitors our neighbors depend on for jobs!

Environment

Save/preserve existing environment will maintain wildlife habitats. If possible build in environmental possibilities in new construction to protect environment. I/We enjoy the farms we see. Hopefully they'll stick around. Thought about environment should go into any planning (as golf course contractors do).

Protect what we have and don't over populate or we will become like the rest of the (? jowy).

Don't want unreasonable regulations and restrictions re environmental protection. they often go too far.

We love Ludington because of all the nature. I hope it stays that way for many more years.

Partridge Pointe needed to preserve its unimproved land. Some lots there seem very small, especially with large houses.

The are far too many houses being built on land that cannot sustain them.

Also conservation development option for residential and agricultural.

But let's not get nuts with environmental protection and preservation.

It's mostly not agriculturally conducive property in most places now. It is wooded and lakeland mostly.

Need environmental preservation within reason.

Environmental protection where you can.

Population density is what drives economic growth including tax revenue. We are a service/tourism based economy - the ? environmental preservation.

The cost of environmental preservation/protection is important.

W have DEQ. We don't need any more protection. Back off. we have the state park and Manistee Forest. Let people use their property - why do you think you know more than the property owners - we pay the taxes. Let's create more jobs and money for our area, create more commercial.

Encourage industrial development to bring jobs to our community and increase the tax base.

Being good stewards of the land is always a prudent idea and will always pay big dividends! Local food production equates to a great benefit to local economy.

We would like to maintain a reasonable balance in such a way that overall quality of life in the township remains high.

As the township grows, residential and commercial will too. Trying to preserve a sense of rural quality is desirable.

Wooded is fine - don't need a lot more development. We have deer, coyote, cougars (yes!) bear, etc. Where will they all go?

Right now because of all these new subdivisions gong in - the wildlife have no where to go, their territory is becoming less to live in. It just seems there should be some consideration and balance when building or moving forward. Consideration for preservation and building should be in moderation for a balance.

You give NO definitions therefore this is deceptive. (the 1-10 scale of types of development).

Environmental protection and preservation must be incorporated in permit processes. Land must not be stolen or bought by the township.

Hamlin Lake - a gift from our forefathers - let's not destroy it.

Too much development without regard to resources or environmental impact.

We already have one of the finest state parks according to Disney. We would like to see protection and preservation a priority to make our special area even better for more families and wildlife to enjoy.

Stop drainage into the bayous.

People live and visit here because of all the beautiful natural areas - so preserve them!! Wish the native center at the state park would be brought back!!

Do what is necessary to preserve quality of Hamlin Lake. Take care of Eurasian milfoil, algae blooms, other invasive species thru the township, county etc. and add to tax bills. Be proactive to get homeowners to start developing buffer zones on their properties.

Environmental preservation is the only future Hamlin township can grow on. Without it we (Hamlin township) has nothing.

I would like to see the speed limits reduced and "Share the Road" signs posted on Lakeshore, Jebavy, Dewey and Decker

I would like to see the Victory DR. from Lakeshore to Lincoln paved. With the increase of people in the area it is a quick way to Jebavy and town. But they are trying to keep it smoothed out but is it always rough and dusty. Just a thought. Thank you.

Need more repairs on roads! Too many potholes!

Better roads!

Speed limit sign of 45 mph on Dewey Rd. "No overnight parking" signs on east side of Lakeshore Dr. at South Bayou Park.

It would be nice if you paved the dirt roads where there are many houses. My neighbors are moving into town because they are disgusted with the dirt road.

Fix Dewey Road.

Require "private roads" such as extension of Shagway to use dust suppression and speed limit such as 15 mph.

Township tax for improving and maintaining township roads.

Pave the roads in Hamlin Lake Estates.

Ask the county to do a better job of plowing and grading the roads. It takes 3 days to get our roads plowed after a storm, they rarely grade the roads, and never ever brine them for dust.

Put up speed limit signs and children playing signs on roads in Hamlin Lake Estates.

Maintain, plow, and widen Mavis RD where it is a two track. This was the main road used after the flood took our Lincoln Rd bridge and nobody but tax paying citizens did anything to help maintain it.

Do not allow people on Lakeshore to build on road right of way. Planter or steel rods on side of road very dangerous.

Clean out the ditches so the water flows and eliminates the mosquito breeding pools.

The non-paving of W. Ehler Rd. has caused great increase in gas consumption.

When is the guaranteed date for replacement of the South Bayou bridge?

Build a new bridge on South Bayou entrance.

Speed limit change to 45 mph on Jagger and posted!

Repair South Bayou bridges.

Perhaps end of Duneway can be slightly improved to reduce erosion, filter road run-off and make for more pleasant launching of canoes, kayaks, and *small* fishing boats.

Dewey Road needs attention. It's falling apart.

Encourage a traffic study for safety issues at Jebavy/Angling.

We need deer crossing signs on our roads.

Lower speed limit on secondary roads.

Help - I can't turn on to 31 near Ludington - tourists (blah!!)

We need the 25 mph signs restored on N. Lakeshore Dr. between south and north bayous.

Junk

Would like to see stronger restrictions on property owners; property maintained/fewer autos and junk.

Township laws should be strengthened to keep people from collecting junk on their properties which become an eyesore to their neighbors and passersby.

Township should govern and enforce clutter, trash, and unsightly kept yards.

Laws to clean up junk in the yards of individuals. Cars. Lots unkempt. Yards look like garbage areas.

Enforce rules of clean yards and maintenance.

I am sick and tired of my property value going down because others don't mow or clean their yards, or they have demo derby cars and engines laying around. Make them clean up their stuff so it is presentable.

Enforce a code so homeowners must keep their property free of debris, lawn mowed, and any unlicensed cars or trucks removed. This type of property brings down the value of the homes that we're trying to take care of.

Please enforce clean up of residential properties (junk cars boats, old tires, etc.) My complaints in the past produced NO results.

Enforce unlicensed cars nd junk.

Fireworks

Why are fireworks shot over Victory ad Grand Townships/ Most of Hamlin can't even see them!

Would it be possible to move the 4th of July fireworks display to a middle area which would be visible to the south residents as well as the north?

Development

There is a nice balance between the types of development now.

Remember majority rules, not the voiceful few. Equal consideration for agricultural, commercial, and residential development.

I realize that with more residential growth more commercial growth will have to happen also.

Encourage growth tat will increase our tax base. People who want to control how land is used should purchase that land.

I encourage all types of development. Some commercial needed, but in "right" spots. Smart development should preserve and protect environment and direct growth

I believe in balanced zoning. All are important to the success of a thriving community. As a lake forest property owner I thank your for all you do to protect water quality.

Again, need to do less not more. If we put a law, rule, or regulation on the books, then remove 2 old laws, rules, and regulation. Let nature take care of itself.

No more packed in cul de sacs! Leave the parks alone.

Growth keeps the community going.

Remember that Hamlin township is no longer the backwater of Mason County like it was 30 years ago. We are the most populous township in the county and growing.

Nowhere are you going to let the poor people build. Look around and see how many out of state rich people came and took over. Look around and see how you didn't have enough land to build, for some reason there's a large place on it. How? See and check on how land got bigger and built on.

Do we prefer any type of development. Let's clean up / fix up / maintain what we have now!

We need to give some comment for resort owners and increase interest.

How about a balance.

Designation of additional areas that would allow for commercial use in the land use plan and zoning ordinance

Too easy to say, NIMBY once your live on the lake. Too easy to become a place for those with \$s only. Open it up to commercial (Not in My Back Yard) and well plan ed.

Preserve the integrity of downtown Ludington because this is the most important of Mason County. It is wholly responsible for tourism and real-estate value of the county.

Residential development needs to be controlled - the developer needs to provide a plan that must be approved before he/she can start anything

No "fast food" establishments to be allowed. All effort should be given to maintain a rural environment.

Balance.

Need more restaurants. Needs camping and cottages.

It is already residential in most cases.

Recreation, sports, parks

Commercial equals small, local grocery/gas station - not factories!

R-2 Res. - Recreational

We should be looking for ways to increase our infrastructure to encourage development.

We do not need little stores, strip malls, and taverns. We need small clean industries that will bring good paying jobs.

Commercial such as storage units, small stores is "okay" - not factories, manufacturing.

I would like to see Lake Hamlin area remain the same type zoning and those campsites be charged more for use of the lake. Perhaps it would bring our taxes down!

Hamlin always has been and always will be a recreational/residential area and you'll never change it. When this is recognized, proper planning has a chance to succeed.

There is a need to increase the tax base for the township.

Lower density equals lower taxes.

By commercial I mean small retail shops and restaurants not manufacturing.

Small service oriented businesses would be nice in areas zoned commercial or agricultural with approved variances (we don't need or want large manufacturing in the township). Agricultural tends to be harmful to our lake. There are too much nutrients generated into our watershed, and very little being done by the ag.. producers to stop it.

No more subdivisions please!

I think that if land=owners who own or lease property for agriculture should get some type of tax break if they can PROVE that they use environmentally friendly pesticides that will not effect the ground water or compromise the natural filters.

I do not know much about the housing situation to make an educated comment.

I would rate ag.. much higher if agricultural practices were vigorously regulated (e.g. fertilizer run-off)

Balanced approach to development. All types are important.

There is virtually no commercial development in Hamlin Township. We need jobs not environmental preservation, or more blueberries.

A gas station, so we don't have to drive to Ludington.

No dairy or poultry, more fruit.

Emphasize recreation and residential.

Agricultural should be encourage with proper use of pesticides, herbicides.

We need to have a balance - all are important in balanced amounts.

I lived in Hamlin for 30 years. Purchased 4 lots to build a house on. This is Hamlin Lake estates. Let's keep it this way. It should have not been split up way back in the day if this was not wanted. Another rule for the rich person. Just what we need.

As a township, we should be making many of these decisions based on science and needs of the township, not on opinion survey and no factual information.

I do not feel my comments (on development) apply, therefore unless it effects our property please leave everything as is.

Money comes from building - concentrate on residential development - encourage it. Item 1 (raising lot sizes) does not encourage it. Work with builders to encourage building. Make it easy for them to build.

Burning

Please enforce burning in Hamlin. Trash, garbage, leaves, grass, and where burning can take place. Needs to be a safe place away from lot lines, etc.!!!

Control outdoor wood stoves. Smoke from them clings along the ground. Make the controls retroactive.

The leaf corral is very good.

Thanks for considering naming Wilson Hill Park a name consistent with the names of our other parks, one that describes its location. I would support the current name if Mr. Wilson or his family had donated the land, developed, and maintained the park.

Enforce burning trash bans.

Hamlin needs to extend natural gas lines to help eliminate wood burning (outdoor) heaters that pollute our air and environment.

Wilson Hill Park

Change the name of Wilson Hill Park back to Hamlin Park.

Leave "Wilson Hill's" name alone. I prefer it to remain "Wilson Hill".

In regards to renaming Wilson Hill Park ... our township is spending to much money on this consideration. For what dispute?

I don't believe taxpayers or the township should have to pay to rename Wilson Hill if the name is in fact changed. Maybe all the people who signed the petition to rename it should pay!!!

Do not change the name of Wilson Hill Park.

Contiguous Lots.

Board should look at contiguously lots that are legal non-conforming and under the same ownership which were purchased separately. They should be able to resell. Should not have to jump thru hoops and put in other home to sell later.

Look at contiguous lots that are under same ownership. Should be able to sell if they were purchased separately and are legal non-conforming. Don't try to regulate areas that are already regulated.

Look at legal non conforming lots that are adjacent and were purchased at separate times. Should be able to resell without having to put in someone else's name just to get around zoning.

Help landowners - adjacent lots - legal non conforming should be able to sell.

ORV

Some legal two tracks for four wheels. Many people ride golf carts on two tracks but hard to find places to get to to ride legally because can't drive those on main roads.

No OR on roads. We already have enough trouble with trespassing, especially on the Black Bass Bayou drainage ditch. Lots of traffic, lots of ditch destruction - people going up and down sides on dirt bikes, 4 wheelers, etc. entering private property

Allow ATVs!

Do something about noisy go-carts!

Water Quality Suggestions

These letters need to come out more often to shame these people into doing what is right for the lake.

Excellent suggests on the enclosed water quality sheet.

Put in sewers and assess the owners.

Dial-A-Ride

Would like dial-a-ride. No more votes on mass transportation period! Seniors - as having the dial-a-ride

Bike Paths

Bike paths.

Can bike paths be developed here? Again, they would be popular.

Schools

Whatever helps to support the schools. We need more money for schools.

Miscellaneous

Lower property taxes.

Control light pollution

Job creation in Mason County.

Need snowmobile trails.

I believe on my own that they have to find something to do with Hamlin Lake jet skis, out of state boats housed year around IN, IL, OH tags on them. Times they are out there around 10 p.m. They say they are out of state and don't know jet skis can't be out there late; time they make the person renting all this junk accountable for who they rent to. I guess we'll have to do all the time, use it when your towels are gone.

Township should do more to help us get cable down Rath Rd between Sugar Grove and Decker. We have not cable, gas, cell service is poor. It is like we live in a hole on Roth Rd.

As a builder, I would like to see revisions of old lot sizes and some way of keeping modular home out of our area. Stop allowing them. They do not hold value and make our neighborhood look like a run down trailer park.

A gas station and nice play park for kids would be nice also.

Disturbance of the peace/ Noise ordinance.

Hamlin staff is awesome!

This is not good for us because we own property but don't live in Hamlin township. We will not be able to vote on this issue but we pay taxes.

Change the name of the long skinny park.

Several years ago I purchased 4 lots as an investment. It has not worked. I now pay taxes on something I will probably never use. Values are still declining. Question: is there a street address for my lots?

Police protection

I don't understand why people some her from down by G.R... and build or put in (Manief?) (manufactured?) homes and then turn around and sell just to do the same again. That is why we have so many empty homes in the area.

We pay too much in property taxes and should be allowed to do whatever we want with our land and buildings.

The dumpster for Nurnberg Road residents is a good idea, but they should be required to use the same green bags as all others. There's no reason - good reason - they get free trash disposal.

Taxes must be based on fair market value.

Like communication on status of lake.

Love Hamlin township.

Have garbage pickup contract for full time residents and summer residents.

At the transfer site - post the costs and gains from recycling monthly

Limit the number of dogs, a household can have two.

It would be nice if you would send a return envelope along with the taxes, please. Greater enforcement of speed laws on Hamlin Lake. More "No Wake" zone, including enforcement

Can we get natural gas in the Lincoln/Sassafras area so we can switch from using propane?

Waste and recycle: How important is the green bags, at a cost of \$11 for 10 bags important to use. 11 bag for \$10 and (? incouunents) I think is a unnecessary cost. Let me add that the people working at our waste disposal do a fine job, however if this service if for or the reasons for the green bags with Hamlin printed on it. Maybe we could have services equal to Pere Marquette. Pick up with black bags 3 bags per household.



Appendix C Community Action Team Process Executive Summary

Overview

As part of the Resilient Ludington community planning project, leaders formed Community Action Teams (CAT) to discuss the various aspects of systems that sustain the Ludington Community, with an emphasis on resilience. Citizens from the entire community were invited to attend a series of working sessions to formulate system-specific recommendations for the City of Ludington, Pere Marquette Charter Township, and Hamlin Township. Participants chose to participate on one of six CATs addressing different systems within the community. Those systems were (1) Access and Transportation, (2) Agriculture and Food, (3) Energy and Economy, (4) Environment and Natural, (5) Human and Social, and (6) Neighborhoods and Infrastructure. Each team had the opportunity to learn about the workings of the system, as well as its strengths and weaknesses. Then, the CATs established goals and recommendations to submit to the Community Planning Committee. The following is a summary of the outcomes and recommendations from the Community Action Team Process.

Process

Approximately 70 individuals participated in the CAT process which included a series of three meetings between June and September of 2014. CAT members were able to choose the system they were most interested in working on by signing up using forms provided at community meetings, using an online signup page, or choosing a system at the CAT meetings. Each of the CAT meetings was conducted in a large meeting space and began with a presentation to the entire group. The presentations included information about community planning, the Resilient Ludington project, community resilience, and instructions for meeting activities. Following the presentations, the CATs conducted separate discussions focused on the six systems then reported their conclusions to the overall group. The following describes the topics covered at each of the three CAT meetings.

1st Gathering – Assets, Threats, and Vision

Build a reasonably complete picture or inventory of assets and threats within each system. CATs will review and build upon the lists of assets and threats created at the Leadership Summit and also consider visions for each community system.

2nd Gathering – Goal Creation and Prioritization

Building on the asset and threat inventories developed at the first gathering, the CATs will develop ideas and goals for improving the system's resilience to the threats identified. Then, goals will be categorized and prioritized.

3rd Gathering – Objective and Task Creation

Building on the discussions, information, and goals developed in the first two gatherings, the CATs will create a series of recommended community goals, objectives,

and tasks for the City of Ludington, Pere Marquette Charter Township, and Hamlin Township.

Community Assets

At the first CAT meeting, the teams were asked to create an inventory of community assets from each of the six systems, and then identify potential linkages between the assets of each system. The CATs were asked to consider four important characteristics of community resilience when identifying system assets: (1) strong and meaningful social connections, (2) diversity of all kinds, (3) innovation and creative problem solving, and (4) extensive ecosystem services. The following is a summary of the community assets identified by the CATs. The assets are organized by the four important characteristics of community resilience listed above.

Strong and Meaningful Social Connections

Many of the system assets identified by the CATs contribute to strong and meaningful social connections within the Ludington community. The people of the community come together in places like parks, beaches, downtown Ludington, area schools of all types, museums, senior centers, and churches. Many festivals, celebrations, events, recreation programs, and gatherings create strong social connections and foster a sense of community pride. Area roads, sidewalks, pathways, transit, the Mason County Airport, and the Lake Michigan Car Ferry are the key connections that bring people together. The CATs also identified a number of intangible community ideals like a collaborative spirit, volunteerism, and entrepreneurship that provide social connections within the community.

Diversity of All Kinds

Diversity in transportation, agriculture, energy, economics, recreational opportunities, natural resources, area services, and housing were noted by the CATs. The Ludington community offers a variety of housing options including condominiums, apartments, and detached single-family dwellings. These options are available in a variety of price ranges and in a range of rural to urban settings. A diverse community economy includes manufacturing, agricultural, tourism, medical, governmental, and entrepreneurial employment opportunities. Transportation choices in the community include walking, bicycling, transit, and driving. The CATs also noted the diverse number of agricultural products that are grown in the area.

Innovation and Creative Problem Solving

The CATs indicated that collaboration between individuals, service groups, businesses, educational institutions, and local governments in the community provides for innovation and creative problem solving. Examples of collaboration that support economic development, provide services to the community, and help protect natural resources were identified. Programs like the Lakeshore Employer Resource Network provide community services through the collaboration of public and private entities.

Extensive Ecosystem Services

The Ludington area is blessed with abundant natural resources that provide ecosystem services to the community. Lake Michigan, inland lakes, rivers, wetlands, agricultural soils, parks, and open spaces all provide benefits of some kind to community residents. Wetlands help store and filter stormwater runoff, limiting flood damage and protecting water quality. Area parks, lakes, and rivers provide transportation and recreation opportunities that allow residents to connect with nature and provide the basis of the local tourism industry. Local soils provide for agricultural production and opportunities for agri-tourism, as well as some stormwater control.

Community Threats

The CATs were also asked to identify threats, or weaknesses and vulnerabilities, to the Ludington community at the first CAT meeting. A number of specific threats were identified by multiple CATs. Themes that emerged during the discussions on community threats were the impacts of the aging population on the community; aging infrastructure; a lack of non-motorized transportation options and connectivity; and the impacts of pollution on natural features. Other threats that were noted by multiple groups included the impact of extreme weather on people, the built-environment, and local crops; the lack of job creation and loss of jobs; a lack of community-wide communication and collaboration; the loss of natural and agricultural areas to development; and the deteriorating condition of parts of the built environment.

The aging population of Ludington impacts the community in a variety of ways. Older populations are more vulnerable to severe weather events and an aging population is likely to place a higher demand on social services and the healthcare system. Demand for different types of housing, which may not be present in the community, occurs as a population ages. Additionally, the transportation needs within a community change as its population becomes older.

It was noted by some CAT participants that the infrastructure of the community is aging and, in some cases, does not meet the needs of the community. Many roads are in need of repair and portions of the community are not well served by sidewalks or bike paths. Many buildings and homes are in disrepair and CAT members expressed a concern that water and wastewater systems may be at higher risk of failure due to their age.

The lack of a consistent non-motorized transportation system within the community was another weakness cited by multiple CATs during discussions. It was noted that it is difficult to get around portions of the community without using a car. Without adequate non-motorized transportation routes, those who cannot drive or afford an automobile can find it difficult to reach the services they need. Additionally, there is a growing demand for non-motorized transportation options, like bike paths and bike lanes, for tourists and others seeking ways to get to and from lodging, attractions, beaches, and parks without driving.

Threats to the environment and natural features from various pollution sources and severe weather events can have a direct impact on the local tourism economy. Runoff from impervious surfaces such as parking lots and roof tops within the community can negatively impact water quality in Lake Michigan, inland lakes, and rivers which are often used for recreation by area residents and visitors alike. Additionally, failing septic systems in rural areas can damage ground and surface water quality.

Extreme weather events, specifically heavy precipitation and high winds, emerged as key concerns during discussions. Heavy precipitation events have damaged public infrastructure and private property in recent years. Large storms have washed out roads, flooded homes and businesses, and overwhelmed stormwater drainage systems. High winds and ice storms can damage electrical lines and damage structures. Many CAT members mentioned a need for community members to be more involved in planning for, and better educated about extreme weather events and other emergency situations. Local crops can also be damaged by extreme weather events and irregularities in the growing seasons as the climate changes.

The loss of manufacturing jobs during the economic recession and the lack of new jobs were concerns identified by CAT members. Also, the lack of education and training opportunities available to area workers was mentioned as a weakness. The skilled workforce, for many area industries, is aging and there are few well-trained employees available to fill vacancies when workers retire. Many of the jobs associated with the local tourism economy are seasonal and workers are left without jobs for a portion of the year.

Residential and other types of development have replaced some of the community's natural and agricultural areas as full-time and part-time residents build close to, or within, the beautiful landscapes of the area. Open spaces, forests, wetlands, and agricultural lands not only provide the basis of the areas tourism and agricultural economies, but provide valuable ecosystem services, like stormwater control, as well. CAT members noted the loss of agricultural and natural lands to development as a threat to the community.

Community resilience is a continuous process of adapting rapidly to changing circumstances and threats. Communities interested in becoming more resilient assess their vulnerabilities and make action plans to reduce their sensitivities and exposures to hazards of all kinds.

Community Vision

During the first CAT meeting, each group identified a broad, system-specific vision for the Ludington community. The visions were further refined during the second gathering. The following paragraph combines and summarizes all six vision statements.

In 20 years, Ludington will be a vibrant, safe, and balanced community. Residents will have an effective, multi-modal transportation system with increased connectivity, modern roadways, and broad access to public transportation. There will be a diverse, prosperous business environment that celebrates entrepreneurship and capitalizes on the unique setting of the community. Neighborhoods will provide a variety of housing options for those of all ages, abilities, and incomes. Land uses will be carefully balanced so that farmland, natural resources, and open spaces are protected and preserved. Community members will have a vast knowledge of the importance of the area's agricultural and natural resources and will work to protect them. Residents will enjoy a high quality of life that offers excellent education, training, and employment opportunities.

Community Action Team Recommendations

At the second and third CAT meetings, participants focused on identifying key goals that would address community-wide issues and concerns. Then, these goals were further developed by each CAT to include underlying objectives and tasks. The CAT participants submitted the following list of goals, objectives, and tasks as their community planning recommendations to the City of Ludington, Pere Marquette Charter Township, and Hamlin Township. The CAT participants request that these community planning recommendations be considered for inclusion into the master plans and local government policies of the Ludington Community.

ACCESS AND TRANSPORTATION

Goal 1: Reduce congestion on US-10/US-31, specifically near the intersections of Pere Marquette Highway and Jebavy Drive.

Objectives:

1. Form a team, including an MDOT project manager, to address congestion problems.

Task: Assign a team leader.

Task: Identify stakeholders and a sponsor in MDOT.

<u>Task:</u> Complete the formation of the team.

2. Set targets for reduction of congestion.

<u>Task:</u> Review existing data on congestion, accidents, etc.

<u>Task:</u> Set reduction targets.

3. Design alternative solutions.

<u>Task:</u> Charter an MDOT design to determine costs, physical requirements, layout, and reductions in congestion.

4. Select a design solution.

<u>Task:</u> Collect public input on design alternatives.

Task: Select a final design.

Task: Gather funding for design implementation.

Task: Construct the proposed design.

Goal 2: Create a multi-jurisdictional US-10/US-31 overlay zone that addresses sidewalks, landscaping, buildings, access management, and crossings.

Objectives:

1. Identify stakeholders.

<u>Task:</u> Contact MDOT, Townships, Mason County, corridor businesses, and corridor residents. (County Building and Zoning Department)

2. Form an Authority, or team.

<u>Task:</u> Identify voting members. (Authority)

Task: Determine rules for the Authority. (Authority)

Task: Identify overlay zone boundaries. (Authority)

Task: Determine legal authority. (Authority)

3. Create the overlay zone language.

<u>Task:</u> Survey other overlay zones that have been created. (Authority)

<u>Task:</u> Identify who has done it the best. (Authority)

Task: Draft the overlay zone language. (Authority)

4. Review the draft overlay zone language and get it approved.

<u>Task:</u> Determine the necessary approval process.

Task: Review of the overlay zone language by required jurisdictions.

5. Implement the standards of the overlay zone

Task: Find funding for overlay zone projects.

Task: Construct projects recommended in the overlay zone language.

Goal 3: Create a multi-use path from Ludington to Scottville.

Objectives:

 Assemble a team of stakeholders: including MDOT, Townships, Mason County, the City of Ludington, special interest groups, and potential users (hikers, bicyclers, ORV drivers) (County elected officials, MDOT, interest group leaders)

2. Find a project sponsor.

Task: Gather input from stakeholders. (Stakeholder team)

Task: Determine the need for a steering committee or oversight team. (Stakeholder team)

3. Identify allowable uses.

Task: Identify corridor routing options. (Stakeholder team)

Task: Identify funding sources. (Stakeholder team)

Task: Create construction cost estimate. (Stakeholder team)

Task: Establish a maintenance fund. (Stakeholder team)

<u>Task:</u> Identify where people are going and why they would be using the path. (Stakeholder team)

- 4. Determine path phasing based on economic realities and matching costs.
 - <u>Task:</u> Create a timeline for trail construction with phases based on funding availability. (Stakeholder team)
- 5. Build and maintain the path.
- 6. Enjoy!

Goal 4: Stabilize funding for maintenance and planning for all modes of transportation.

Objectives:

- 1. Review funding sources.
 - <u>Task:</u> Rely on existing gasoline taxes. (Road Commission, elected officials)
 - <u>Task:</u> Revise the funding mechanism (vehicle miles traveled). (Road Commission, elected officials)
 - <u>Task:</u> Revise funding. (Road Commission, elected officials)
- 2. Identify the minimum level of maintenance and planning spending.
 - <u>Task:</u> Gather public input on acceptable levels of maintenance. Examples dust control, snow removal within four hours. (Road commission, State and local agencies, public)
 - <u>Task:</u> Review maintenance priorities and determine appropriate increases and decreases in levels of maintenance. (Road commission, State and local agencies, public)
- 3. Aggressively participate in the political process to fund public expectations.
 - Task: Educate the public on how they can provide input. (Elected officials)

AGRICULTURE AND FOOD

Goal 1: Educate the local community about agricultural assets and the importance of agriculture.

Objectives:

- 1. Connect local businesses and farms to discover how to offer local products and where to get them. (Conduct research to determine if there is enough supply and demand to support a food hub)
 - <u>Task:</u> Get local schools to offer local foods in school lunch programs. (School superintendents, USDA)
 - <u>Task:</u> Create networking events/summits to bring food producers, businesses, and schools together. (Chamber of Commerce, MSU Extension, local businesses, Farm Bureau)
- 2. Provide residents with information about the importance of the agriculture industry, nutritional value of local foods, etc.
 - <u>Task:</u> Work with local media to communicate with public. (Local media, Farm Bureau)
 - <u>Task:</u> Provide informational booths at local events. (MSU Extension, Health Department, Win With Wellness, DHS)
 - <u>Task:</u> Educate the public about the "cottage food law." (MSU Extension food educators)
- 3. Encourage local education to provide programs related to agriculture and career opportunities within the agriculture industry.
 - <u>Task:</u> Hold presentations at schools to discuss possible careers and programs for youth like FFA, 4H, etc. (School superintendents, local companies and processors, FFA representatives, 4H representatives)

Goal 2: Utilize agricultural assets to drive economic development.

Objectives:

- 1. Work with the Cultural Economic Development Task Force to support the development of agricultural assets and attractions.
 - <u>Task:</u> Develop local "cottage food" producers to drive economic development. (Cultural Economic Development Task Force)
 - <u>Task:</u> Approach farmers to participate in the Agricultural Trail and further develop agricultural attractions. (Cultural Economic Development Task Force)
- 2. Work with the Convention and Visitors Bureau to support the promotion and marketing of agricultural attractions and products.

<u>Task:</u> Ensure local information on farmers markets and other attractions and products is included in statewide listings and brochures (Farm Bureau, etc.) and make the information available at the Visitor's Center. (Convention and Visitor's Bureau)

<u>Task:</u> Research the efforts and attractions of other communities to gather ideas to implement locally. (Conventions and Visitor's Bureau)

Goal 3: Preserve and protect agricultural land.

Objectives:

- Provide resources to residents to engage them in advocacy of agricultural land preservation.
 <u>Task:</u> Identify interested groups and individuals. (Farm Bureau, MSU Extension, legislative aids)
 - <u>Task:</u> Identify communication outlets email blasts, newsletters, speaking engagements. (Farm Bureau, MSU Extension, legislative aids)
- Ensure that local zoning recognizes and protects local agricultural lands.
 Task: Participate in the comprehensive planning process. (Interested citizens and farmers)

ENERGY AND ECONOMY

Goal 1: Become a community that is knowledgeable about diverse energy systems.

Objectives:

- 1. Identify both commercial and residential energy systems.
 - <u>Task:</u> Create a task force of stakeholders including passionate residents; planning and zoning staff; Township and City governments; the business community; utilities; HVAC professionals; human service organizations; and energy efficiency specialists.
 - Task: Research each energy system. (Task force)
 - Task: Educate the community on those systems. (Task force)
- 2. Identify the community's energy goals.
 - Task: Review community's energy needs. (Task force)
 - <u>Task:</u> Identify goals for balanced energy systems. (Task force)
- 3. Identify energy conservation systems and programs.
 - <u>Task:</u> Create a team to identify energy conservation systems and programs.
 - <u>Task:</u> Identify existing energy conservation programs. (Team)
 - <u>Task:</u> Connect existing programs to users. (Team)
 - <u>Task:</u> Research or develop new energy conservation systems and programs. (Team)

Goal 2: Establish current economic conditions and needs.

Objectives:

1. Develop a database of current information.

Task: Gather existing Chamber of Commerce data.

Task: Gather existing State of Michigan data.

Task: Create a survey to gather additional data.

<u>Task:</u> Identify potential grants.

<u>Task:</u> Compile community demographic data.

<u>Task:</u> Gather local unemployment data.

(All tasks could be completed by the Chamber of Commerce, state agencies, consultants, Scottville Main Street, the DDA, and local planners)

2. Identify gaps in the data and information.

<u>Task:</u> Gather additional data and conduct a market analysis. (Hired consultant)

3. Use the gathered information to develop economic strategies.

<u>Task:</u> Develop strategies related to the health care industry.

<u>Task:</u> Develop strategies for area downtowns.

Task: Develop strategies for creating additional job opportunities.

(All tasks could be completed by elected officials, local residents, local governments, and local businesses)

Goal 3: Develop and identify systems to connect locally made and grown products with the local community.

Objectives:

- 1. Identify all locally made and grown products.
- 2. Survey public to identify opportunities and missed connections.
- 3. Identify hurdles to connecting locally made and grown products to the community.

Task: Identify areas where lack of capital is a problem.

Task: Identify areas where location is a problem.

Task: Identify areas where lack of business expertise is a problem.

Task: Identify areas where market issues are present.

Task: Identify areas where zoning issues exist.

4. Create incentive programs for local citizens to buy locally made and grown products.

<u>Task:</u> Create a stakeholder task force to research opportunities and create incentive programs.

<u>Task:</u> Test the local market.

5. Educate local producers and buyers

<u>Task:</u> Educate local producers and buyers on existing buy local programs.

Task: Educate local producers and buyers on any newly created buy local programs.

(All tasks for this goal's objectives could be completed by local growers, local producers, MSU Extension, local zoning officials, the DDA, and local schools)

Goal 4: Plan strategies for the US-10/US-31 corridor.

ENVIRONMENT AND NATURAL

Goal 1: Protect the water quality of Lake Michigan, inland lakes, and rivers.

Objectives:

1. Work with various community groups and stakeholders to implement water quality protection measures.

<u>Task:</u> Educate the community about the importance of water quality and how it can be protected. (MSU Extension, local schools, Soil Conservation District, local watershed councils, AFFEW)

<u>Task:</u> Raise funds for the implementation of water quality protection projects.

<u>Task:</u> Create a local watershed council to promote resource protection and implement projects. (Planning commissions, DEQ, local officials)

Task: Expand and upgrade local sewage and septic facilities. (Municipalities)

Goal 2: Protect the area's rural character, natural areas, and farmland.

Objectives:

- Utilize local master plans to plan for the preservation of green spaces.
 Task: Examine local master plans to ensure that open spaces are being preserved. (Planning commissions, zoning administrators, County administration)
- Identify important open spaces for preservation.
 Task: Gather public input to identify locally important open spaces.

Goal 3: Control stormwater runoff and erosion.

Objectives:

1. Implement Low Impact Development stormwater practices.

Task: Include rain gardens on sites. (Soil Conservation District, landscapers, Drain Commissioner)

Task: Include on-site stormwater retention facilities. (Drain Commissioner, Zoning Administrators, Road Commission, Planning Commissions, contractors)

2. Work with local Drain Commission to control stormwater runoff and prevent erosion.

Goal 4: Control gas well creation and gas exploration.

HUMAN AND SOCIAL

Goal 1: Provide affordable continuing education to create a highly skilled workforce.

Objectives:

- 1. Identify the types of skill sets for the types of jobs that are needed in our community.
- 2. Identify funding sources for continuing education programs. (i.e., Grants, Community Foundation)
- 3. Create internship opportunities with local companies.
- 4. Educate individuals on the types of jobs available in our community and the skill sets needed for those jobs.
- 5. Match West Shore Community College with community needs for training and educating individuals to meet local job demands.

(Groups that could achieve these objectives and tasks include the Chamber of Commerce/SCORE Success Coach, West Shore Community College, local employers, the Employer Resource Network, and strategic partners like Michigan Works, Department of Human Services, etc.)

Goal 2: Develop a proactive system of collaborative services to address long-term solutions for personal success.

Objectives:

1. Determine service providers that need to be included.

- 2. Develop ways to share financial and human resources across systems and services.
- 3. Develop a holistic approach to addressing a client's issue across systems and services.

(Groups that could achieve these objectives include United Way and a cross section of other non-profits, education organizations, health and human services, private sector groups, and the hospital. Examples include the Employer Resource Network and Pathways to Potential – Family Links.)

Goal 3: Provide quality education from birth to twelfth grade to produce career ready students.

Objectives:

- 1. Identify which service providers and educators need to be involved.
- 2. Define "career ready" and develop a curriculum.
 - Task: Identify best practices.
- 3. Create a continuum of education.

(Groups that could achieve these objectives include Great Start, Oak Tree, other daycare providers, area schools – public and private, the Children's Museum, the Library, and Strive (Rotary).)

NEIGHBORHOODS AND INFRASTRUCTURE

Goal 1-a: Improve, maintain, and expand infrastructure in the community. (Water, sewer, lighting)
Objectives:

- 1. Plan for future improvement, maintenance, and expansion rather than reacting to immediate needs.
 - Task: Create an "infrastructure business plan."
- 2. Prioritize the improvement, maintenance, and expansion plans.
- 3. Identify funding sources for the improvement, maintenance, and expansion of infrastructure.
- 4. Educate the public on the needs of the community's infrastructure.
 - Task: Attend civic group meetings. (Councils, municipal staff)
 - <u>Task:</u> Provide information through the local media and news outlets.
- 5. Increase local tree canopy

Goal 1-b: Improve walkability, biking, and accessibility throughout the community.

Objectives:

- 1. Identify parties responsible for maintenance and clearing all obstructions (snow, cars) from sidewalks. (Councils)
- 2. Educate community members on sidewalk programs.
- 3. Incentivize the public to put in sidewalks at private homes and businesses.
- 4. Provide better pedestrian and biking connections between nodes like neighborhoods and business areas.
- 5. Prioritize a program or initiative for adding sidewalks to blocks where they do not exist.

Goal 1-c: Provide life services such as pharmacies, groceries, and hardware stores in localized areas.

Objectives:

1. Promote the creation of community centered retail centers.

Goal 2: Provide quality affordable housing for all members of the community.

Objectives:

- 1. Gain support of local elected officials.
- 2. Educate the community on quality affordable housing and rental codes so that they know what they are, how they work, and what the need is. (Code enforcement offices)
- 3. Develop rental codes with the help of a task force. (City Council, Township Boards)
- 4. Enact rental codes.
- 5. Enforce rental codes.

<u>Task:</u> Provide tax incentives for private home improvements (requires state legislation) (City Council, Township Boards, State legislators)

6. Develop a fee schedule utilizing past research.

Goal 3: Integrate County-wide disaster preparedness with local governments and citizens.

Objectives:

- 1. Foster and maintain better communication between the local units of government, the Emergency Management Office, and the public.
- 2. Provide easier access to the Emergency Management Plan.
- 3. Prepare neighborhoods and households with specific emergency plans and escape routes.

Goal 4: Sustain and improve the community's recreational amenities and opportunities.

Objectives:

1. Plan for the future of the community's parks, museums, green spaces, and beaches.

Goal 5: Improve community-wide access to technology like wireless internet and fiber optics.

Objectives:

1. Collaborate with the Business Energy Group to determine how to improve access.

APPENDIX D

VULNERABILITY ASSESSMENT

Defining Vulnerability in the Ludington Community

Introduction

The harmful impacts of climate change on agriculture, infrastructure and human health are being felt almost everywhere across Michigan. With planning and preparation, communities can weather the storms and recover, becoming even better places to live and thrive. Through community-wide planning, resilient cities and townships actively cultivate their abilities to recover from adverse situations and events, working to strengthen and diversify their local economies and communications networks, increase social capital and civic engagement, enhance ecosystem services, improve human health and social systems, and build local adaptive capacity.

Building Community Resilience

According to the Rand Corporation, community resilience is a measure of the sustained ability of a community to utilize available resources to respond to, withstand, and or recover from adverse situations. The Rockefeller Foundation emphasizes equity as an important component of resilience, stating that city resilience is the capacity for people – particularly the poor and vulnerable – to survive and thrive no matter what stresses or shocks they encounter. Communities that are resilient are able to learn from adversity and adapt quickly to change. In general, the most important characteristics of community resilience are: (1) strong and meaningful social connections, (2) social and economic diversity, (3) innovation and creative problem solving capacity, and (4) extensive use of ecosystem services. The Rockefeller Foundation has identified 12 indicators that make for a resilient community (see right panel). However, it is important to acknowledge that every community is unique and not all indicators or characteristics are needed to be "resilient".

According to the Rockefeller Foundation, a resilient community often has...

- Minimal human vulnerability
- Diverse livelihoods and employment
- Adequate safeguards to human life and health
- Collective identity and mutual support
- Social stability and security
- Availability of financial resources and contingency funds
- Reduced physical exposure and vulnerability
- Continuity of critical services
- Reliable communications and mobility
- Effective leadership and management
- Empowered stakeholders
- Integrated development planning

^{1.} The Rand Corporation. http://www.rand.org/multi/resilience-in-action/faqs.html

 $^{2.} The \ Rockefeller Foundation: City \ Resilience \ Framework. April \ 2014. \ ARUP. \ https://www.rockefellerfoundation.org/report/city-resilience-framework/resilience-frame$

^{3.} Walker and Salt. (2006) Resilience Thinking: Sustaining Ecosystems and People in a Changing World. Island Press, Washington.

The Resilient Ludington community planning process aimed to increase resilience by fostering civic engagement and improving communications and cooperation between cultural and service organizations. To improve economic resilience, communities can work to encourage and support local production of goods and supplies, increasing self-reliance and reducing the flow of funds out of the community. Programs to encourage local investing and entrepreneurship have been helpful in building both employment and production capacity. Local investments, consumption of locally produced products, and locally owned businesses all help to diversify the community's economy, giving it greater resilience.

The following is a community vulnerability assessment focused on the City of Ludington, Pere Marquette Charter Township, and Hamlin Township. This assessment begins with an overview of regional climate trends and predicted societal impacts, then transitions to detailed assessments of the community's vulnerabilities to extreme heat and flooding events. Although the assessment is concentrated on these two specific types of events, many of the considerations and societal impacts identified would be present under other stresses and shocks within the community.

In completing the assessment, we consider factors, such as demographics, environmental conditions, locations of critical facilities and essential services, and the built environment. This assessment informs recommendations in the community's master plan for reducing the identified vulnerabilities through policies, programs, and projects, which will inevitably lead to a more resilient community.

Climate Change and Variability

Climate and weather are directly related, but not the same thing. Weather refers to the day-to-day conditions we encounter in a particular place: sun or rain, hot or cold. The term climate refers to the long-term weather patterns over regions or large geographic areas. When scientists speak of

Downscaling climate data is a strategy for generating locally relevant data using global scale predictions to create regionally specific forecasts.

global climate change, they are referring to generalized, global patterns of weather over months, years and decades. To help predict what the climate will be in the future, scientists use three-dimensional computer models of the earth's atmosphere, oceans and land surfaces to understand past trends and predict future changes. These General Circulation Models (GCM) have been improved and verified in recent years, resulting in relatively reliable predictions for climate changes over large regions. To help predict climate change at the earth's surface for smaller regions, scientists apply downscaling techniques.

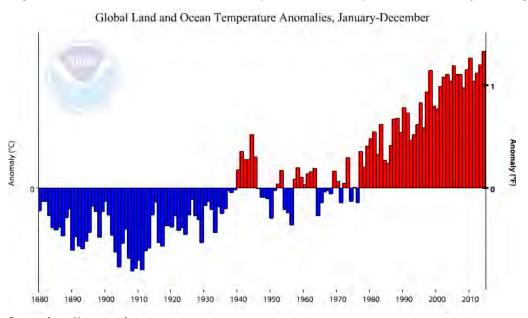
As stated by the Intergovernmental Panel on Climate Change (IPCC), significant changes in the earth's climate have been observed and thoroughly documented. Warming of the climate system is unequivocal and is now evident in average air

^{4.} Intergovernmental Panel on Climate Change. (2007). Observed changes in climate and their effects. Web. Accessed July 2015.

^{5.} NCDC/NEDIS/NOAA at www.ncdc.noaa.gov

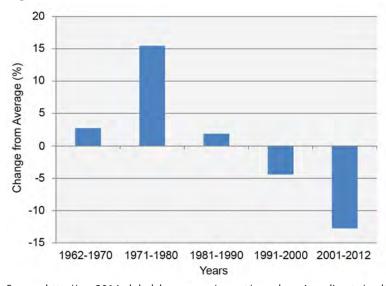
and ocean temperatures, rising sea levels and the melting of ice. Figure 1 provides a summary of observed changes in land and ocean temperatures over the last 150 years. The bar-graph in Figure 2 presents observed changes in the amount of ice cover on the Great Lakes. Overall, there has been a 71% reduction in the extent of Great Lakes ice cover between 1973 and 2010, led by losses on Lake Superior. The decrease in ice cover is another strong indicator of change.

Figure F-1: Global Surface Mean Temperatures Compared to Century Average



Source: http://www.ncdc.noaa.gov

Figure F-2: Ice Cover in the Great Lakes



 $Source: http://nca2014.global change.gov/report/our-changing-climate/melting\ ice\#graphic-16703$





In June of 2008, Mason County experienced record-breaking flooding, with an estimated 11 inches of rain over six hours and wind gusts up to 80 miles per hour. Photos above show damage to roads and culverts as a result of that event.

"Future crop yields will be more strongly influenced by anomalous weather events than by changes in average temperature or annual precipitation. Cold injury due to a freeze event after plant budding can decimate fruit crop production, as happened in 2002, and again in 2012, to Michigan's \$60 million tart cherry crop."

Third U.S. National Climate Assessment - 2014 The Great Lakes Integrated Sciences Assessment (GLISA) is a consortium of scientists and educators from the University of Michigan and Michigan State University that is funded by the National Oceanic and Atmospheric Administration (NOAA) to provide climate resources, including downscaled models, for communities across the Great Lakes Region. According to GLISA, the Great Lakes Region has already experienced a 2.3° F increase in average temperatures. An additional increase of 1.8 to 5.4° F in average temperatures is projected by 2050. Although these numbers are relatively small, they are driving very dramatic changes in Michigan's climate.

Based on the most recent models, the climate of Ludington, Michigan will continue to warm, with greater increases in temperature during the winter months and at night. There are a variety of weather impacts expected with this change in average temperatures. Some of the potential impacts of climate change in the Ludington area include:

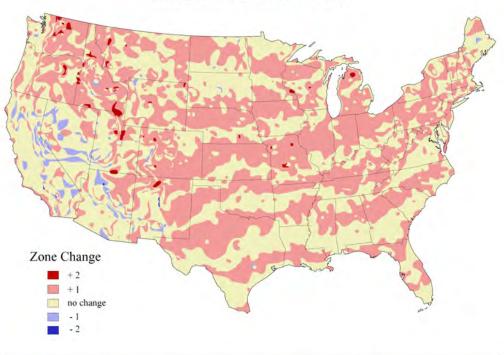
- Storms are expected to become more frequent and more severe
- Increases in winter and spring precipitation
- Less precipitation as snow and more as rain
- Less winter ice on lakes
- Extended growing season (earlier spring/later fall)
- Greater frequency and intensity of storms
- More flooding events with risks of erosion
- Increases in frequency and length of severe heat events
- Increased risk of drought, particularly in summer

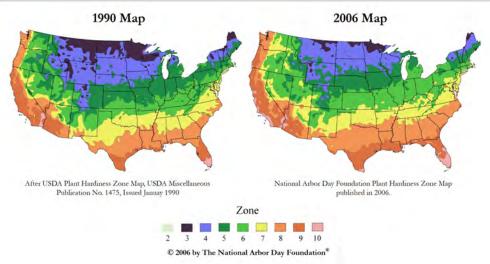
It is important to note that increased flooding and more intense drought are not mutually exclusive nor contradictory. In the Great Lakes region, scientists are predicting more intense rain events in the fall and winter and more intense droughts in the summer months. These changes in climate could have a number of both positive and negative effects on the Ludington Community. For example, an extended growing season could help support new crops and increase crop yields for farmers in Mason County. On the other hand, the highly variable weather conditions such as severe storms and flooding mixed with summer droughts present big challenges to farming.

Much of the U. S. has been warmer in recent years, and that affects which what plants grow best in various regions. The Arbor Day Foundation completed an extensive updating of U.S. Hardiness Zones based upon data from 5,000 National Climatic Data Center cooperative stations across the continental United States. As is illustrated in Figure 3, zones in west Michigan are shifting northward. Zone 5 plants that previously thrived in Ludington, now do best in northern Michigan, while zone 6 plants that once thrived in states like Tennessee, now will grow well in Ludington.

Figure F-3

Differences between 1990 USDA hardiness zones and 2006 arborday.org hardiness zones reflect warmer climate

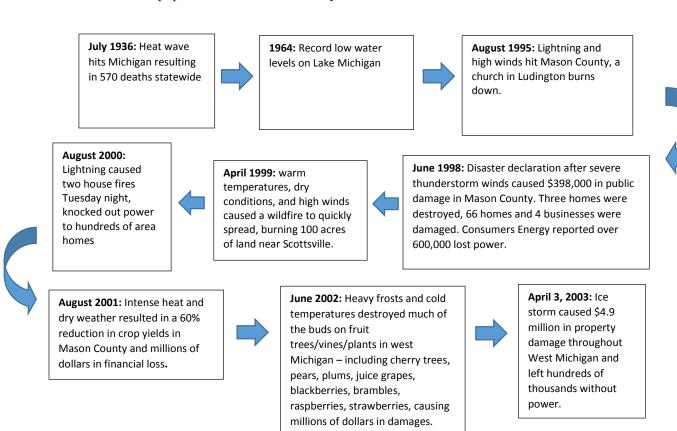




Source: https://www.arborday.org/media/map_change.cfm

Weather Events in the Ludington Community

The following section summarizes a few of the major weather-related events in the Ludington community and west Michigan over the past 40 years. Oftentimes, severe weather events results in negative impacts to the local economy and to vulnerable population s in the community.



Public Health and Climate

Major health effects of long-term climatic change are predicted for the Midwest Region. Already, people in Michigan are experiencing higher rates of skin and eye damage from increased exposure to ultraviolet radiation, increased incidence of respiratory and cardiovascular diseases, and increased incidence of vector-borne and water-borne diseases. Weather conditions and high heat events exacerbate poor health conditions like allergies, asthma, and obesity.

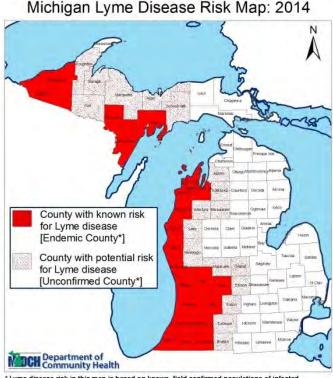
The Michigan Department of Health and Human Services (MDHHS) published the Michigan Climate and Health Adaptation Plan in 2011. The Plan indicates that increasing numbers of illness and deaths as a result of extreme heat events, declining air quality as a result of increased production of ozone and particulate matter from heat and drought events, and adverse changes to water quality and availability following severe weather events can be expected in coming years. In the long-term, health experts are most concerned with a rising incidence of infectious

diseases and outbreaks of new diseases not currently endemic to Michigan, increasing numbers of disease vectors and appearance of new vectors not currently established in Michigan, and a degradation of food safety, security, and supply. For example, deer ticks are one disease vector that has increased in recent years. According to the MDHHS, the first official reported human case of Lyme disease was in 1985. Cases have now been reported in both the upper and lower peninsula and are increasing. It is anticipated that the number of cases reported will continue to increase due to public and medical personnel education, and expanding tick ranges. Figure 4 demonstrates the distribution of deer ticks in west Michigan, which has increased in recent years.

Vulnerability Assessments

Communities interested in becoming more resilient assess their vulnerabilities and make action plans to reduce their sensitivities and exposures to hazards of all kinds. This Community Vulnerability Assessment has been compiled by the Land Information Access Association to provide a wide variety of useful information aimed at improving climate resilience by reducing human and community vulnerabilities.

Figure 4



Lyme disease risk in this map is based on known, field confirmed populations of infected blacklegged ticks, or laboratory confirmed human cases. a) Counties labeled "endemic" are counties where infected tick populations have been confirmed

Two or more laboratory confirmed human cases have been identified with local exposure. b) Counties labeled "unconfirmed" are conties bordering endemic counties, but which do not meet the above criteria for "endemic" counties.

^{7.} National Research Council. Reconciling observations of global temperature change. Washington, DC: National Academy Press, 2000:86

This Assessment supports the land use planning and community development process known as Resilient Michigan and focuses on the City of Ludington, Pere Marquette Charter Township, and Hamlin Township.

Vulnerability = Exposure + Sensitivity

A Vulnerability Assessment is designed to identify and help prioritize adaptation strategies in the community planning process. We use a model that defines 'vulnerability' as 'exposure plus sensitivity.' Exposure refers to hazards in the natural or built environment, while sensitivity refers to the degree to which a community or certain segments of a community could be impacted by an event. This concept has been used recently in a variety of studies such as equity and adaptation assessments conducted by the NAACP, vulnerability and its relationship to adaptation, and hazard-specific vulnerability assessments aimed at measuring exposure, sensitivity, and resilience.

By assessing the potential for exposure to a hazard and the sensitivities of specific populations, we can generate maps that identify the areas in a community with relatively greater vulnerability. This tool provides direction for community planners and public health workers in reducing risks to human health in the future by knowing where the areas of vulnerability lie and why the vulnerability exists there.

For the purposes of this tool, based on the greatest risks in Michigan and most likely predicted climate changes, we decided to limit our vulnerability assessments to extreme heat waves and flooding. However, climate change is predicted to result in increases of other exposures that should also be considered in community planning and development (e.g., high winds and tornados).

Our assessments were based in part on data obtained from the American Community Survey, a continuing survey program operated by the U.S. Census Bureau. This data includes information on housing, income, and education characteristics of the populations in geographic areas called block groups, containing between 600 and 3,000 individuals. We also used data from the 2010 Census including population age and racial composition collected by Census blocks, which are the smallest available geographic areas for demographic data. Data sets concerning parcel characteristics were obtained from Mason County, the City of Ludington, Pere Marquette Charter Township, and Hamlin Township. Building footprint and tree canopy cover were digitized using an orthophotograph from 2009.

Exposure refers to hazards in the natural or built environment while sensitivity refers to the degree to which a community or certain segments of a community could be impacted by an event.

^{8.} Foundations for Community Climate Action: Defining Climate Change Vulnerability in Detroit. University of Michigan. December 2012.

 $^{9.\} Equity\ in\ Building\ Resilience\ in\ Adaptation\ Planning.\ National\ Association\ for\ the\ Advancement\ of\ Colored\ people\ (NAACP)$

^{10.} Adger, W. N. (2006). "Vulnerability." Global Environmental Change 16 (3): 268-281. Adger, W. N., N. Arnell, and E. Tompkins (2005). "Adapting to climate change-perspectives across scales." Global Environmental Change 15(2):77-86.

^{11.} Polsky, C., R. Neff, and B. Yarnal (2007). "Building comparable global change vulnerability assessments: the vulnerability scoping diagram." Global Environmental Change 17(3-4): 472-485.

Heat Vulnerability

Community vulnerability to heat events varies spatially, on local, regional, and national scales. In the Michigan communities where we have worked, we see varying degrees of vulnerability to heat based on proximity to the Great Lakes, access to air conditioning, and surrounding environmental factors like tree canopy and impervious surfaces.

Studies have shown that heat-related mortality generally occurs in areas of the community that are warmer, less stable, and home to more disadvantaged populations. One study found that neighborhoods with the highest temperatures and the least amount of open space and vegetation were also likely to be the most socioeconomically disadvantaged. The same study also found that the strongest protective factor for residents was access to air conditioning in the home and in other places, as well as having access to transportation.

A 2012 literature review conducted by researchers at the University of Michigan indicates that infants under five and persons over age 65 are highly sensitive to heat events, as are persons living in lower-income census tracts and minority populations. Living alone, being confined to bed, using tranquilizers, having a mental illness, not leaving home daily, living on higher floors of multistory buildings, and being alcoholic are additional factors that are associated with increased risk of heat-related mortality.

Many of the communities we work with are rural and suburban. There have been limited studies conducted on how heat events impact rural and suburban communities, one study noting that rural populations may exhibit patterns of vulnerability different from those of urban populations.

Heat Sensitivity Assessment

To create the sensitivity and exposure maps, as well as the resulting vulnerability maps, LIAA relied on methodologies developed at the University of Michigan's Taubman College of Architecture and Urban Planning in a 2012 report.

To conduct the heat sensitivity assessment of the Ludington Community, we used a geographic information system (GIS) for spatial data analyses to show the relative distribution of people most at risk. We considered five factors as primary contributors to the sensitivities and risks of people exposed to a heat wave. Using the U.S. Census data, we identified the percentages of people living in each area (Block Group or Block) for each sensitivity factor.

^{12.} USDA and NRCS Geospatial Data Gateway

^{13.} Foundations for Community Climate Action: Defining Climate Change Vulnerability in Detroit. University of Michigan. December 2012

^{14.} Semenza JC, Rubin CH, Falter KH, et al. Heat-related deaths during the July 1995 heat wave in Chicago. N Engl J Med 1996; 335:84–90.

^{15.} Mapping Community Determinants of Heat Vulnerability. Environmental Health Perspectives 117:1730–1736 (2009). doi:10.1289/ehp.0900683 available via http://dx.doi.org/ [Online 10 June 2009]

Foundation for Community Climate Action: Defining Climate Change Vulnerability in Detroit (December 2012) University of Michigan's Taubman College of Architecture and Urban Planning.

People who are older have greater sensitivity to extreme heat events. The technical literature also indicates that older age is associated with higher hospital admission rates in heat waves. The Percent of Population 65 and Older (Map 1) depicts the relative concentration of older people in the community by Census Block. Upon review of this map, planning committee members noted that there are very few individuals living in the southern portion of Pere Marquette Township that was flagged as red, so that may be over exaggerating the risk. It was also noted that there is a high concentration of older citizens living in one place at Longfellow Towers. One commissioner noted that the Senior Center will check on older adults who live alone or need help, but only if notified and if they have the resident in their database.

Another sensitivity factor is living alone, which serves as a measure of social isolation. Although living alone is not necessarily a risky thing, people who are socially isolated are at greater risk during an extreme heat event. As noted earlier, isolated people may not be able to recognize symptoms of heat-related illness and take proper action. In this case, we used American Community Survey data for Census Block Groups, broken out into individual Census blocks for geographic representation (blocks with no population were not included). The higher concentration of people living alone in the downtown core is in line with nationwide trends because downtowns generally have a greater supply of live-work units, single apartment and/or condominium units, and accessory dwelling units. This is shown in Map 2.

Literature suggests that minorities are at greater risk during extreme heat events for various reasons, including less reliable access to health care, transportation and other social supports needed to reduce heat exposures. We used Census Blocks to map the relative percentages of non-white populations in the Ludington Community. This is shown in Map 3.

Two socioeconomic factors associated with increased heat-related morbidity and mortality are the percentage of the people living in poverty and percentage of people without a high school diploma. In general, persons living at or below the poverty line have less access to air conditioning or cooling options for their residences. This could limit a person's access to relief from an extreme heat event. We used Census Blocks Groups to map the relative percentages of percent of households living below the poverty threshold in the Ludington Community. Riviera Trailer Park on Rasmussen Road was noted as a particularly vulnerable location. The Planning Committee members brought up a vulnerable group that is often not counted in the Census, which is the area's homeless and mentally ill. While there is a rotating shelter for these populations in the winter at area churches, there is not a designated shelter for the homeless population during the summer months. This can be found on Map 4.

^{17.} Waugh and Tierney (eds.) Emergency Management: Principles and Practices for Local Government. Chapter 13: Identifying and addressing social

^{18.} Curriero FC, Heiner KS, Samet JM, et al. Temperature and mortality in 11 cities of the eastern United States. American Journal of Epidemiology. 30 (2001): 1126-8.

Similarly, University of Michigan researchers found studies that demonstrates a direct link between low educational attainment and poor health. There is also an established correlation between lower educational attainment and income. Based on these findings, we used Census Blocks Groups to map the relative percent of persons 25 years and older with less than a high school education in the Ludington Community (Map 5).

To complete the heat sensitivity assessment, we created a cumulative score for all five sensitivity factors for each Census Block. In each of the sensitivity factors, the percentages were grouped into five categories (ranging from a very low percentage of people to a relatively high percentage living with the identified sensitivity). The five categorical groupings were generated by the GIS software ArcMap using natural breaks in the data (groupings). We assigned a ranking of 1 to 5 to each of the categories, ranging from 1 for the lowest percentage to 5 for the highest. Finally, we combined the scores of the sensitivity factors within each Census Block. Thus, the most sensitive Census Blocks would be scored up to 25. The sensitivity is color coded for ease of identifying areas with the greatest sensitivity.

The Ludington Sensitivity to Excessive Heat Map (Map 6) provides a reasonably detailed map of locations where the highest percentages of at-risk residents live. This does not mean that these community residents are in immediate danger. Rather, the map provides planning officials a new way of identifying areas where heat waves could present serious problems for a significant number of citizens. These are populations that could be sensitive to extreme heat events.

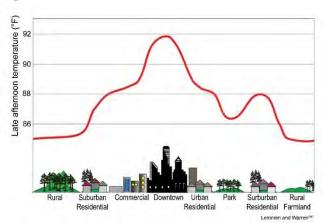
Because the Census data we use likely double-counts people, such as in cases where a person is both a minority and over 65, this may overestimate the severity of the sensitivities in some locations. Additionally, the sensitivity analysis may underestimate risk because it leaves out several key sensitive populations, such as those with preexisting health concerns that denote vulnerability to heat (for example, cardiovascular disease or psychiatric disorders). Such data is not often available publically or on the Census block level. Emergency managers, hospitals, and community health departments may have additional data available that can be included as the community looks to better understand its overall sensitive populations. To further improve the analysis, additional variables could be collected through local surveys and observation, such as the degree of social connections among individuals within a community, or materials used in housing.

 $^{19. \} Mapping\ Community\ Determinants\ of\ Heat\ Vulnerability.\ Environ\ Health\ Perspectives\ 117:1730-1736\ (2009).\ doi:10.1289/ehp.0900683\ available\ via\ http://dx.doi.org/\ [Online\ 10\ June\ 2009]$

Heat Exposure Assessment

When larger communities experience heat waves, air temperatures can vary significantly from place to place both during the day and at night. Some of these differences can be attributed to the varying types of land cover found throughout the community. For example, temperatures can be significantly lower at night in locations with a heavy tree canopy and very little pavement, versus locations with little greenery and lots of pavement.

Figure 5. Urban Heat Island Effect



Large amounts of concrete and asphalt in cities absorb and hold heat. Tall buildings prevent heat from dissipating and reduce air flow. At the same time, there is generally little vegetation to provide shade and evaporative cooling. As a result, parts of cities can be up to 10°F warmer than the surrounding rural areas, compounding the temperature increases that people experience as a result of human-induced warming.³¹³

Source: US Global Change Research Program (2009) http://www.epa.gov/climatechange/impacts-adaptation/health.html

Albedo is the fraction of solar energy reflected from the earth back into space. It is a measure of the reflectivity of the earth's surface. Ice, especially with snow on top of it, has a high albedo, while pavement has a low albedo.

Impervious surfaces such as paved parking lots, roadways, and buildings absorb large amounts of heat from the air and from sunshine that is radiated back into the surroundings when temperatures begin to fall. At the same time, tree canopy and other vegetation tend to help cool an area through evaporation and transpiration of water and by providing shade. In places with a high percentage of impervious surface and little tree canopy, the immediate surroundings can be much warmer. Urban areas typically have higher heat indexes (combinations of temperature and humidity) than surrounding suburban or rural areas. This condition has been termed the Urban Heat Island Effect.

People living in settings with a Urban Heat Island Effect suffer greater exposures to heat over longer periods of time (e.g., warmer nights), making them more vulnerable to health impacts. Studies of the Urban Heat Island Effect (whereby air temperatures in an urban area are 1–5° C, higher than in a nearby rural area) have shown that the

albedo, or reflectivity, of an urban area is one of the most important determinants in reducing the magnitude of the heat island. Increasing the tree canopy cover can also reduce air temperature by $1-3^{\circ}$ C. Green roofs, or plantings on roofs, may also decrease the Urban Heat Island Effect and decrease storm water runoff and building energy use. An added benefit that stems from increasing albedo and vegetation are positive impacts on reducing ground level ozone and energy costs associated with air conditioning use.

To complete a heat exposure assessment, we focused on the urban heat island effect. With data obtained from Mason County, the City of Ludington, Pere Marquette Charter Township, and Hamlin Township we were able to create two separate exposure maps. The first exposure map depicts the percentage of impervious surfaces within each Census Block, as used in the sensitivity assessment (Map 7). These percentages are divided into five categories using the GIS software's natural

^{20.} Basu and Samet. (2002) Relation between Elevated Ambient Temperature and Mortality: A Review of the From the Department of Epidemiology, Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD.

^{21.} Kolokotroni M, Giridharan R. Urban heat island intensity in London: An investigation of the impact of physical characteristics on changes in outdoor air temperature during summer. Solar Energy 2008;82(11):986–998.

^{22.} Akbari H. Shade trees reduce building energy use and CO2 emissions from power plants. Environmental Pollution 2002;116:S119–S126. [PubMed: 11833899]

breaks calculation. Since exposure is lowest in areas with the lowest percentage of impervious surface, those scored a 1, with 5 ratings assigned to areas with the highest percentage of impervious surfaces.

The second exposure factor is percentage of tree canopy. Here tree canopy is mapped within each Census Block (Map 8) and scored using a similar five category process. The highest percentage of tree canopy (therefore the lowest heat exposure) received a 1 and the least vegetative areas received a 5.

We combined the results of the two exposure maps to provide a single Community Excessive Heat Exposures Map (Map 9), which provides a reliable depiction of where the Urban Heat Island Effect would be most and least intense during a heat wave. Community planners can use this map

Batt Insulation above gap

Preservative-treated lumber

Chair Chair rail

Chair rail

Chair rail

Flood-resistant (non-paper-faced gypsum) willboard gypsum) willboard gypsum) willboard found in prevent wicking

Closed-cell or plastic foam insulation

Figure 6. Home Design Techniques for Flood Resilience

Source: fema.org

to better assess where new vegetation and tree canopy would be helpful to reduce the heat impact.

Composite Heat Vulnerability

The Ludington Heat Vulnerability Map is a simple additive combination of the overall sensitivity map and the overall exposures map. The resulting vulnerability index depicts where concentrations of exposures and sensitive populations create a higher risk for community residents. In general, those areas with a composite score of 8 to 10 (red) have residential populations that may be particularly vulnerable to extreme heat events. This is illustrated in Map 10.

Heavy Rain and Flooding

Climate scientists say that Ludington and west Michigan can expect more frequent storms of increasing severity in the decades ahead. The total amount of rainfall per year is also likely to increase. However, climate models suggest that the precipitation will be more concentrated in the winter, spring and fall seasons and there will be more localized, intense storms at almost any time of the year. The potential for substantially larger rain events raises concerns over the potential for harm to human health and damage to buildings and infrastructure.

The following summarizes a Flooding Vulnerability Assessment we conducted for the Ludington Community. In assessing vulnerability, community planners evaluate potential exposures as well as sensitivity to flooding. Buildings, roads, bridges, sewer lines and other infrastructure located in a flood zone are exposed to greater risks than elsewhere. Where flowing floodwaters have the greatest energy, structures may be undercut, collapsed or moved, and soils will erode. Even areas outside of an identified floodplain are subject to flooding from heavy downpours. Where the soils have low permeability and physical drainage is inadequate, water will accumulate and cause ponding during large storm events. Appropriate planning and land-use regulations can help reduce exposures caused by poor site selection. The sensitivity of structures can be modified to reduce risk of damage by applying flood-resistant design standards. See Figure 6 for an overview of recommendations from FEMA for retrofitting homes to make them more resilient to flooding events.

Exposure to Flooding Hazards

The Community Elevation Profile and Drainage Map (Map 11) offers a useful view of the topography of Ludington, including the most prominent drainage patterns. On this map, the darkest green colors identify the lowest elevations, while the darkest brown colors identify the highest elevations.

The Federal Emergency Management Agency (FEMA) develops Flood Insurance Rate Maps (FIRMs) for each County in the United States. According to FEMA, the FIRM is "the primary tool for state and local governments to mitigate the effects of flooding in their communities." The National Flood Insurance Program was created in 1968 to reduce future damage and provide an insurance program that would help protect property owners from losses. The FIRMs show areas subject to flooding, based on historic, hydrologic, hydraulic and meteorological data as well as flood controls. The maps identify a base flood elevation (BFE), sometimes referred to as the 100-year flood zone. These are areas that have a 1% chance of flooding in any given year. The maps also identify the areas with a 0.2% chance of flooding in any given year, also known as the 500-year flood zone. FEMA points out that these ratios are only probabilities, not forecasts.

Household Sensitivity to Flooding

In many communities, flooding impacts are felt most significantly at the household level. A home's flood risk is based on its relative location to floodplains and other flooding hazard areas. The household flood sensitivity refers to how well the house structure is equipped to deal with flooding. As modeled by the University of Michigan, household sensitivity to flooding can be determined by looking at the age of the housing stock and homeowner's financial ability to maintain and improve the home, which is approximated using the median household income. In general, homes built before 1940 used a more porous concrete material for basement construction, so water can flow more rapidly through the foundation. Older homes may be more vulnerable if residents have not had the financial resources to make improvements and upgrades. By looking at median household income as a marker of likely upkeep of the home, we attempt to exclude older homes that have been well-maintained and undergone upgrades from our areas of flood damage risk. Map 12 illustrates the FIRM for the Ludington Community. Map 13 shows the locations of homes built before and after 1940. Map 14 illustrates household sensitivity to flooding based on income and housing age.

Flooding Vulnerability

By looking at the overlap of flooding exposure and housing sensitivity, we identified a number of Census blocks that are the most vulnerable in the community to flooding damage, based on available data (See Map 15). It is important to note that other factors contribute to flood risk. For example, mobile and manufactured homes are often particularly susceptible to flood damage because they generally lack a reinforced foundation. In addition, the municipal infrastructure plays an important role in protecting homes from flood damage. Communities with and aging storm sewer system or ones where the storm sewer has not been fully disconnected from the sanitary sewer are more prone to damage from an overloaded system in the event of a severe rain event.

Other Considerations for Defining Community Vulnerability

We are interested in knowing locations of key community assets and looking at how accessible they are to residents. We are also interested in key infrastructure and assets that could be at risk, or would be most negatively impacted if they were impacted.

Critical Facilities

In general usage, the term "critical facilities" is used to describe all manmade structures or other improvements that, because of their function, size, service area, or uniqueness, have the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if they are destroyed, damaged, or if their functionality is impaired. Map 16 shows the locations of critical facilities in the Community. Critical facilities include:

- emergency response facilities (fire stations, police stations, rescue squads, and emergency operation centers [EOCs]);
- custodial facilities (jails and other detention centers, long-term care facilities, hospitals, and other health care facilities);
- schools;
- emergency shelters;
- utilities (water supply, wastewater treatment facilities, and power);
- communications facilities;
- other assets determined by the community to be of critical importance for the protection of the health and safety of the population; and
- places where 300+ people congregate.

Access and Distribution of Social Services

Service centers and institutions (such as homeless shelters and churches) are important in delivering day-to-day support to residents. In the event of an emergency, such as an extreme heat event or flash flooding episode, service centers and institutions are especially important as a safe place where residents can go if they cannot return home. Map 17 highlights key locations of places where residents may seek temporary refuge in the event of an emergency. These locations include schools, places of worship, governmental buildings, hospitals and clinics, libraries, and other non-profit social service organizations. In Ludington and adjacent Townships, social services are concentrated in the downtown core and along major commercial corridors.

Communities with high population densities, frequent extreme weather events, or both are likely to have designated services centers. In the event of extreme heat waves, designated community cooling centers may provide refuge for sensitive populations and those without access to air conditioning. In the event of loss of power due to flooding or extreme storms, locations with a backup power source, such as a generator, are essential.

A best management practice for a resilient community is to designate community service centers that are accessible, evenly distributed across the population, open 24 hours, and well-known to residents.

Food Availability

Climate change will likely make significant impacts to the availability and prices for global food markets. A community can decrease its vulnerability to disruptions in food sources through a strong local food economy. Support for and reliance upon locally produced foods not only alleviates potential future challenges in the food market, but also helps foster another strong economic sector for the region.

Just as cultivating local entrepreneurship makes a community stronger, the capacity of a community to produce and process its own food greatly increases resilience. Because of its ability to impact health, wealth, and quality of life, there is a national trend in support of the local food movement. Communities can leverage their existing assets, such as the local Farmer's Market, community gardens, and an established agricultural base, to lay the foundation for additional local food-related jobs. Communities can take more creative approaches as well, such as allowing for agriculture on publically owned and vacant lands in existing neighborhoods and parklands.

In evaluating community vulnerabilities, we look at locations of full service grocery stores in relation to where people live. In the event of loss of power or disruption in potable water supplies, it is important to ensure that residents have access to affordable food and drinking water.

We also evaluate access to healthy food to see if there are areas of the community that qualify as a food desert. According to the United States Department of Agriculture (USDA), a food desert is defined as an area vapid of fresh fruit, vegetables, and other healthful whole foods, usually found in impoverished areas. This is largely due to a lack of grocery stores, farmers' markets, and healthy food providers. Communities looking to reduce the number of residents living in a food desert can promote or zone for pop-up farm stands in low income areas, enact housing policies supportive of mixed incomes, and establish community gardens in areas identified as food deserts.

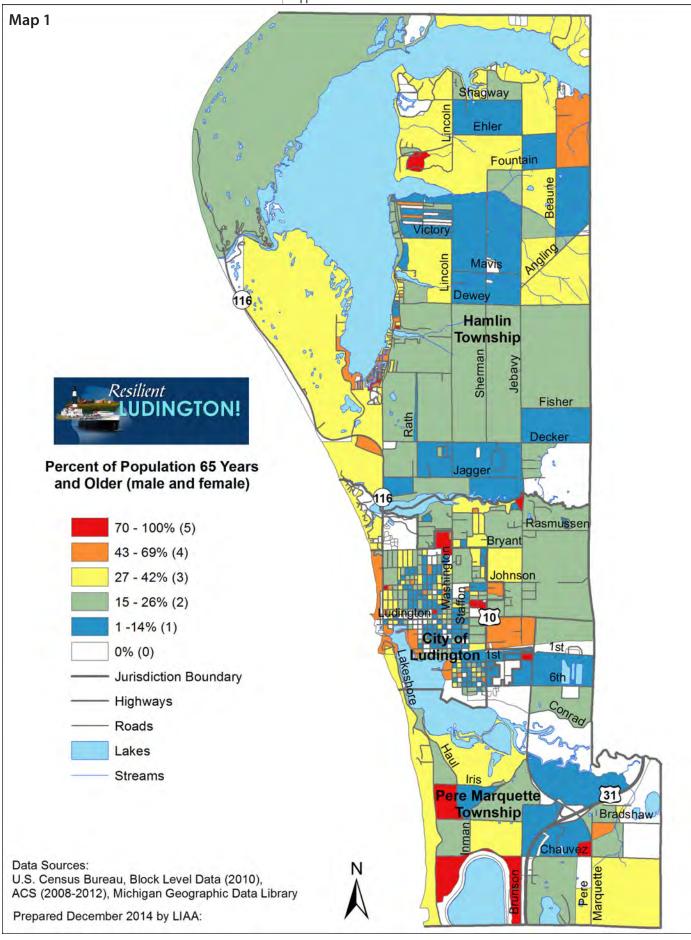
Map 18 identifies neighborhoods within the Ludington Community that are located within one mile of a full service grocery store.

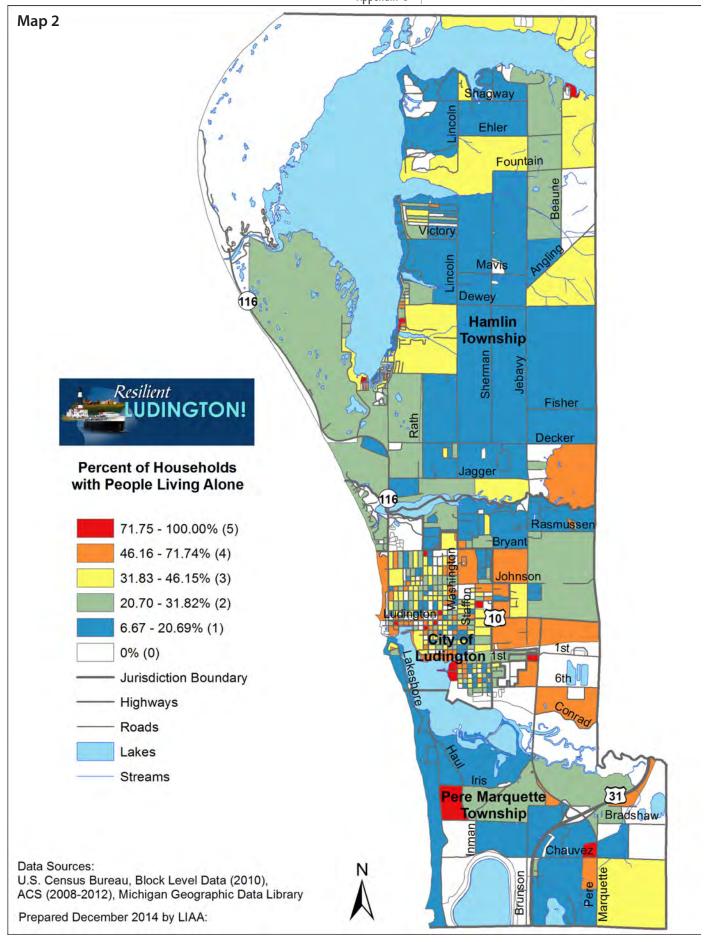
Additional Resources:

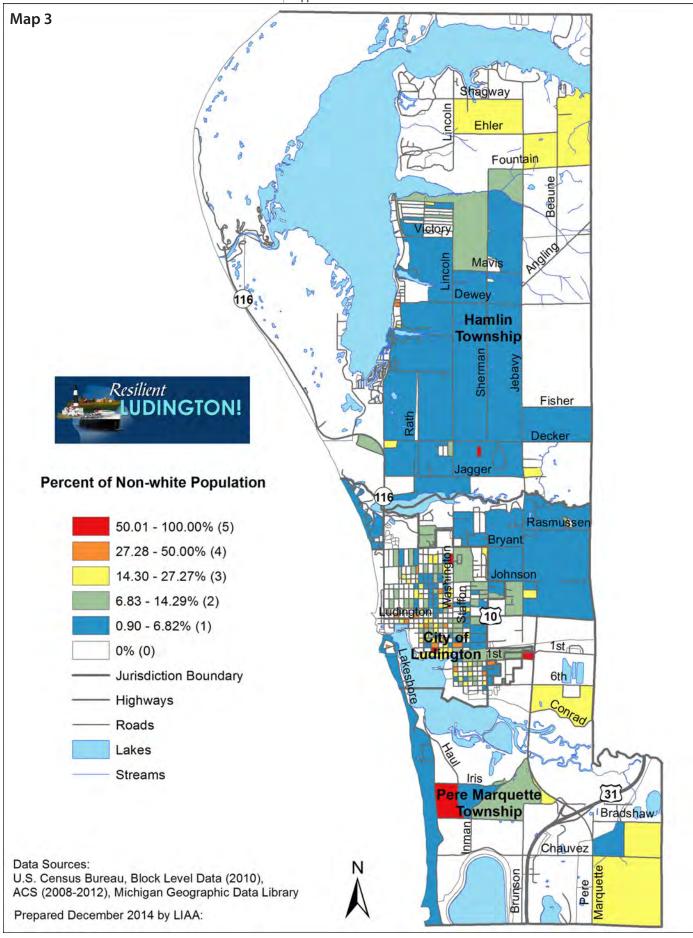
Snover, A.K., L. Whitely Binder, J. Lopez, E. Willmott, J. Kay, D. Howell, and J. Simmonds.

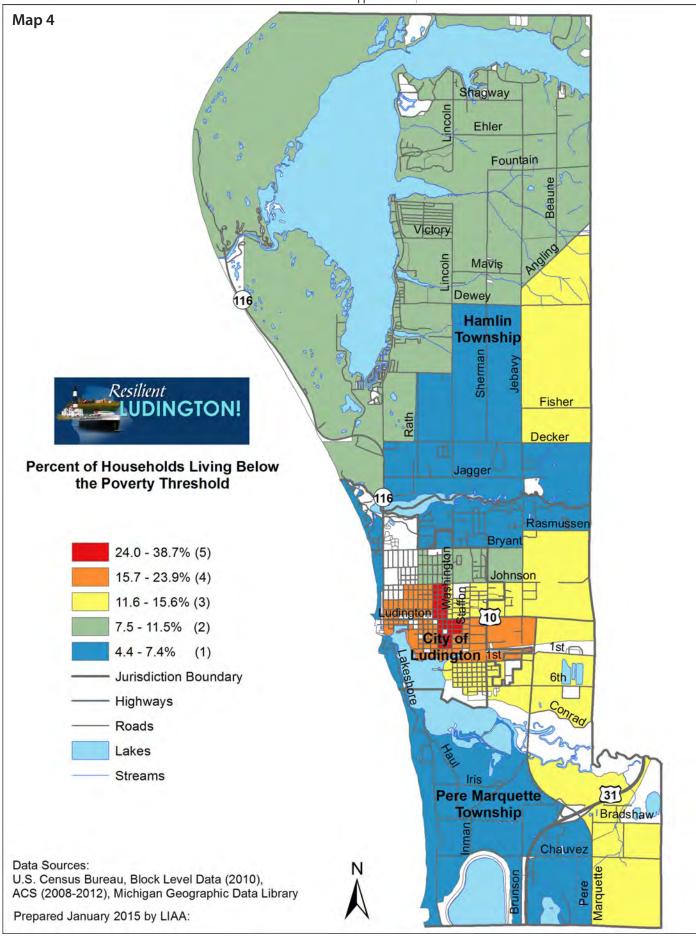
2007 Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments. In association with and published by ICLEI – Local Governments for Sustainability, Oakland, CA

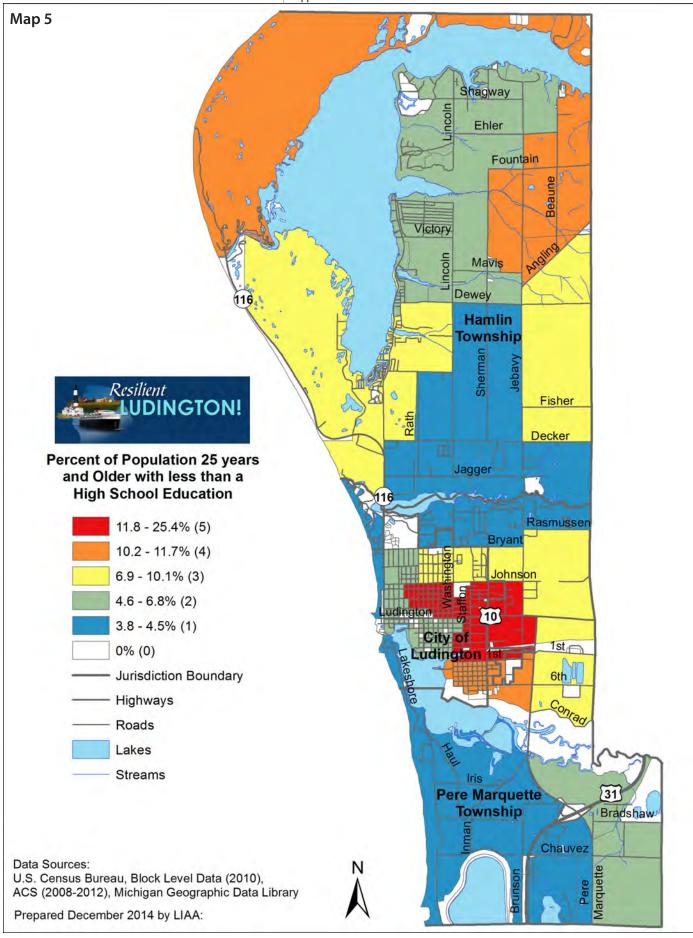
Michigan Climate and Health Adaptation Plan 2010-2015 Strategic Plan, Prepared by the Michigan Department of Community Health (2001)

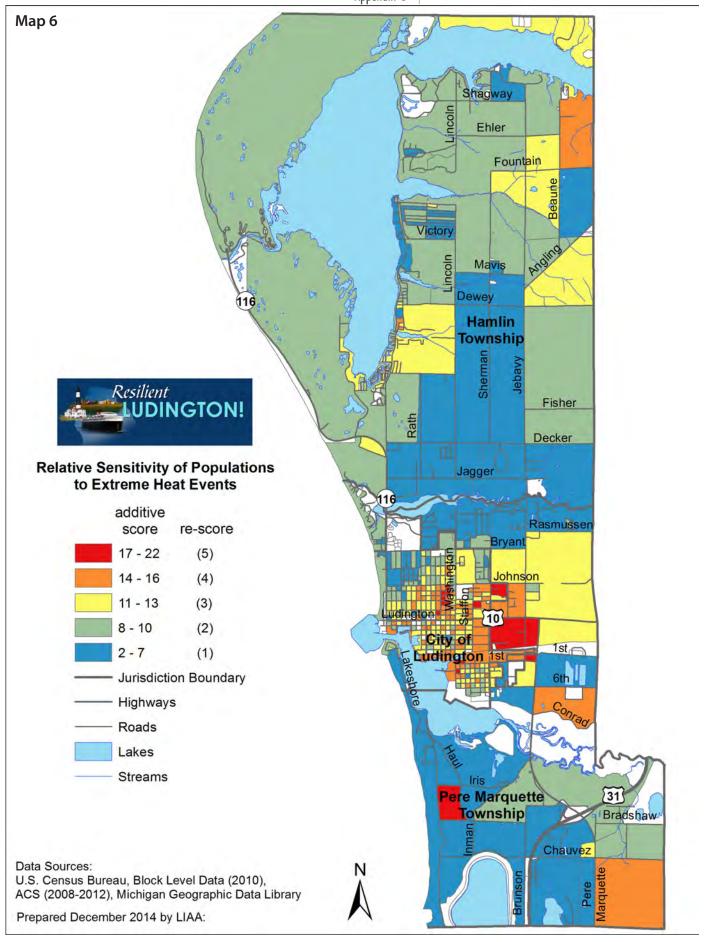


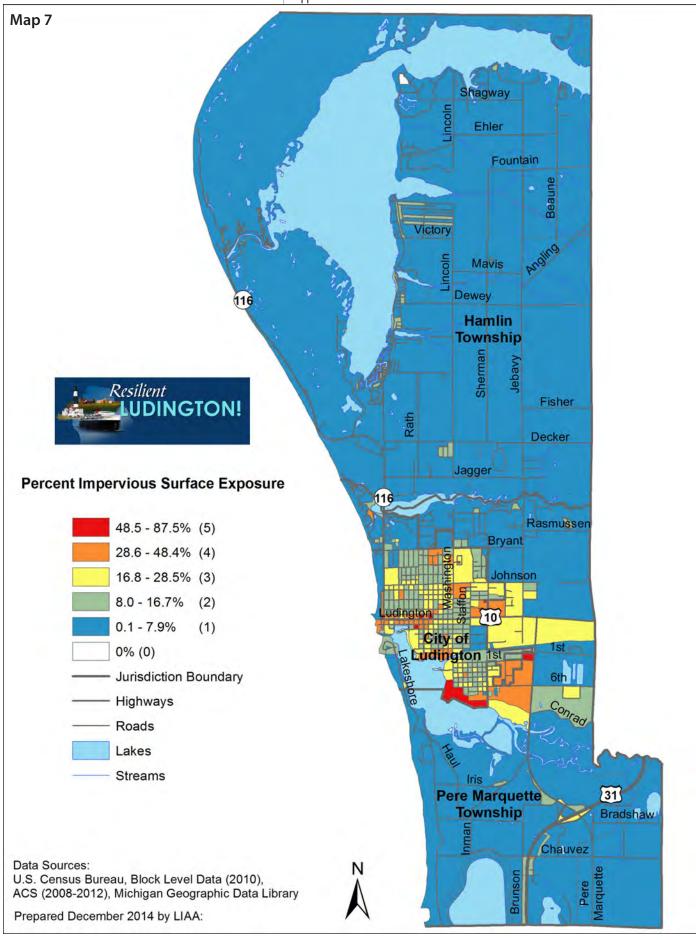


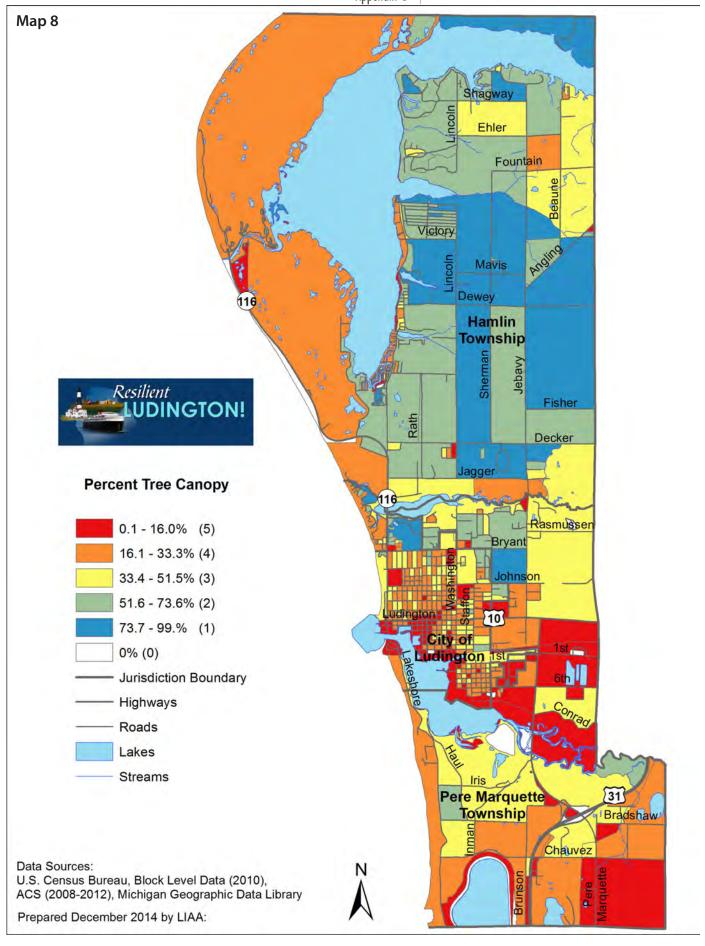


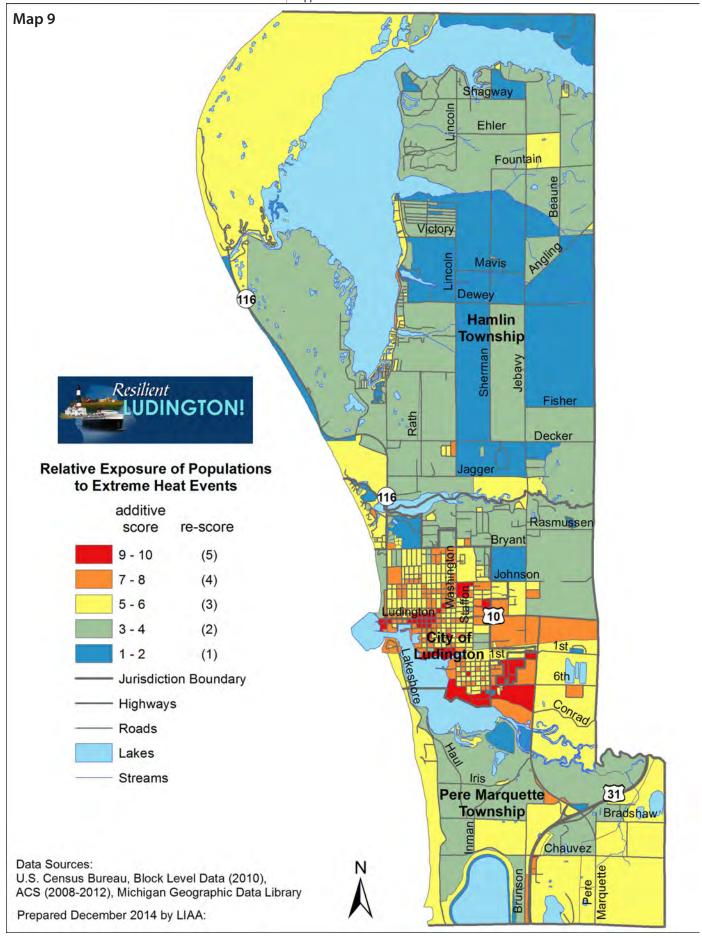


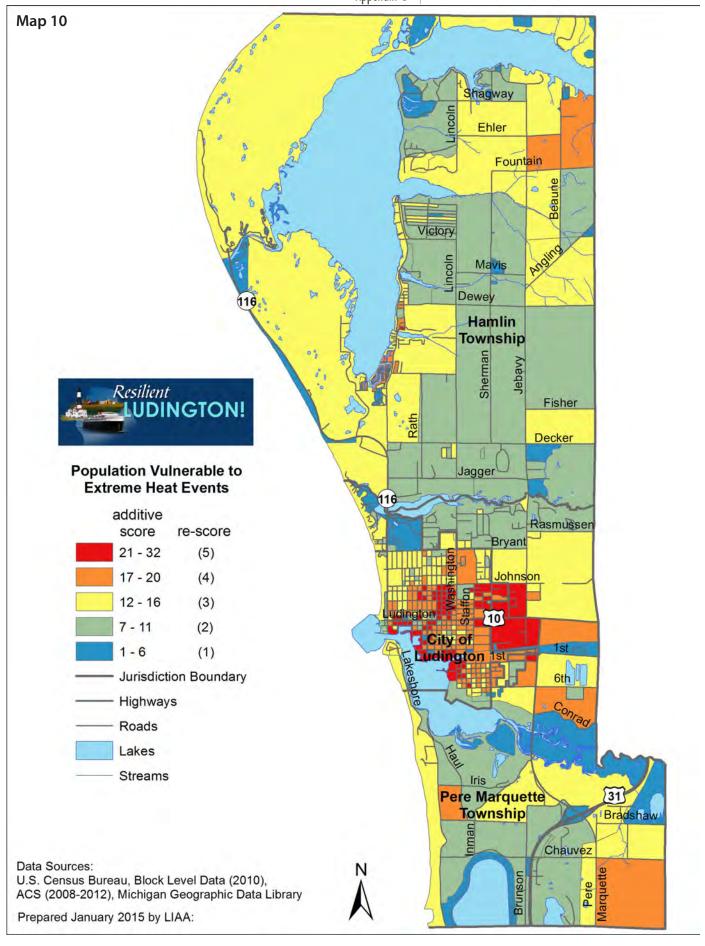


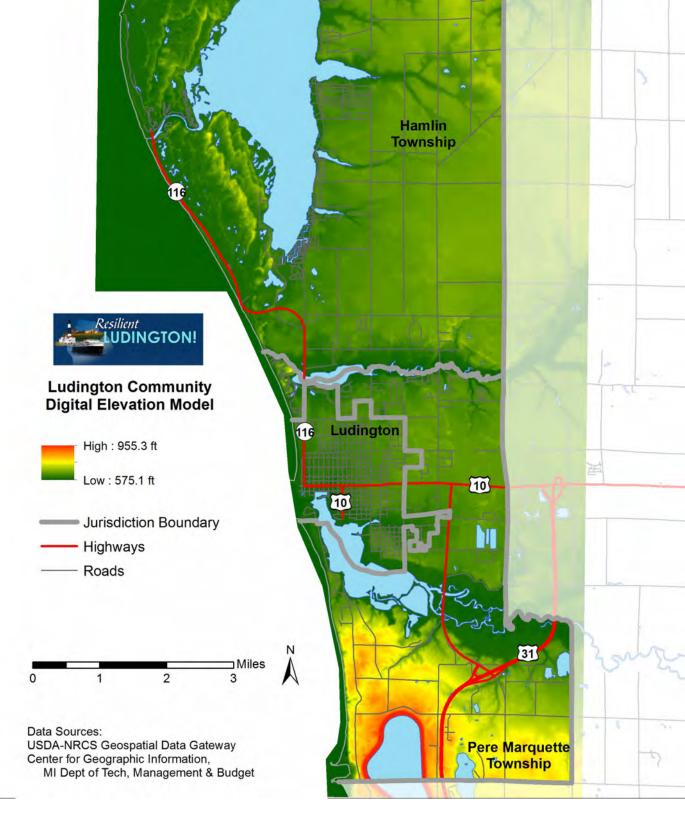


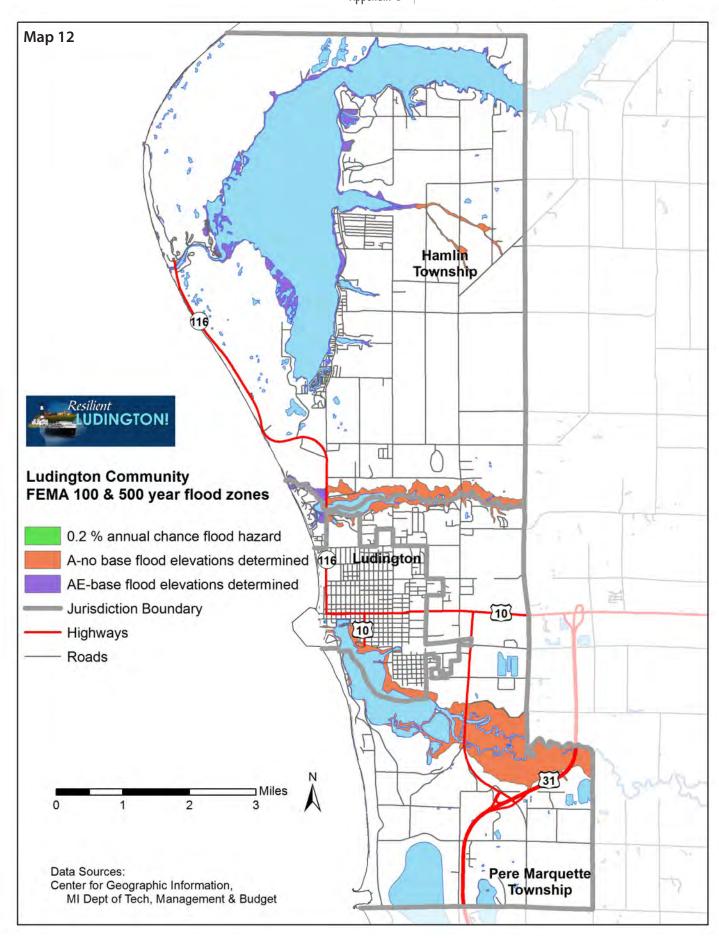


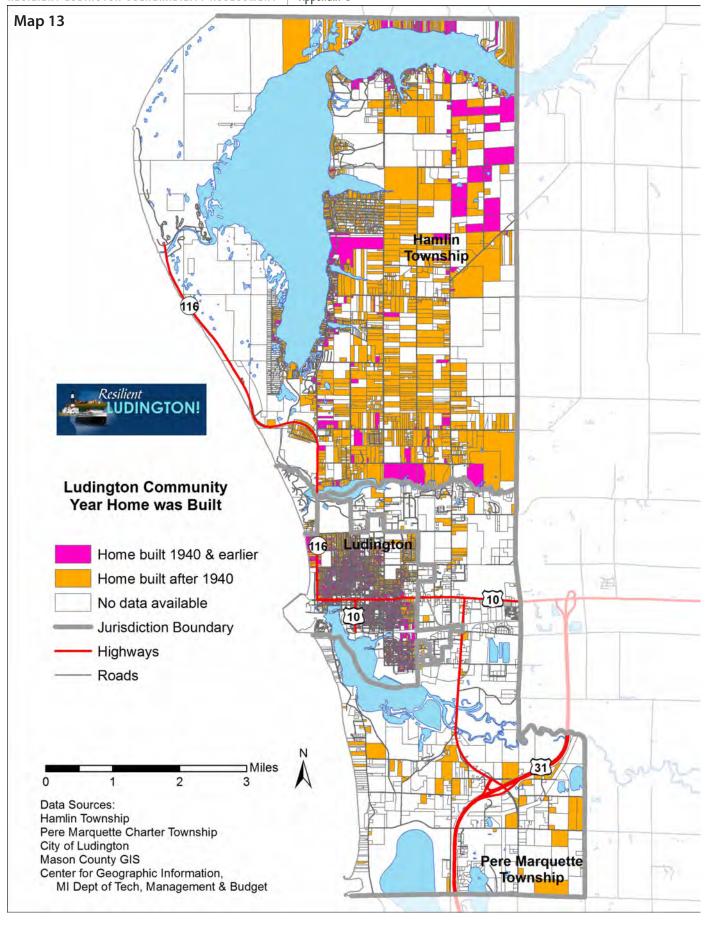












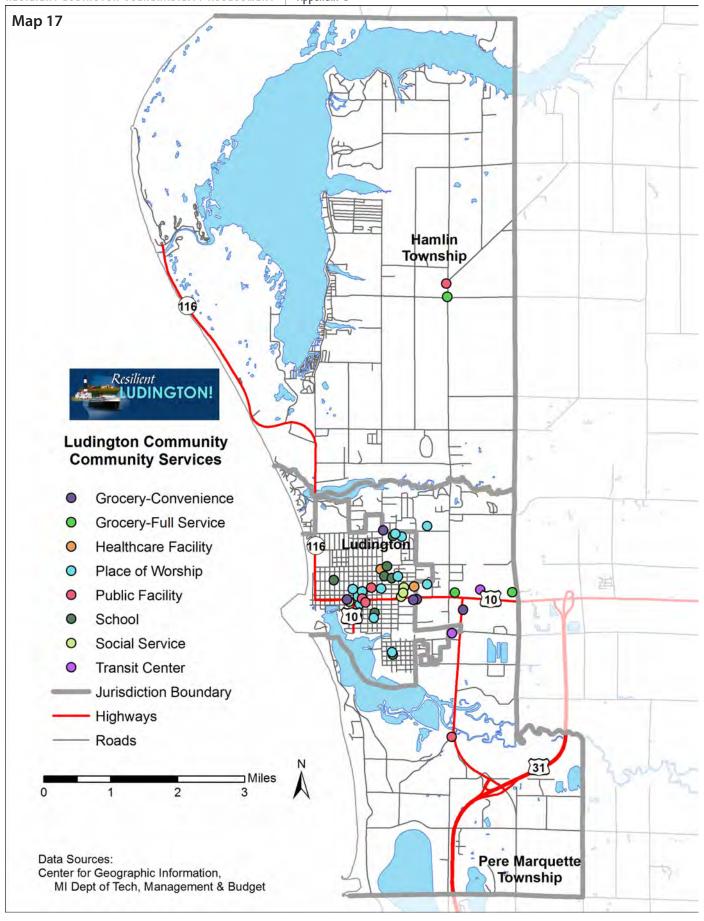
Data Sources:

Center for Geographic Information,

MI Dept of Tech, Management & Budget

Pere Marquette

Township





APPENDIX E

RESILIENT LUDINGTON ONLINE COMMUNITY PLANNING SURVEY RESULTS

DEMOGRAPHIC INFORMATION

1. In which jurisdiction of the Ludington community do you live?

	Totals
Total Respondents	87
City of Ludington	33
Pere Marquette Charter	
Township	12
Hamlin Township	22
Other nearby jurisdiction	17
Live elsewhere, but own a	
second home or vacation in	
the area	3

2. How many people live in your household?

	Community
Total Respondents	87
% w/1 person	12.6
% w/2 people	44.8
% w/3 people	17.2
% w/4 to 6 people	25.3
% w/more than 6 people	0.0

3. Do you own property in the Ludington community (City of Ludington, Pere Marquette Township, Hamlin Township?

	Community
Total Respondents	88
% YES	78.4
% NO	21.6

4. What is your age group?

	Community
Total Respondents	87
% under 25 years old	2.3
% 24-44 years old	23.0
% 45-64 years old	52.9
% 65 years or older	21.8

5. Are you male or female?

	Community
Total Respondents	86
% Female	61.6
% Male	38.4

6. What is your employment status?

	Community
Total Respondents	86
% Employed	44.2
% Self-Employed	15.1
% Student	2.3
% Unemployed	5.8
% Retired	32.6

7. What is your household income?

	Community
Total Respondents	76
% Up 34,999	11.8
% 35,000-49,999	19.7
% 50,000-74,999	36.8
% 75,000 or more	31.6

8. Do you have school-age children (18 years old or younger) in your household?

	Community
Total Respondents	86
% YES	27.9
% NO	72.1

9. How long have you been a resident of the Ludington community?

	Community
Total Respondents	87
% Less than 1 year	3.4
% 1 to 3 years	10.3
% 4 to 10 years	6.9
% 11 or more years	72.4
% I do not reside in the	
Ludington community	6.9

10. Are you an appointed or elected local government official or government staff member?

	Community
Total Respondents	88
% YES	18.2
% NO	81.8

ABOUT LIVING IN THE LUDINGTON COMMUNITY

How important are each of the following to your decision to live in the Ludington Community?

11. Safe place to live, work & play

	Community
Average	2.91
Total Respondents	88
% Not At All Important (1)	1.1
% Somewhat Important (2)	6.8
% Very Important (3)	92.0

12. Amenities such as libraries, parks & historic buildings

	Community
Average	2.64
Total Respondents	88
% Not At All Important (1)	5.7
% Somewhat Important (2)	25.0
% Very Important (3)	69.3

13. Desirable neighborhoods

	Community
Average	2.75
Total Respondents	88
% Not At All Important (1)	2.3
% Somewhat Important (2)	20.5
% Very Important (3)	77.3

14. Access to Lake Michigan, inland lakes, and rivers

	Community
Average	2.82
Total Respondents	88
% Not At All Important (1)	2.3
% Somewhat Important (2)	13.6
% Very Important (3)	84.1

15. Public school system

	Community
Average	2.39
Total Respondents	88
% Not At All Important (1)	13.6
% Not Important (2)	34.1
% Very Important (3)	52.3

16. Have a job in the Ludington Community

	Community
Average	2.36
Total Respondents	87
% Not At All Important (1)	21.8
% Somewhat Important (2)	20.7
% Very Important (3)	57.5

17. Easy commute to work

	Community
Average	2.16
Total Respondents	87
% Not At All Important (1)	25.3
% Somewhat Important (2)	33.3
% Very Important (3)	41.4

18. Friends or relatives live here

	Community
Average	2.11
Total Respondents	87
% Not At All Important (1)	25.3
% Somewhat Important (2)	37.9
% Very Important (3)	36.8

19. Affordable housing

	Community
Average	2.41
Total Respondents	88
% Not At All Important (1)	9.1
% Somewhat Important (2)	40.9
% Very Important (3)	50.0

20. Recreational opportunities

	Community
Average	2.64
Total Respondents	87
% Not At All Important (1)	4.6
% Somewhat Important (2)	26.4
% Very Important (3)	69.0

How easy is it to get around the Ludington Community using the following transportation modes? (Please rate the ease of movement on a scale from 1 for <u>Very Difficult</u> to 5 for <u>Very Easy</u>.)

21. By Automobile (Driving)

	Community
Average	1.88
Total Respondents	88
% Very Easy (1)	44.3
% Easy (2)	34.1
% Neutral (3)	13.6
% Difficult (4)	5.7
% Very Difficult (5)	2.3

22. On Foot (Walking)

	Community
Average	2.60
Total Respondents	88
% Very Easy (1)	17.0
% Easy (2)	31.8
% Neutral (3)	27.3
% Difficult (4)	21.6
% Very Difficult (5)	2.3

23. By Bicycle (Biking)

	Community
Average	3.08
Total Respondents	88
% Very Easy (1)	8.0
% Easy (2)	21.6
% Neutral (3)	28.4
% Difficult (4)	38.6
% Very Difficult (5)	3.4

24. Public Transportation

	Community
Average	3.16
Total Respondents	87
% Very Easy (1)	6.9
% Easy (2)	20.7
% Neutral (3)	36.8
% Difficult (4)	20.7
% Very Difficult (5)	14.9

25. Taxi & Hired Transportation

	Community
Average	3.22
Total Respondents	85
% Very Easy (1)	3.5
% Easy (2)	14.1
% Neutral (3)	55.3
% Difficult (4)	10.6
% Very Difficult (5)	16.5

26. Have you visited or shopped at the Ludington Downtown Farmers Market in the last year?

	Community
Total Respondents	85
% Yes (1)	68.2
% No (2)	31.8

What are the most important features or qualities of the Ludington Community?

(Please rate importance on a scale from 1 for Not At All Important to 5 for Very Important.)

27. Access to Lake Michigan

	Community
Average	1.32
Total Respondents	88
% Very Important (1)	77.3
% Important (2)	14.8
% Moderately Important (3)	6.8
% Little Importance (4)	1.1
% Unimportant (5)	0.0

28. Rural character (e.g., Farms, Open Fields, Natural Areas)

	Community
Average	1.91
Total Respondents	88
% Very Important (1)	39.8
% Important (2)	38.6
% Moderately Important (3)	13.6
% Little Importance (4)	6.8
% Unimportant (5)	1.1

29. Downtown Ludington

	Community
Average	1.91
Total Respondents	88
% Very Important (1)	44.3
% Important (2)	31.8
% Moderately Important (3)	14.8
% Little Importance (4)	6.8
% Unimportant (5)	2.3

30. Historic sites and structures

	Community
Average	2.24
Total Respondents	88
% Very Important (1)	30.7
% Important (2)	29.5
% Moderately Important (3)	26.1
% Little Importance (4)	12.5
% Unimportant (5)	1.1

31. Sports & Recreation Facilities

	Community
Average	2.33
Total Respondents	87
% Very Important (1)	21.8
% Important (2)	37.9
% Moderately Important (3)	31.0
% Little Importance (4)	3.4
% Unimportant (5)	5.7

32. Affordable Housing

	Community
Average	2.02
Total Respondents	88
% Very Important (1)	35.2
% Important (2)	36.4
% Moderately Important (3)	22.7
% Little Importance (4)	2.3
% Unimportant (5)	3.4

33. Inland Lakes and Rivers

	Community
Average	1.70
Total Respondents	88
% Very Important (1)	47.7
% Important (2)	38.6
% Moderately Important (3)	10.2
% Little Importance (4)	2.3
% Unimportant (5)	1.1

34. State and Local Parks

	Community
Average	1.42
Total Respondents	88
% Very Important (1)	68.2
% Important (2)	25.0
% Moderately Important (3)	4.5
% Little Importance (4)	1.1
% Unimportant (5)	1.1

35. Restaurants and Lounges

	Community
Average	1.99
Total Respondents	86
% Very Important (1)	36.0
% Important (2)	43.0
% Moderately Important (3)	12.8
% Little Importance (4)	2.3
% Unimportant (5)	5.8

36. Events and Festivals (e.g., Harbor Festival, Western Michigan Fair)

	Community
Average	2.23
Total Respondents	88
% Very Important (1)	28.4
% Important (2)	37.5
% Moderately Important (3)	21.6
% Little Importance (4)	8.0
% Unimportant (5)	4.5

37. Retail stores and shopping

	Community
Average	2.13
Total Respondents	87
% Very Important (1)	21.8
% Important (2)	49.4
% Moderately Important (3)	25.3
% Little Importance (4)	1.1
% Unimportant (5)	2.3

38. Safe place to live, work, and play

	Community
Average	1.27
Total Respondents	88
% Very Important (1)	80.7
% Important (2)	13.6
% Moderately Important (3)	4.5
% Little Importance (4)	0.0
% Unimportant (5)	1.1

39. Bicycling and walking paths

	•
	Community
Average	1.99
Total Respondents	87
% Very Important (1)	43.7
% Important (2)	29.9
% Moderately Important (3)	17.2
% Little Importance (4)	2.3
% Unimportant (5)	6.9

40. Friendly and welcoming people

	Community
Average	1.70
Total Respondents	87
% Very Important (1)	51.7
% Important (2)	33.3
% Moderately Important (3)	10.3
% Little Importance (4)	2.3
% Unimportant (5)	2.3

41. Large home lots / yards

	Community
Average	2.43
Total Respondents	88
% Very Important (1)	23.9
% Important (2)	29.5
% Moderately Important (3)	30.7
% Little Importance (4)	11.4
% Unimportant (5)	4.5

42. Availability of Good Jobs

	Community
Average	1.67
Total Respondents	88
% Very Important (1)	55.7
% Important (2)	28.4
% Moderately Important (3)	10.2
% Little Importance (4)	4.5
% Unimportant (5)	1.1

43. Easy to Get Around

	Community
Average	1.70
Total Respondents	87
% Very Important (1)	43.7
% Important (2)	47.1
% Moderately Important (3)	5.7
% Little Importance (4)	2.3
% Unimportant (5)	1.1

Thinking about the future, which new or additional commercial developments do you think are most important to improving the Ludington Community? (Please rate importance on a scale from 1 for Not At All Important to 5 for Very Important.)

44. Retail clothing & shoe stores

	Community
Average	2.51
Total Respondents	88
% Very Important (1)	17.0
% Important (2)	34.1
% Moderately Important (3)	33.0
% Little Importance (4)	12.5
% Unimportant (5)	3.4

45. Fast food restaurants

	Community
Average	3.98
Total Respondents	86
% Very Important (1)	1.2
% Important (2)	2.3
% Moderately Important (3)	26.7
% Little Importance (4)	37.2
% Unimportant (5)	32.6

46. Sit-down and fine dining restaurants

	Community
Average	2.41
Total Respondents	88
% Very Important (1)	26.1
% Important (2)	28.4
% Moderately Important (3)	30.7
% Little Importance (4)	8.0
% Unimportant (5)	6.8

47. Food or grocery stores

	Community
Average	2.55
Total Respondents	88
% Very Important (1)	21.6
% Important (2)	27.3
% Moderately Important (3)	30.7
% Little Importance (4)	15.9
% Unimportant (5)	4.5

48. Automobile sales and services

	Community
Average	3.27
Total Respondents	88
% Very Important (1)	4.5
% Important (2)	18.2
% Moderately Important (3)	38.6
% Little Importance (4)	22.7
% Unimportant (5)	15.9

49. Visitor & tourist attractions

	Community
Average	2.23
Total Respondents	88
% Very Important (1)	30.7
% Important (2)	35.2
% Moderately Important (3)	22.7
% Little Importance (4)	3.4
% Unimportant (5)	8.0

50. Boutiques & specialty shops

	Community
Average	2.61
Total Respondents	88
% Very Important (1)	17.0
% Important (2)	31.8
% Moderately Important (3)	33.0
% Little Importance (4)	9.1
% Unimportant (5)	9.1

51. Business offices

	Community
Average	2.69
Total Respondents	88
% Very Important (1)	10.2
% Important (2)	37.5
% Moderately Important (3)	33.0
% Little Importance (4)	11.4
% Unimportant (5)	8.0

How would you rate the importance of the following transportation improvements?

52. Improvements for pedestrians (e.g., sidewalks)

	Community
Average	1.78
Total Respondents	88
% Very Important (1)	44.3
% Important (2)	38.6
% Moderately Important (3)	12.5
% Little Importance (4)	3.4
% Unimportant (5)	1.1

53. Improved appearance for the US-10/US-31 corridor

	Community
Average	1.99
Total Respondents	88
% Very Important (1)	47.7
% Important (2)	27.3
% Moderately Important (3)	9.1
% Little Importance (4)	10.2
% Unimportant (5)	5.7

54. Better safety features for the US-10/US-31 corridor

	Community
Average	1.59
Total Respondents	87
% Very Important (1)	67.8
% Important (2)	16.1
% Moderately Important (3)	9.2
% Little Importance (4)	3.4
% Unimportant (5)	3.4

55. Improved appearance for Pere Marquette Highway

	Community
Average	2.31
Total Respondents	87
% Very Important (1)	32.2
% Important (2)	28.7
% Moderately Important (3)	21.8
% Little Importance (4)	10.3
% Unimportant (5)	6.9

56. Better safety features for Ludington Ave. in downtown Ludington

	Community
Average	2.00
Total Respondents	88
% Very Important (1)	46.6
% Important (2)	27.3
% Moderately Important (3)	11.4
% Little Importance (4)	9.1
% Unimportant (5)	5.7

57. New & improved bicycling routes

	Community
Average	1.92
Total Respondents	88
% Very Important (1)	48.9
% Important (2)	26.1
% Moderately Important (3)	14.8
% Little Importance (4)	4.5
% Unimportant (5)	5.7

58. Additional bus service

	Community
Average	2.60
Total Respondents	88
% Very Important (1)	25.0
% Important (2)	21.6
% Moderately Important (3)	30.7
% Little Importance (4)	13.6
% Unimportant (5)	9.1

How would you rate the importance of the following community services and activities?

59. Festivals, parades & local celebrations

	Community
Average	2.16
Total Respondents	86
% Very Important (1)	30.2
% Important (2)	38.4
% Moderately Important (3)	20.9
% Little Importance (4)	5.8
% Unimportant (5)	4.7

60. Public libraries

	Community
Average	1.86
Total Respondents	88
% Very Important (1)	45.5
% Important (2)	35.2
% Moderately Important (3)	10.2
% Little Importance (4)	5.7
% Unimportant (5)	3.4

61. Properly maintained sidewalks

	Community
Average	1.60
Total Respondents	88
% Very Important (1)	52.3
% Important (2)	37.5
% Moderately Important (3)	8.0
% Little Importance (4)	2.3
% Unimportant (5)	0.0

62. Automobile parking near business & retail locations

	Community
Average	1.80
Total Respondents	88
% Very Important (1)	39.8
% Important (2)	44.3
% Moderately Important (3)	13.6
% Little Importance (4)	1.1
% Unimportant (5)	1.1

63. Roads & bridges for automobiles

	Community
Average	1.66
Total Respondents	86
% Very Important (1)	46.5
% Important (2)	40.7
% Moderately Important (3)	12.8
% Little Importance (4)	0.0
% Unimportant (5)	0.0

64. Services for the poor (e.g., food pantries, shelters)

	Community
Average	1.91
Total Respondents	88
% Very Important (1)	38.6
% Important (2)	38.6
% Moderately Important (3)	15.9
% Little Importance (4)	6.8
% Unimportant (5)	0.0

65. Services for area seniors

	Community
Average	1.88
Total Respondents	88
% Very Important (1)	35.2
% Important (2)	47.7
% Moderately Important (3)	11.4
% Little Importance (4)	5.7
% Unimportant (5)	0.0

66. Public schools

	Community
Average	1.65
Total Respondents	88
% Very Important (1)	52.3
% Important (2)	35.2
% Moderately Important (3)	10.2
% Little Importance (4)	0.0
% Unimportant (5)	2.3

67. Street lights

	Community
Average	2.06
Total Respondents	88
% Very Important (1)	34.1
% Important (2)	39.8
% Moderately Important (3)	15.9
% Little Importance (4)	6.8
% Unimportant (5)	3.4

Which of the following things would you be in favor of local government doing to protect the water quality of lakes, streams and groundwater in the Ludington Community?

68. Work to reduce stormwater runoff from streets & parking lots

	Community
Average	1.84
Total Respondents	87
% Strongly Support (1)	44.8
% Somewhat Support (2)	34.5
% Neutral (3)	14.9
% Somewhat Oppose (4)	3.4
% Strongly Oppose (5)	2.3

69. Maintain shoreline vegetation to filter stormwater runoff

	Community
Average	1.62
Total Respondents	87
% Strongly Support (1)	54.0
% Somewhat Support (2)	33.3
% Neutral (3)	10.3
% Somewhat Oppose (4)	1.1
% Strongly Oppose (5)	1.1

70. Require maintenance of on-site home septic systems

	Community
Average	2.01
Total Respondents	88
% Strongly Support (1)	50.0
% Somewhat Support (2)	17.0
% Neutral (3)	21.6
% Somewhat Oppose (4)	4.5
% Strongly Oppose (5)	6.8

71. Work to protect lakes from invasive species

	Community
Average	1.40
Total Respondents	88
% Strongly Support (1)	75.0
% Somewhat Support (2)	17.0
% Neutral (3)	3.4
% Somewhat Oppose (4)	2.3
% Strongly Oppose (5)	2.3

Over the last 10 years, have you noticed a change in any the following weather events in Ludington?

72. Heavy Rainstorms

	Community
Total Respondents	87
% More Common	26.4
% No Change	50.6
% Less Common	9.2
% Don't Know	13.8

73. Snowstorms

	Community
Total Respondents	85
% More Common	45.9
% No Change	35.3
% Less Common	5.9
% Don't Know	12.9

74. Ice Storms

	Community
Total Respondents	86
% More Common	23.3
% No Change	54.7
% Less Common	7.0
% Don't Know	15.1

75. Heat Waves

	Community
Total Respondents	86
% More Common	17.4
% No Change	40.7
% Less Common	27.9
% Don't Know	14.0

76. Cold Spells

	Community
Total Respondents	87
% More Common	36.8
% No Change	44.8
% Less Common	2.3
% Don't Know	16.1

77. Flooding

	Community
Total Respondents	87
% More Common	25.3
% No Change	49.4
% Less Common	5.7
% Don't Know	19.5

78. Droughts

	Community
Total Respondents	87
% More Common	16.1
% No Change	51.7
% Less Common	10.3
% Don't Know	21.8

79. Insect Pests (e.g., mosquitoes)

<u> </u>	
	Community
Total Respondents	87
% More Common	40.2
% No Change	41.4
% Less Common	4.6
% Don't Know	13.8

80. Brush & Forest Fires

	Community
Total Respondents	86
% More Common	3.5
% No Change	61.6
% Less Common	10.5
% Don't Know	24.4

How would you rate the importance of the following actions that could be used for controlling stormwater runoff and reducing flooding hazards in the Ludington community?

81. Use more effective landscaping with new developments

	Community
Average	1.97
Total Respondents	86
% Very Important (1)	39.5
% Important (2)	37.2
% Moderately Important (3)	15.1
% Little Importance (4)	3.5
% Unimportant (5)	4.7

82. Encourage the planting of more trees & shrubbery

	Community
Average	1.85
Total Respondents	86
% Very Important (1)	43.0
% Important (2)	39.5
% Moderately Important (3)	10.5
% Little Importance (4)	3.5
% Unimportant (5)	3.5

83. Require more on-site storage of stormwater.

•	
	Community
Average	2.61
Total Respondents	84
% Very Important (1)	17.9
% Important (2)	27.4
% Moderately Important (3)	35.7
% Little Importance (4)	14.3
% Unimportant (5)	4.8

84. Reduce or limit the size of paved parking areas

	Community
Average	2.71
Total Respondents	86
% Very Important (1)	18.6
% Important (2)	23.3
% Moderately Important (3)	34.9
% Little Importance (4)	15.1
% Unimportant (5)	8.1

85. Encourage the use of rain gardens & rain barrels

	Community
Average	2.42
Total Respondents	85
% Very Important (1)	34.1
% Important (2)	22.4
% Moderately Important (3)	18.8
% Little Importance (4)	16.5
% Unimportant (5)	8.2

86. Provide more education / information to home-owners

	Community
Average	2.10
Total Respondents	86
% Very Important (1)	46.5
% Important (2)	18.6
% Moderately Important (3)	20.9
% Little Importance (4)	5.8
% Unimportant (5)	8.1

87. Preserve existing wetlands

	Community
Average	1.74
Total Respondents	86
% Very Important (1)	58.1
% Important (2)	19.8
% Moderately Important (3)	15.1
% Little Importance (4)	3.5
% Unimportant (5)	3.5

Which of the following things would you be in favor of local government doing to help improve the Ludington Community's *local economy*?

88. Work to increase all forms of tourism.

	Community
Average	2.18
Total Respondents	88
% Strongly Favor (1)	36.4
% Somewhat Favor (2)	33.0
% Neutral (3)	13.6
% Somewhat Oppose (4)	10.2
% Strongly Oppose (5)	6.8

89. Work to increase local food production

	Community
Average	1.70
Total Respondents	88
% Strongly Favor (1)	50.0
% Somewhat Favor (2)	30.7
% Neutral (3)	18.2
% Somewhat Oppose (4)	1.1
% Strongly Oppose (5)	0.0

90. Provide incentives for locally-owned business

	Community
Average	1.74
Total Respondents	88
% Strongly Favor (1)	56.8
% Somewhat Favor (2)	22.7
% Neutral (3)	12.5
% Somewhat Oppose (4)	5.7
% Strongly Oppose (5)	2.3

91. Work to attract additional manufacturing business

	Community
Average	1.61
Total Respondents	88
% Strongly Favor (1)	62.5
% Somewhat Favor (2)	19.3
% Neutral (3)	12.5
% Somewhat Oppose (4)	5.7
% Strongly Oppose (5)	0.0

Which are the most important improvements to make to the Ludington Community's municipal facilities and services *over the next 10 years*?

92. Re-pave & repair roads

	Community
Average	1.65
Total Respondents	88
% Very Important (1)	47.7
% Important (2)	42.0
% Moderately Important (3)	8.0
% Little Importance (4)	2.3
% Unimportant (5)	0.0

93. Improve municipal parks

	Community
Average	2.20
Total Respondents	88
% Very Important (1)	21.6
% Important (2)	46.6
% Moderately Important (3)	21.6
% Little Importance (4)	10.2
% Unimportant (5)	0.0

94. Construct stormwater detention facilities

	Community
Average	2.37
Total Respondents	87
% Very Important (1)	19.5
% Important (2)	37.9
% Moderately Important (3)	29.9
% Little Importance (4)	11.5
% Unimportant (5)	1.1

95. Add new sidewalks

	Community
Average	2.25
Total Respondents	88
% Very Important (1)	25.0
% Important (2)	37.5
% Moderately Important (3)	26.1
% Little Importance (4)	10.2
% Unimportant (5)	1.1

96. Build new bicycle & walking trails

	Community
Average	2.03
Total Respondents	87
% Very Important (1)	48.3
% Important (2)	20.7
% Moderately Important (3)	16.1
% Little Importance (4)	9.2
% Unimportant (5)	5.7

97. Improve the "curb appeal" throughout Ludington

-	Community
Average	2.09
Total Respondents	88
% Very Important (1)	40.9
% Important (2)	22.7
% Moderately Important (3)	25.0
% Little Importance (4)	9.1
% Unimportant (5)	2.3

98. Increase availability of recreation programs

	Community
Average	2.36
Total Respondents	88
% Very Important (1)	28.4
% Important (2)	26.1
% Moderately Important (3)	30.7
% Little Importance (4)	10.2
% Unimportant (5)	4.5

99. Expand recreation facilities

	Community
Average	2.39
Total Respondents	88
% Very Important (1)	26.1
% Important (2)	28.4
% Moderately Important (3)	29.5
% Little Importance (4)	12.5
% Unimportant (5)	3.4

100. Improve & increase bus service

	Community
Average	2.57
Total Respondents	86
% Very Important (1)	26.7
% Important (2)	19.8
% Moderately Important (3)	31.4
% Little Importance (4)	14.0
% Unimportant (5)	8.1

101. Expand municipal utility services (e.g., sewer, water)

	Community
Average	2.65
Total Respondents	88
% Very Important (1)	19.3
% Important (2)	27.3
% Moderately Important (3)	30.7
% Little Importance (4)	14.8
% Unimportant (5)	8.0

Which of the following actions would you take or have you taken to protect yourself and your community from local environmental hazards?

102. Learn about local hazards & the best ways to deal with them

	Community
Total Respondents	87
% Have Done	35.6
% Would Do	44.8
% Would Not Do	8.0
% Don't Know	11.5

103. Participate in and/or organize family or neighborhood voluntary response effort

•	
	Community
Total Respondents	86
% Have Done	9.3
% Would Do	45.3
% Would Not Do	31.4
% Don't Know	14.0

104. Purchase an emergency kit

	Community
Total Respondents	87
% Have Done	52.9
% Would Do	37.9
% Would Not Do	5.7
% Don't Know	3.4

105. Install water efficient household appliances to conserve water

	Community
Total Respondents	87
% Have Done	62.1
% Would Do	24.1
% Would Not Do	12.6
% Don't Know	1.1

106. Install energy efficient household appliances and lights to conserve energy

	Community
Total Respondents	87
% Have Done	77.0
% Would Do	17.2
% Would Not Do	4.6
% Don't Know	1.1

107. Increase the amount of insulation in my home to save energy

	Community
Total Respondents	87
% Have Done	63.2
% Would Do	29.9
% Would Not Do	3.4
% Don't Know	3.4

108. Plant more trees, shrubs & greenery

	Community
Total Respondents	86
% Have Done	55.8
% Would Do	32.6
% Would Not Do	9.3
% Don't Know	2.3

109. Install rain barrels at my home

-	
	Community
Total Respondents	87
% Have Done	9.2
% Would Do	46.0
% Would Not Do	28.7
% Don't Know	16.1

Which of the following actions would you take, or have you taken, to improve water quality in Lake Michigan or other inland lakes and rivers?

110. Volunteer for a local watershed group?

	Community
Total Respondents	87
% Have Done	9.2
% Would Do	27.6
% Would Not Do	42.5
% Don't Know	20.7

111. Participate in a river or lake clean-up?

	Community
Total Respondents	87
% Have Done	26.4
% Would Do	43.7
% Would Not Do	19.5
% Don't Know	10.3

112. Organize an environmental education event?

	Community
Total Respondents	87
% Have Done	8.0
% Would Do	18.4
% Would Not Do	51.7
% Don't Know	21.8

113. Financially support or donate to a watershed project?

	Community
Total Respondents	87
% Have Done	13.8
% Would Do	35.6
% Would Not Do	31.0
% Don't Know	19.5

114. How important is environmental quality and watershed quality to the economic vitality of the Ludington community?

	Community
Average	1.42
Total Respondents	88
% Very Important (1)	62.5
% Somewhat Important (2)	33.0
% Not at all Important (3)	4.5