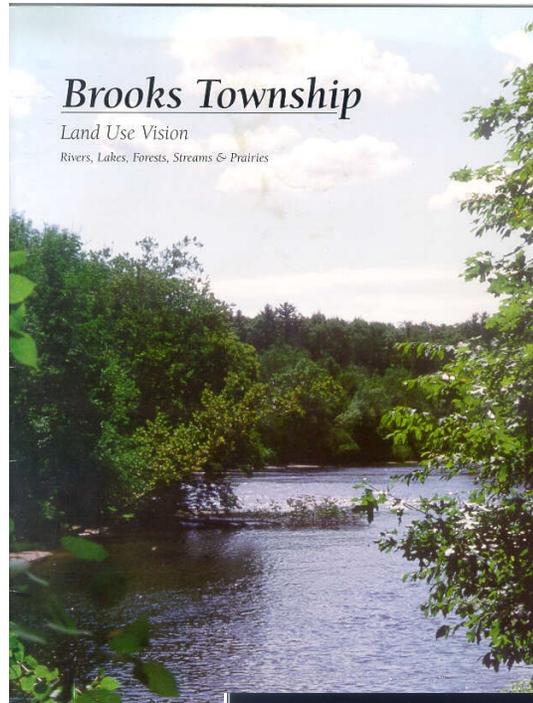


# 1 Brooks Township Master Plan 2007



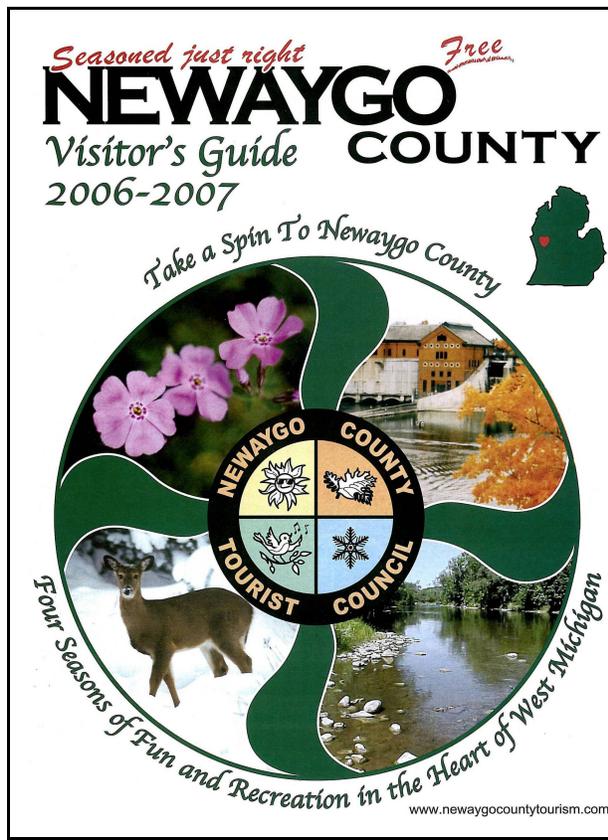
On

The  
1999 PARKS,  
RECREATION, AND  
NATURAL AREAS  
MASTER PLAN

For  
Brooks Township, Newaygo County

January 18, 1999

*Building  
The  
Past...*



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*...Planning For The Future*



# Acknowledgments

Special Thanks to...

## **Members of the Township Planning Commission**

- Jim Leonard
- Ryan McNally
- Mark Pitzer
- Fred Hawkey
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- Bob Wood
- Marc Libants
- Kim Hoyle
- Adam Wright

## Members of the Township Board

- Les Salacina, Supervisor
- Lora Jones, Clerk
- Christina Haynor, Treasurer
- Robert Wood , Trustee
- Robert Henning, Trustee

and

All Brooks Township Residents who participated in the update of this Plan.



# TABLE OF CONTENTS

CHAPTER 1.....	1
INTRODUCTION.....	1
The Brooks Township Master Plan.....	1
The Brooks Township Master Plan - Legal Basis.....	2
The Master Plan and Zoning Relationship.....	2
Building on a Foundation of Prior Planning Activity.....	2
How Does the Plan Impact Residents and Property Owners?.....	3
Updating the Plan.....	4
CHAPTER 2.....	5
THE COMMUNITY.....	5
BROOKS TOWNSHIP HISTORY.....	5
Land Use Trends.....	7
See Township Hall for 1998 parcel map. May not be duplicated on the internet per copyright agreement.....	7
Land Use Trends.....	9
BROOKS TOWNSHIP TODAY.....	10
Existing Land Use .....	10
Single Family Residential.....	13
Multiple Family Residential.....	13
Residential Building Permits.....	14
Manufactured Housing.....	15
Commercial.....	15
Industrial .....	15
Agricultural.....	15
Vacant Land.....	15
Public/Quasi-Public .....	16
Natural Features.....	16
Forest.....	16
Water Resources.....	17
Insert Natural Features Map.....	20
Brooks Township Land Use Vision.....	20
Wetlands.....	20
Ground Water.....	21
Rare Species.....	21
Soils.....	22
Transportation.....	23
Roadway Classifications.....	24
Description Of Existing Roadway Infrastructure.....	24
Existing Transportation Studies.....	26
Roadway Improvements.....	26
DEMOGRAPHICS.....	28
Data.....	28

Population.....	28
Population Projections.....	29
Age of Population.....	30
Seasonal Population.....	31
Housing Affordability.....	31
Income.....	31
Transportation.....	32
CHAPTER 3.....	33
GOALS & OBJECTIVES.....	33
NATURAL FEATURES.....	33
River, Tributary, & Lake Objectives:.....	33
Forests, Prairies, and Open Space Objectives:.....	34
RESIDENTIAL.....	35
COMMERCIAL AND INDUSTRIAL.....	36
PUBLIC SERVICE AND INFRASTRUCTURE.....	37
QUALITY OF LIFE.....	37
CHAPTER 4.....	38
LAND USE PLAN.....	38
PLAN DISTRICTS.....	38
CONSERVATION OVERLAYS.....	42
INDUSTRIAL DISTRICT.....	43
Appendix A.....	45
Brooks Township Survey Results.....	45



# CHAPTER 1

## INTRODUCTION

### The Brooks Township Master Plan

Brooks Township is a rural community located in Newaygo County, Michigan. The township borders the City of Newaygo and is located approximately 32 miles north of Grand Rapids.



Brooks Township is connected to that large metropolitan center via M-37 and M-82/US-131.

Collectively, Brooks Township and the City of Newaygo form a desirable “small

town” example of an environment considered highly attractive to families and visitors. The area is rich in natural features including large tracts of forested lands, the Muskegon River and associated tributaries, lakes and wetlands, rolling topography, and an abundance and variety of flora and fauna. The area is generally characterized by low density residential development and possesses an emerging base of commercial and industrial opportunities.

The qualities that make a community desirable can be lost if not carefully managed. This is of major concern to Brooks Township. The township acknowledges that population growth will likely result in heightened demand for the conversion of open space to residential and other intense forms of use; pressures to develop M-37 and M-82 for commercial purposes; potential requests for the provision of “urban infrastructure” such as public water and sanitary sewers to serve high growth areas near the City of Newaygo and around the township’s populated lakes; and, the implementation of other facilities and services necessary to meet the needs of a growing and diverse population. It is the goal of the township to establish a workable program within which these demands and pressures will be evaluated and directed. This will help ensure that the desired qualities existing today will be carried over into the township’s future.

The Brooks Township Master Plan represents the framework for the above program. It is the public’s vision of the township’s future. As such, the plan attempts to:

- recognize and balance the interests and desires of all residents and landowners;
- provide a basis of support for the Township Zoning Ordinance;
- recognize and protect the township's natural features, many of which are unique and/or fragile in character;
- recognize the City of Newaygo as the area's central city;
- recognize and, as appropriate, coordinate land use opportunities along the township's perimeter with the City of Newaygo and neighboring townships;
- delineate land development types and patterns consistent with the needs and desires of township residents;
- recognize that the intensity and/or density of certain land uses requires location in or near areas served by public infrastructure such as all-season roads, public water, sanitary sewers, etc.
- recognize the importance of maintaining the township's rural character; and,
- achieve the quality of life desired by township residents.

### **The Brooks Township Master Plan - Legal Basis**

The Master Plan was prepared by the Brooks Township Planning Commission. The Commission is a body of local residents appointed by the Brooks Township Board under the provisions of The Michigan Public Act 168 of 1959.

Pursuant to Act 168, the Commission is charged with preparation and adoption of the Township Master Plan.

The Brooks Township Planning Commission also has administrative responsibility for a variety of zoning functions including site plan review and initial preparation of zoning ordinance text and map amendments.

### **The Master Plan and Zoning Relationship**

It is a common, but false, perception that the master plan and zoning ordinance are synonymous. While the two instruments are intricately linked, they serve different purposes. As illustrated by the following chart, the master plan is a visionary document providing support for the zoning ordinance. The zoning ordinance is a regulatory document governing the present day use of land. It is a tool used to achieve the recommendations of the master plan.

<b>MASTER PLAN</b> <i>[Visionary-Establishes Policy]</i>
Guides Land Use
Future/Visionary Document
Supports Zoning Ordinance
Adopted by Planning Commission

<b>ZONING ORDINANCE</b> <i>[Regulatory-Land Use Law]</i>
Regulates Land Use
Present Day Document
Implements Master Plan
Adopted by Township Board

### **Building on a Foundation of Prior Planning Activity**

In addition to the zoning relationship, the Master Plan is also intrinsically linked to

several other township planning instruments. These include the former Brooks Township Plans, the Brooks Township Land Use Vision (1999), and the Brooks Township Recreation Plan (1999) and other regional document.

## **BROOKS TOWNSHIP MASTER PLANS**

### **Brooks Township Land Use Vision**

### **Brooks Township Master Plan**

### **Brooks Township Zoning Ordinance**

### **Brooks Township Recreation Plan**

The Land Use Vision represents a unique plan (planning exercise) combining the input and expertise of local, regional and state agencies and organizations in order to identify land use issues of concern, and methods for resolving those concerns. The findings and recommendations of the Land Use Vision were used extensively in the preparation of the new Master Plan.

The previous Master Plan provided important detail concerning the township's historic make-up and patterns of change. The plan also identified a series of goals and objectives used to guide growth and development during the plan's implementation phase. This information served as important building blocks for preparation of the current plan.

While not a plan, per se, the Zoning Ordinance represents an important planning tool pursuant to the implementation of the Master Plan. Much of the township's historic land development is based on the regulatory standards of the Zoning Ordinance.

The Recreation Plan represents a comprehensive planning document reflecting the township's identified recreational need and outlining action programs for addressing those needs. Demographic and other data is shared between the two plans.

*Due to their extensive use in the preparation of this document and continued relevance, the Land Use Vision and the Recreation Plan are classified as supplementary (support) instruments to the Brooks Township Master Plan. The Zoning Ordinance will continue to serve as an important plan implementation tool.*

## **How Does the Plan Impact Residents and Property Owners?**

Although the Master Plan is not a regulatory instrument, like zoning, it can be extremely important to residents, property owners, business entrepreneurs, interest groups, future investors and others. For example, the plan:

- identifies and spatially delineates the land use districts programmed for the township;
- details levels of acceptable land use intensity and/or density for identified plan districts;
- recognizes the need to protect the Muskegon River, its

- tributaries and other water resources as well as prairies and woodlands;
- supports the identification, purpose, and regulations of the township's zoning districts; and
- details goals and objectives concerning the township's future growth.

The above information can be very useful during investment decisions, identifying development opportunities, and assessing needed programs and services.

## **Updating the Plan**

Communities experience change. That change may simply involve the aging of the existing populace and land use. Or, it may entail new residents, new developments, new lifestyle demands, philosophical changes in attitude regarding land stewardship, and/or other adjustments. As time progresses, Brooks Township will likely experience a combination of these factors.

Accordingly, it is important that the Master Plan be periodically reviewed and, as necessary, updated to reflect community needs and desires. The necessity to update should not be viewed as a weakness of the document in place, or the process as a whole. In fact, state law now requires that the plan be updated at least every 5 years.

Master planning is evolutionary. It is a strategy by which current and future residents are given the opportunity to build on past efforts, and to lead the township in a positive direction.

# CHAPTER 2

## THE COMMUNITY

### BROOKS TOWNSHIP HISTORY

Water features, including the Muskegon River, Hess, Brooks, Emerald, Sylvan, and Pickerel Lakes, have played a significant role in the history of Brooks Township.



Prior to European settlement, ancestors of the Ottawa Indians were fur trappers, capitalizing on water-dependent animals, such as beaver. Historical remnants of the Indian culture can still be found in Brooks Township.

Ancestors of the Ottawa Indians left burial grounds, now called Mallon Mounds, located near Brooks Lake.

Also prior to European settlement, there were...

*...large prairie openings of 600-1500 acres. Surrounding these openings were barrens, "park-like" areas with trees. Dense forests covered much of the remainder of the township. The frequency of fires, along with soils, determined where prairies, barrens, and forests grew.*

#### *Brooks Township Land Use Vision*

Before 1837, lumbering was established in Newaygo County as a major economic activity. The forests of Brooks Township were tapped for their woodland resources.

Later, area settlers attempted to capture the hydrologic energy afforded by the flow of the Muskegon River.

Consumers Power Company played a significant role in this effort. One of its achievements most commonly recognized is the Croton Dam, established in 1907.

Emerald and Sylvan Lakes also added another economic attraction to area. Marl found on the bottom of the lakes, used in production of cement, helped to attract the Newaygo Portland Cement Company in 1900.

The river and the lakes also attracted people pursuing recreation and proximity to natural resources. This formed the basis of tourism in the area and the building of cottages and homes along various shoreline areas of the river, tributaries, and lakes.

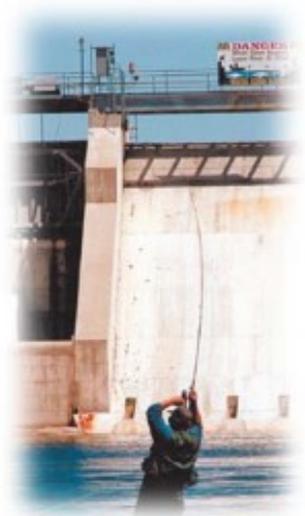


Photo by Dave Carlson/The Muskegon Chronicle

Advancements in technology, the development of the automobile and the extension of electric and other services, resulted in the establishment of many full-time residents in the area now known as Brooks Township.

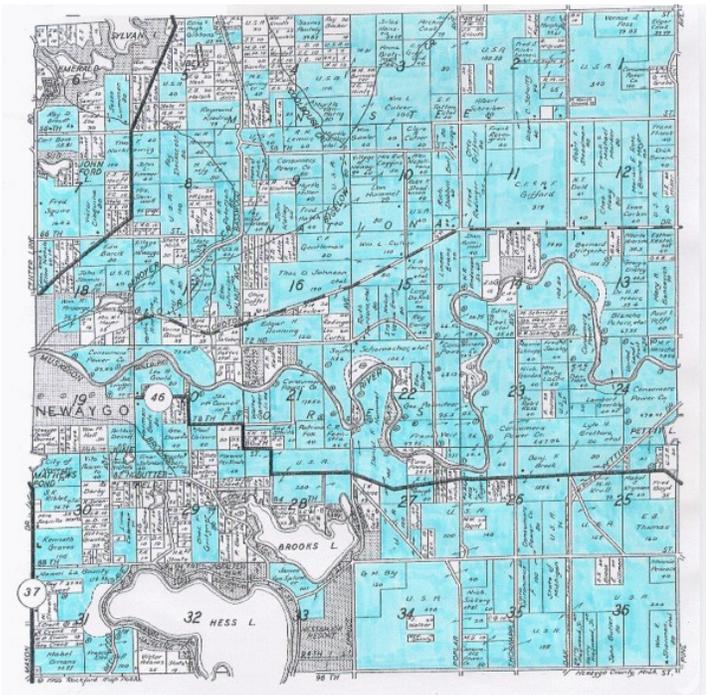


## Land Use Trends

The land use trends in Brooks Township, and the rest of the State, have been largely influenced by the land division laws. These laws have affected how land has been subdivided and used.

The series of maps on the following pages are plat maps, from 1955, 1982, 1998 and 2006. These maps show the division of land in Brooks Township. Note that over time, the larger parcels (over 40 acres) have diminished significantly outside public land areas. This land fragmentation is a result people migrating into the area for a rural lifestyle. In the 2006 map, only state lands are highlighted, which reflects the relatively small percentage of privately owned land in parcels of over 40 acres in size.

Brooks Township  
Historical Land Divisions  
1955



Areas depicted in blue are contiguous parcels under the same ownership that are greater than or equal to 40 acres.

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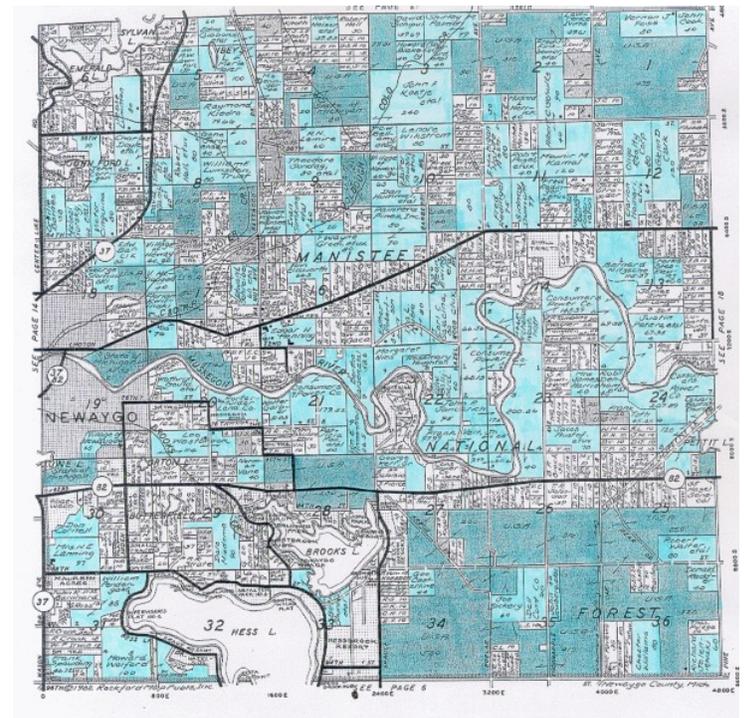
## Brooks Township Master Plan 2007



Several significant land events occurred during the time period depicted by these plat maps. First, platting around the lake happened prior to 1955. Also prior to 1955, much of the land that was originally settled for farming that was not well suited for agriculture was abandoned. This land reverted to State and Federal organizations and became what is now the Manistee National Forest.

In 1967, the Subdivision Control Act was enacted allowing 40 acres to be split into 4 parcels without the formal platting process. This caused the creation of many long, narrow 10 acre "bowling alley lots", parcels with narrow frontage on county roads which are tough to redivide efficiently. Perhaps this had the largest affect on the changing character of the township.

Brooks Township  
Historical Land Divisions  
1982



Areas depicted in blue are contiguous parcels under the same ownership that are greater than or equal to 40 acres.

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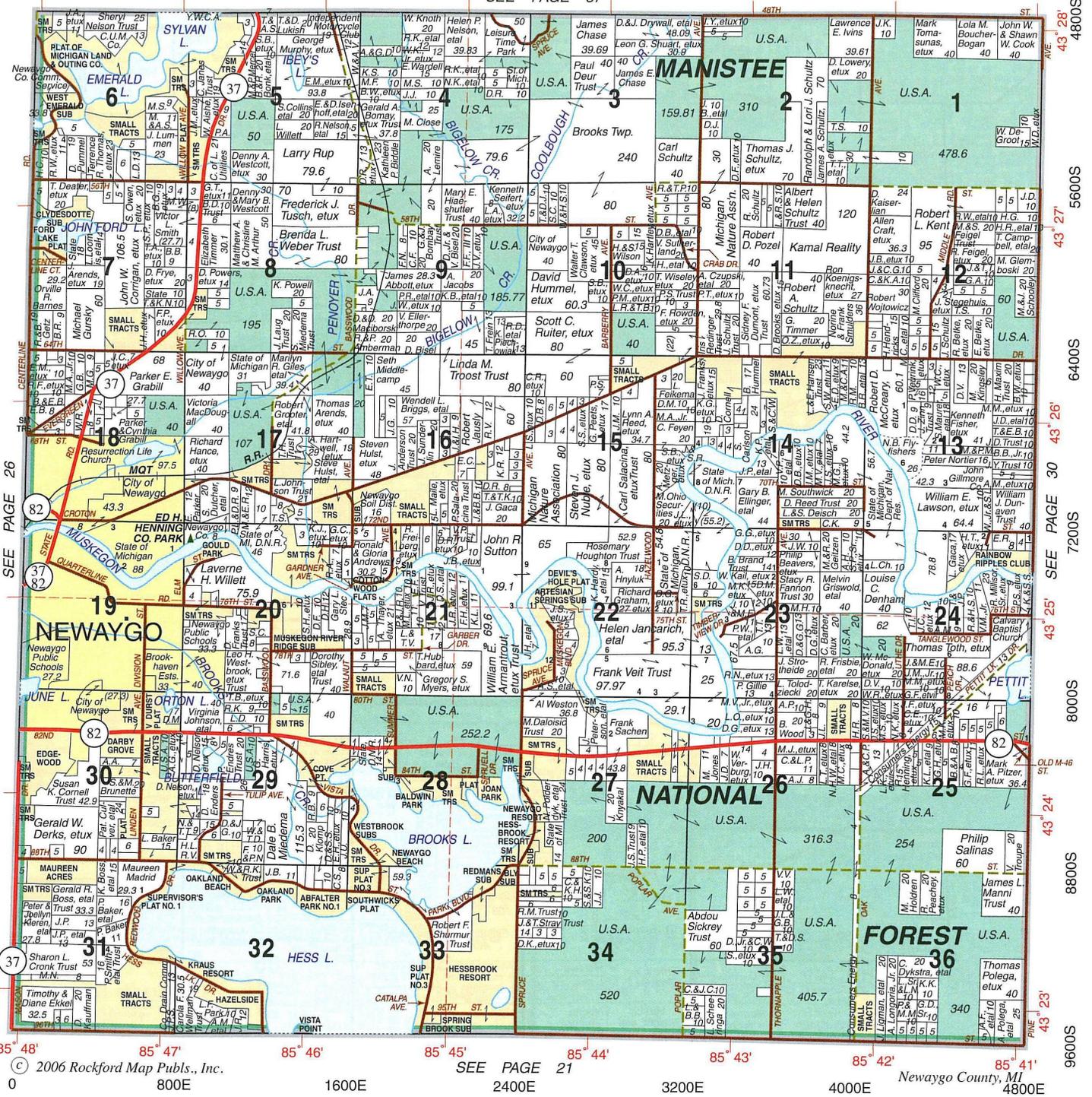


**See Township Hall for 1998  
parcel map. May not be  
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# BROOKS 2006

# T.12N.-R.12W.

SEE PAGE 37



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## Land Use Trends

<b>Land Use Categories</b>	<b>1978 Land Use (acres)</b>	<b>1999 Land Use (acres)</b>	<b>Difference 1978 and 1999 (acres)</b>	<b>% Change</b>	<b>Annual Loss Or Gain (acres)</b>
Single Family Residential	911	2,059	1,148	126%	52
Multi-Family Residential	-----	2	-----	-----	-----
Manufactured Home Park	27	34	7	26%	0.31
Commercial	32	34	2	6%	0.09
Public/Quasi-Public	132	132	0	0%	0
Industrial/Extractive	82	82	0	0%	0
Agricultural	801	305	-496	-62%	-23
Vacant Land	1,843	1,741	-102	-5%	-5
<b>Natural Features</b>	<b>1978 (acres)</b>	<b>1999 (acres)</b>	<b>Difference 1978 and 1999 (acres)</b>	<b>% Change</b>	<b>Annual Loss Or Gain (acres)</b>
Forest*	16,985	16,476	-509	-3%	-23
Wetlands	357	300	-57	-16%	-3
Water	1,495	1,500	5	0%	0
Total Approximate Acres	22,792	22,792	-----	-----	-----

\* The Manistee National Forest land encompasses approximately 3,950 acres.

The data presented in this table was developed using Environmental Systems Research Institute, Inc. (ESRI) Geographic Information System technology. Digital 1978 land use information from the State of Michigan Department of Natural Resources MIRIS was used along with current (1999 land use).

## **BROOKS TOWNSHIP TODAY**

People often base their perception of land use and land use change in their community on 1) the number of houses recently built in close proximity to their own; 2) increased traffic on roads they often travel; and 3) encroaching development on open areas or areas of recreation they often visit.

Often these perceptions are a reflection of actual trends. However, it is important to document measurable trends.

The table on the previous page is a brief summary of land use trends in the township as determined from, essentially, aerial photography. It is useful in that relative ratios of land cover can be determined, (e.g., forest vs. subdivisions) but it does not reflect true suburbanizing trends. For example, a 20-acre piece of land that has a home built in the woods may still be reflected as “forest” but it may not be used for forest production because it has become a homestead.

The remainder of this section more thoroughly discusses each type of land use within the township.

- ✓ The number of acres devoted to residential land use has more than doubled since 1978 to over 2,000 acres. This land has been converted from other uses such as agricultural production and vacant land (or open field).
- ✓ The amount of land devoted to commercial, industrial and public land uses has not changed significantly in the past twenty years.

- ✓ Land used for agricultural purposes has decreased from 800 acres to just over 300 acres.

(This can be attributed to several factors, including the cessation of Christmas tree production. Some of this land has been sold for residential development.)

- ✓ Forested land has decreased by about 3% (over 500 acres) since 1978, and mostly developed for single family homes.

### **Existing Land Use**

An existing land use inventory gives a community a snapshot in time. It is valuable and useful in many ways. From a planning standpoint, the information permits a community to:

- identify the spatial patterns of land use/land development trends;
- measure the land area devoted to the land use categories;
- identify and measure sprawl;
- identify possible infrastructure needs;
- assess impacts on the natural environment;
- identify possible land use deficiencies;
- identify likely growth areas.

The following sources of land use information were used to map land use and to establish land use trends in Brooks Township:

- 1978 land use information developed by the Michigan Department of

Natural Resources from aerial photography;

- 1996 land use information from the Water Resources Institute at Grand Valley State University from aerial photography ; and field verification in the form of a “windshield” survey conducted in December of 1999.

**Insert existing land use map**

## **Single Family Residential**

Historically, and more recently, people have moved to Brooks Township to get away from more urbanized areas, drawn by openness and natural features.

The Existing Land Use map shows several population concentrations:

- **around the lakes (primarily Brooks, Hess, Emerald, and Sylvan Lakes);**
- **along the Muskegon River;**
- **along M-82; and**
- **along Croton Drive.**



The Brooks Township Land Use Vision also reports that over 80% of residents live adjacent to a water body.

Residential concentrations can also be found near the City of Newaygo. This shows a natural progression of growth, outward from a developed city center. Living outside of the city allows individuals to live near their place of employment, businesses, and services while enjoying life where a stronger sense of rural character still exists.

The comfortable commute to Grand Rapids, within 30-40 driving minutes,

also draws residents to live in the rural settings of the township.

Access to roads, the quality and the maintenance of roads has also influenced residential development patterns in the township. The homes along the improved routes of M-82 and Croton Drive exemplify this, with many other residences found along County maintained and operated roads that adjoin these two major thoroughfares. In general, poorer roads have less development on them. When a roadway is improved, development pressures increase.

Building permits, (shown on the following page), as recorded by section in the township, also help to identify where residential development has been concentrated in recent years. The past decade has seen the highest concentrations of residential building activity continue adjacent to lakes.

## **Multiple Family Residential**

Currently, there is no multi-family development in the township because of the community's rural nature. It is the intent of this plan to direct higher density development, like condominiums, apartments and other multi-family uses, into the City of Newaygo where such developments are supported by public water and sewer and which, in turn, support the City's tax base and economy.

## Residential Building Permits by Section in Brooks Township

1992 - 1993

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

As Reported by WMSRDC in the 1994 Brooks Township Master Plan



1996 - 1999

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

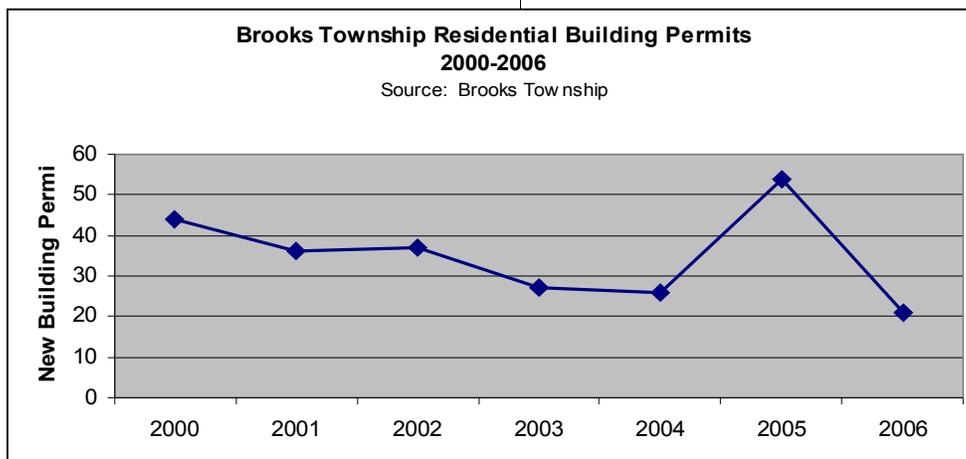
As Reported by Newaygo County/Brooks Township

New housing construction activity in Brooks Township has maintained a steady pace through the 1990s and was on a decline in early 2000 until activity in 2005 doubled the amount of new permits in one year (see graph below). The majority of permits for new construction are occurring south of M-82, primarily along the southern township boundary in Sections 31, 32 and 33. Since the 2000 Census, 245 new homes have been built in the township, which is an average of about 41 homes per year.

### 2000 - 2006 Total Building Permits (BP) by Section

6	5	4	3	2	1
13 BP	3 BP	0 BP	0 BP	1 BP	0 BP
7	8	9	10	11	12
7 BP	3 BP	2 BP	2 BP	2 BP	3 BP
18	17	16	15	14	13
5 BP	3 BP	8 BP	6 BP	10 BP	4 BP
19	20	21	22	23	24
0 BP	5 BP	9 BP	2 BP	2 BP	6 BP
30	29	28	27	26	25
12 BP	10 BP	17 BP	8 BP	5 BP	1 BP
31	32	33	34	35	36
22 BP	24 BP	29 BP	6 BP	4 BP	10 BP

Source: Brooks Township, 2006



### **Manufactured Housing**

Individual isolated manufactured homes can be found in locations across the township. Concentration of these units, known more commonly as manufactured home parks, are found south of 76<sup>th</sup> Street and Brooks Creek (Section 20) and to the north and south of Hess Lake (Sections 29 and 32). A concentration of single-wide manufactured homes located on non-park, scattered, sites is found just south of M-82 in Section 30.

### **Commercial**

Brooks Township has maintained its rural atmosphere in part by the lack of commercial businesses dotting major roadways. Residents of Brooks Township primarily rely on commercial services offered by the City of Newaygo, Fremont, Grand Rapids, or Muskegon.

Commercial development in the township has occurred along M-37, just south of the City of Newaygo. Only four other commercial operations exist currently in other areas of the township:

- a greenhouse operation located to the south of M-82 on the eastern edge of the township;
- a convenience store is located along 88<sup>th</sup> Street on Hess Lake;
- a propane business is located on Croton Drive, a half mile outside of the Newaygo City limits;
- Smuggler's Cove Resturant.

Brooks Township has not experienced the development of scattered

commercial operations. In many other townships in West Michigan, in which this type of sprawl development has occurred, there has been duplication of services, scattered residential growth, and the expensive and in many cases, needless, extension of infrastructure. It is the intent of this plan to keep commercial development consolidated on M-37 near the City of Newaygo and to prevent strip development along M-82.

### **Industrial**

There is no industrial development in the township nor is any intended. Industrial lands are best suited in the City, again, where infrastructure and other City services are readily available.

### **Agricultural**

The identified agricultural areas on the existing land use map are primarily fields that are being actively farmed or are in Christmas tree production.

In years past, Christmas tree farming was more prevalent in the township. Many of those farms are no longer managed and the stands of evergreens have become forest stands.

### **Vacant Land**

Land that falls within this category is not developed. It is typically areas of open field. Some of this land in Brooks Township has been identified as prairie remnants. Pre-European settlement, there were more prairie-like openings. Many rare butterfly and plant species depend on this habitat. These prairies are found mostly in the northeast quadrant of the township.

## **Public/Quasi-Public**

These uses entail:

- Churches
- Camp Calvary
- land owned by the Michigan Department of Natural Resources
- Coolbough Natural Area
- Approximately 3,950 acres of state forest land.

## **Natural Features**

Forests cover over 72% of the township, with water covering another 7% (1,500 acres), and wetlands 2% (300 acres) of the land area. Over 81% of the land in Brooks Township is occupied by natural features.

## **Forest**

The Manistee National Forest accounts for over 3,950 acres of forested land in Brooks Township which represents about 17% of all forest land in the township.

*The Huron-Manistee National Forests are unique in that they were created*



*from abandoned farms and lumbered wastelands that were unwanted.*

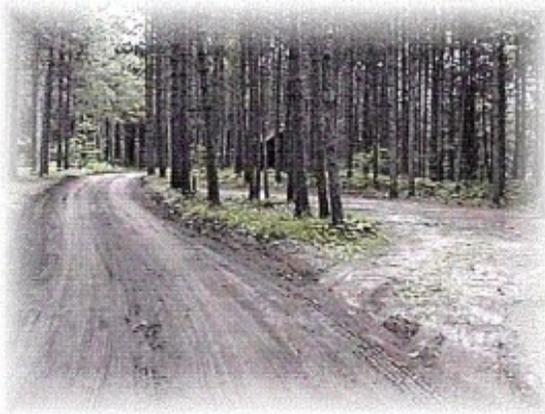
*The Manistee National Forest contains a variety of habitats for bird watching. Deciduous and coniferous forests, lakes, rivers, streams, swamps, and marshes support diverse assemblages of wildlife and plants.*

*During the late 1930's and early 1940's the Civilian Conservation Corp (CCC) planted an amazing number of pine trees giving nature a precision not usually seen. [Today] indigenous plants are moving into the CCC pine plantations, re-establishing natural habitats.* (GORP website)

The Forest also offers other recreational activities valued by Brooks Township residents including:

- canoeing and boating;
- fishing;
- hunting;
- trapping;
- ORV trails (designated);
- scenic drives and lookouts;
- hiking;
- cross-country skiing (designated).

A majority of the forested land in the township, more than 12,500 acres, is in private ownership. These “native” forest stands, classified as dry-mesic northern forests, are full of oak, white pine and other hardwood and softwood species.



A small segment of forests in the township are abandoned Christmas tree farms. They can be distinguished from the “native” forest stands, principally by tree type.

## **Water Resources**

### ***Lakes***

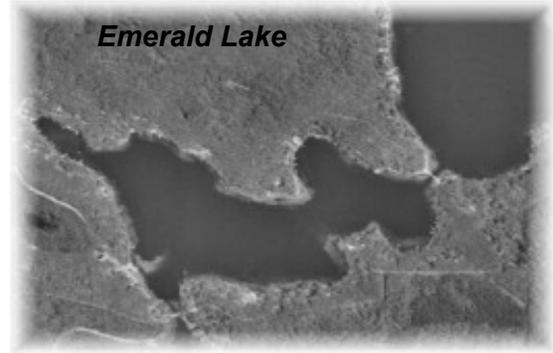
There are ten lakes in the township, including:

- Hess
- Brooks
- Sylvan
- Emerald
- Butterfield
- John Ford
- Ibeys
- June
- Pickerel
- Pettit

The township’s lakes range in size from a few acres to one of over 700 acres. The lakes are typical for southwest Michigan in that they range from mesotrophic (tending to be conical with respect to depth; having clear, cooler waters with native vegetation) to eutrophic (water tending to be shallow, warm and nutrient rich as well as murky

and weedy, having both native and non-native vegetation).

Most of the lakes are home to many year round residents as well as supporting seasonal dwellers. However,



the year round populations are growing. Seasonal use has now become nine months rather than three or four. These trends are creating more stress on the quality of water in the lakes. Increased recreational use and nutrient loading from on site septic systems, landscaping, fertilization and building of new or additional dwellings and accessory buildings contribute to the creation of poor water quality.



The lakes are recognized as an important part of the quality of life in Brooks Township. Thankfully, the



inhabited lakes have Lake Associations and/or Lake Boards. Residents and non-resident property owners are supportive of and are being aggressive with respect to water quality, green spaces, building and zoning issues and issues of public health and safety. Several projects are ongoing, have been completed or are contemplated with respect to the care of these precious resources, our lakes.

## Hess Lake

### **Rivers & Streams**

It is the rivers and streams throughout the township that provide a connected “greenway” network. This greenway is as important to the residents of Brooks



Township as it is for habitats for many different species of animals and birds.

The Muskegon River is the largest river in the township. Logging early in the township’s history damaged the River’s natural integrity. Logging stripped slopes of existing vegetation and increased erosion. Subsequent restoration attempts and the end of the logging era partially restored some elements of the original river ecology. Erosion is a natural process, but still one of concern. Sediment erosion can cover existing fish spawning areas in the river, increase water temperatures and degrade overall quality of the river.

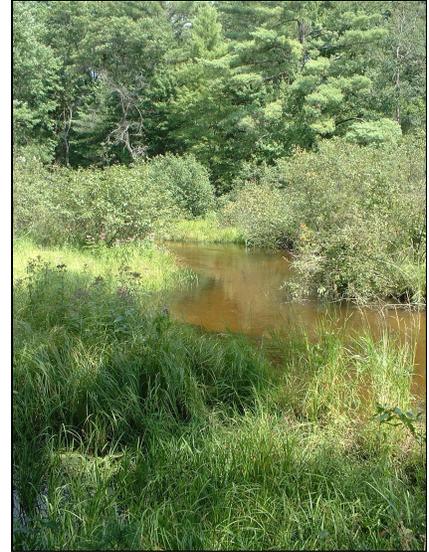
Several Muskegon River Watershed programs are currently focusing on further restoration and public education efforts. Education efforts will be aimed at prevention of further degradation by future development. Even with erosion concerns, the Muskegon River itself remains a cool water fishery which means it can support both cold water fish (e.g., trout and salmon) and warm water fish (e.g., bass and walleye). Currently the state estimates that the fishery generates over 2.1 million dollars in revenue annually between Croton Dam and Muskegon Lake. Stocking efforts, including salmon, represent about \$250,000 of annual state investment in the fishery.

*The gravel and cobble beds in the Muskegon River currently provide some of the best spawning habitat in the entire Midwest for salmon, steelhead, trout, and walleye. There are also populations of rare fish, the lake sturgeon and river red horse sucker.*

*...[It] is the steepest free-flowing section remaining within the entire 237-mile long river system.*

*Bigelow Creek and Penoyer Creek are quality cold water tributaries of the Muskegon River. These systems are unique in character in the river's lower watershed. Bigelow Creek flows for much of its length through steep forested banks...*

*Penoyer Creek has warm water sources and flows for a relatively short distance, but has cold water due to the steep sandbanks and large influx of groundwater.*



Penoyer Creek



Bigelow Creek

## Insert Natural Features Map

## Brooks Township Land Use Vision

### Wetlands

Wetlands identified on the Natural Features map come from general state and federal wetlands inventories.

Wetlands are scattered in Brooks Township, but found primarily along water bodies. They are important to groundwater and surface water quality and the overall environmental quality of the township because they provide:

- wildlife habitat;
- sediment control;
- nutrient removal;
- sites of



groundwater discharge (often found where the groundwater table intersects the land);

- barriers to erosion;
- flood storage and conveyance.



The “Brooks Township Land Use Vision” identifies the presence of rich conifer swamps that act as buffers to wetlands.

The document also calls for more information to be gathered about wetlands in the township, with specific regard to location. Such an inventory would allow township leaders to assess the appropriateness of wetland regulatory measures beyond those of the State. (The State of Michigan Wetlands Protection Act establishes the authority for local governments to regulate wetlands.)

Some wetlands are regulated by the State of Michigan Department of Environmental Quality (MDEQ). Those that are include:

- ✓ contiguous to a water body (without regard to size) and;
- ✓ non-contiguous wetlands greater than 5 acres in size.

## **Ground Water**

The residents of Brooks Township rely on ground water to supply their potable water needs. The use of ground water as the primary source of drinking water is expected to continue over the life of this plan. Accordingly, it is extremely important to maintain land use (zoning) regulations conducive to the long term protection of ground water and to educate the public on the need for ground water protection measures. (See also the section on Soils.)

### **Prairies**

As detailed in the *Brooks Township Land Use Vision*, Brooks Township is blessed with a variety of dry sand prairie plants species.

These are found on dry sand prairie remnants located in both the northerly and southerly sectors of the townships.

The presence of the prairie offers a unique quality to the township’s environmentally sensitive, rural, character. However, modification of prairie lands may easily occur unless protected from over development and use.

### **Rare Species**

## Ore-Ida Prairie



The natural features in the township provide habitat for many wildlife species. Those listed in this section are considered rare and potentially vulnerable by the Michigan Department of Natural Resources. Protection of these species is dependent upon the preservation of the natural features in the township.

### Birds

- Bald Eagle
- Common Loon
- Golden-winged Warbler
- Cerulean Warbler

### Fish and Reptiles

- Lake Sturgeon
- Pugnose Shiner
- Wood Turtle

### Butterflies, Moths and Other Insects

- Dusted Skipper Butterfly



**Karner Blue Butterfly**



**Bald Eagle**



**Wood Turtle**

- Frosted Elfin Butterfly
- Henry's Elfin Butterfly
- Karner Blue Butterfly
- Ottoe Skipper Butterfly
- Culvers Root Borer Moth
- Spartina Borer Moth
- Great Plains Spittlebug

### Plants

- Alleghany Plum
- Black-Fruited Spike-Rush
- Blue-eyed Grass
- Golden Alexanders
- Grooved Yellow Flax
- Prairie Smoke
- Side-oats
- Virginia Meadow-Beauty
- Western Silvery Aster
- Lupine
- Big Blue Stem grass
- Birdsfoot violet



**Blue-eyed Grass**

### Soils

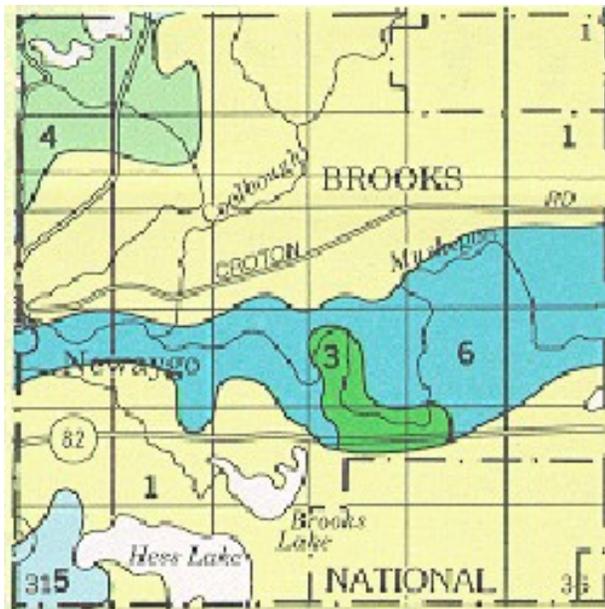
#### *Broad Land Use Considerations*

*Each year, some areas in Newaygo County are developed for residential, commercial, or industrial uses. Deciding what land should be used for urban development is a very important issue. The general soil map is suitable for broad land use planning...*

*Soil Survey: Newaygo County,  
Michigan*

Too often, soils information is overlooked in planning because soils mapping is done by sampling at large intervals, not parcel-by-parcel. A soil survey is meant to be, and is, a good over-all guide where site-by-site examination is necessary.

Soils are an important and inherent natural feature to a community. Soils dictate, among other things:



- what types of vegetation (native or non-native) will grow (for example pines in sandier soils);
- whether a drain system is needed to build a home with a basement; and
- whether sand needs to be hauled to a site for road development.

**1. Plainfield-Grattan-Brems;  
suitable for building except for  
on steep slopes, poorly suited  
for septic tanks**

**3. Glendora-Abscota-Anglansee;  
floodplain soils, not suitable for  
development or septic tanks**

**4. Marlette-Metea-Spinks; fairly  
well suited for development and  
septic, erosion concerns**

**5. Coloma-Spinks-Metea;  
suitable for building and septic  
tank absorption, slope  
limitations**

**6. Toogood-Boyer; suitable for  
building and septic tank  
absorption, slope limitations**

Overall, many of the soils in Brooks Township are well-suited to forest production. Their sandy texture is ideal for pine species.

In fact, many of the soils that were cleared for farming were not productive. This texture may also make some areas fairly suitable for development, but raises large concerns regarding septic suitability for standard (tiled) systems due to the rapid rate of percolation which occurs in these soil types. Areas which are typically unsuitable for development or septic include the northwest portion of the township, as well as the central section along the Muskegon River floodplain. Along the River, soils *may* be suitable for development and septic tank absorption; however, steep slopes serve as an extreme limitation in most cases.

### **Transportation**

The capacity of the existing transportation system in a community must be examined in conjunction with changes in land use. Land use affects transportation systems by:

- the type of development (commercial, residential, etc.);
- intensity;
- location; and
- design and location of access to the use.

The transportation system in Brooks Township is part of a much larger network that operates regionally, statewide, and nationwide. It is principally made up of roads. For planning purposes, roads are classified by movement and access functions. (Refer to the map on following page)

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### **Roadway Classifications**

A majority of the township's major roads are classified as arterial roadways. Arterial roads:

- Serve large volumes of through traffic (major arterials) or localized, shorter distance traffic (minor arterial).
- Access to abutting land use restricted, to maintain high-level traffic service.
- Act as boundaries of housing and community areas.
- Connect to collector streets.

### **Description Of Existing Roadway Infrastructure**

The two major arteries in the township are M-82 and M-37. M-82 traverses Brooks east to west, intersecting M-37 in the City of Newaygo. It runs to the east of Brooks Township to Howard City, just beyond U.S. 131. M-37 continues north to Traverse City and south to Grand Rapids.

The other roads are paved county roads, unpaved county roads, graded local roads and unimproved local roads (on the Transportation Map as two track or seasonal roads). These roads fall under the jurisdiction of the Newaygo County Road Commission. Several other access roads are private, some of which are nonconforming in terms of current township design standards.

Insert Transportation Map

## **Roadway Character**

A majority of the roads in the township are currently tree-lined, which contributes significantly to the rural character of the area. Pines and other deciduous tree species line M-82, which carries more traffic yet is *visibly* less developed than Croton Drive, a paved county east-west road that traverses the township to the north of the Muskegon River.

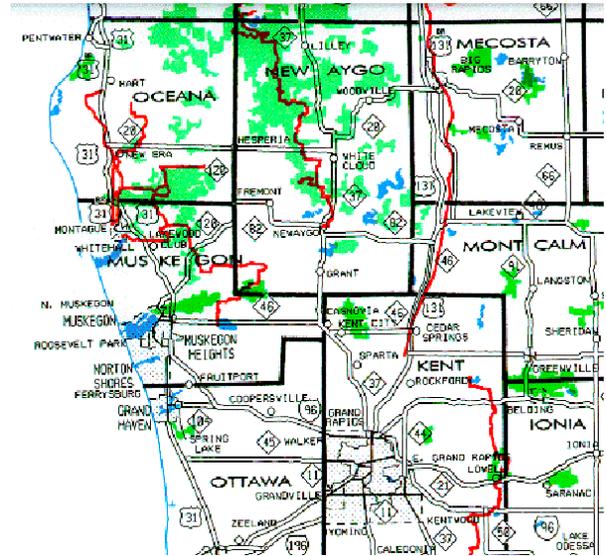
## **Existing Transportation Studies**

**M-37 Corridor Study (July 1998)** completed by *West Michigan Shoreline Regional Development Commission and the M-37 Corridor Study Steering Committee* was completed to... *identify planning and development issues for a major transportation artery, undertake research and analysis, develop policy guidelines, and recommend various actions to the appropriate transportation planning bodies.*

Input from local businesses was taken into consideration in this study as recognition of the Corridor's economic importance. The following are issues and recommendations brought to light in the Study as related to Brooks Township:

- Traffic congestion and turning between 88<sup>th</sup> Street and M-82 should be addressed by 1) an MDOT traffic study to look at decreased speed limit along this stretch and/or 2) looking at the feasibility of adding a turning lane or simply widening this section of M-37.
- A standardized site plan review process [should] be adopted by all jurisdictions along M-37 to provide

for a cooperative, unified approach to development along the Corridor.



**Regional Transportation**

## **Roadway Improvements**

The Michigan Department of Transportation (MDOT) does not currently have plans to improve the segments of M-82 and M-37 in Brooks Township (based on the *5 Year Road & Bridge Program published by MDOT 1999-2004*).

The improvements of other roads in the township are the responsibility of the County Road Commission. The Commission is responsible for construction of all roadway and bridge improvements. However, the township is normally called upon to fund a major part of any improvement. Discussion with the Newaygo County Road Commission staff, completed as part of the planning process, finds no significant planned improvements to the township's roadway system over the next several years. Understanding these facts, it is the land use policy of the township to restrict density and limit the extent of commercial areas to

prevent unnecessary pressures on the existing roadway.

Another factor that influences development and the movement of people and goods in the township is the limitations natural features pose. Because of surface waters, north/south movement is limited in the township. East/west movement is also limited and large sections of the township simply have no roadways (e.g., north of 58<sup>th</sup> street between Basswood and Poplar).

# DEMOGRAPHICS

## Data

Understanding the physical, social, and economic characteristics of the township is necessary to help determine a future direction. Past trends and current conditions provide a valuable perspective on growth and needs. The following pages offer insights regarding the community's composition and provide both a historical perspective and useful comparisons with neighboring communities.

## Population

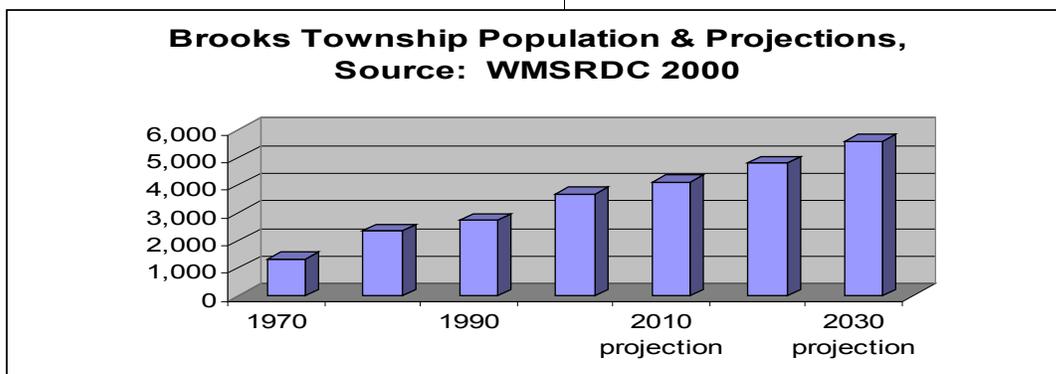
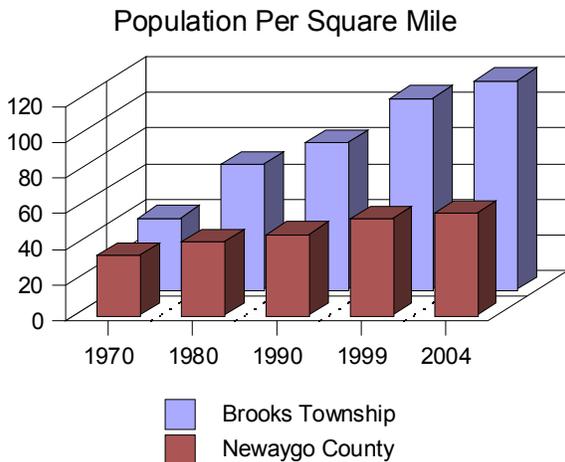
The U.S. Census (2000) reported a township population of 3,671. This represents an addition of 943 people, a 35 percent increase since the 1990 Census. Between the years 1970 and

2000, the township's population increased from 1,330 to 3,671 persons, a 30-year growth rate of 176 percent.

The accompanying graph shows the overall population density of Brooks Township as compared to Newaygo County, which has experienced less overall growth than the township. Compared to Newaygo County as a whole, the township's population density is increasing at a much faster pace. Increases in density equate to increases in land development area (e.g. break-up of parcels to support housing development, visual presence of development, etc.)

Population density increases also support strong growth in the township. Determination of density can be indicated by the number of residents per square mile of township area. In 1970, the township's population density was 40 people per square mile. In 2000, the density increased to 116 people per square mile.

Despite the growth and development pressure that has occurred in the area, Brooks Township remains essentially rural in terms of population density and residents still have a peaceful and quiet place to call home.



Recent reports concerning the population have given rise to concern over expansion of development into what have traditionally been regarded as more rural places. In fact, Newaygo County is ranked 7<sup>th</sup> in percentage increase (21%) out of the counties in Michigan, after Ottawa County (23%). However, the net increase in population for Newaygo was reported as 8,150, which is significantly less than Ottawa County's increase of 42,493.

### **Population Projections**

Using the same census numbers for population, population projections through the year 2030 have been calculated based on past growth rates and other measures. Caution is needed when utilizing projections, as changes in the economy, real estate markets, and other factors are difficult to predict. The township's resident population, as well as the population of surrounding governmental entities, is anticipated to continue to grow strongly between the 2000 to 2030 period.

**Population Age Breakdown – Brooks Township - 2000**

Gender	Pre-School 0-4	School Age 5-17	Post School 18-24	Family Forming 25-44	Empty Nester 45-64	Retired 65+
Female	105	391	84	508	465	261
Male	110	388	113	491	500	255
*Total (%)	215 (6%)	779 (22%)	197 (5%)	999 (27%)	965 (26%)	516 (14%)

Source: U.S. Census

\* Percent figures represent percent of the total township population for the specified category. Percentages have been rounded.

The presence of the City of Newaygo at the western boundary of Brooks Township has planning related implications, especially with regard to commercial and industrial development, and thus data for the city is also included periodically in this section.

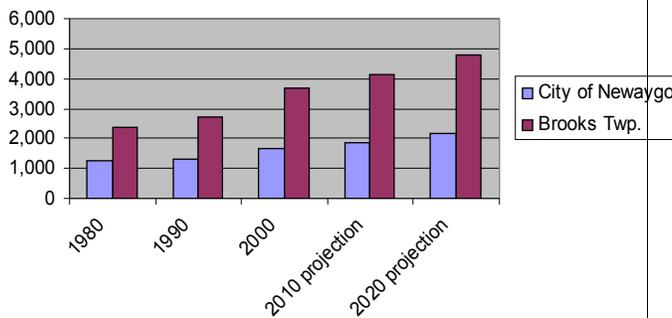
**Age of Population**

The age of township residents provides an indication of economic, transportation, recreational and other current community needs and how these needs will change as the composition of the population changes. Sensitive community planning can help Croton maintain its high quality of life and provide the opportunity for housing and services which benefit every segment of the population.

The above table provides detail on the township’s resident population base by age category based on the 2000 U.S. Census. The information indicates:

- Slightly over 20 percent of the township’s population is comprised of young adults and children between the ages of 5 and 19.

**Twp. and City Growth Trend**



The rate of growth for the City of Newaygo and Brooks Township show a similar population projection of growth.

- 14 percent of the population is 65 years or older.

The median age of Brooks Township residents is 39. Male residents slightly outnumber female residents (51% to 49%).

**2000 Household Population Count**

Household Type	Persons Living In Household Setting
Family (2 or more persons)	3,135 (86% of total population)
Non-Family (1 person only)	528 (14% of total population)

Source: U.S. Census

Almost 26% of the township’s population falls in the empty-nester or retirement age category, aged 45 years and older.

**Seasonal Population**

Although accurate counts are not available, it is roughly estimated that the township’s seasonal (summer) population increases the resident base by 1,000 to 2,000 people during peak periods (e.g. summer weekends, holidays, etc.). These numbers include seasonal home owners, vacationers, people using the township’s system of lakes and rivers, and others. Conversely, during winter months there is a slight drop in population as a segment of the township’s retired resident’s travel to warmer climates.

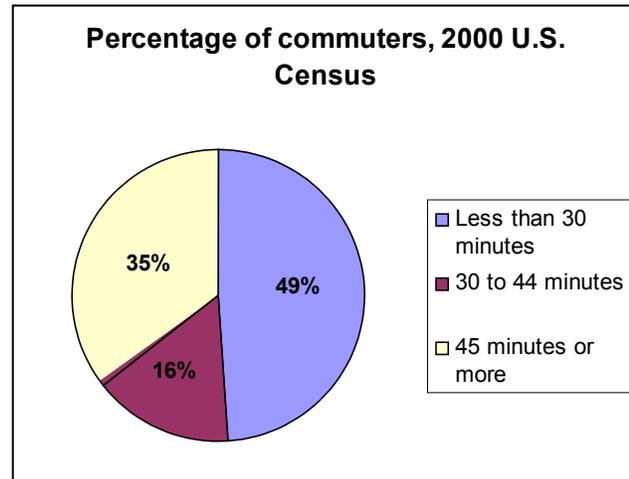
Eighty-three percent of the population resides in a family household (two or more persons). Twenty seven percent reside in a non-family household or a

single-person household. Sixty one (61) percent of households reflect married couples.

**Housing Affordability**

The median housing value for Brooks Township in 2000 was \$111,600, a 119% increase in value from 1990 median housing values of \$50,900. The median housing value in 2000 for Newaygo County was \$88,700. The higher housing values can be attributed to the natural resources abundant in Brooks Township, including several inland lakes and river that provide for a desirable waterfront living environment.

The rise in median housing value may be related to former seasonal units converted to year round use (the 2000 Census reported approximately 23% of the township’s housing stock as



seasonal, down from the 1990 Census of 34.5%.

**Income**

Eight-nine percent of the population is above poverty level (e.g. above 50% of the county median income). Eleven (11) percent of the population is at or below poverty level. This is down from the 1990 census of seventeen (17) percent.

<b>2000</b>	<b>Household Income</b>	<b>Family Household Income</b>
Median Income	\$42,434	\$50,440
Per Capita Income	\$19,088	-----

Source: U.S. Census  
*Household refers to a single-person, while family household refers to a household with two or more people*

**Transportation**

The rural living environment of Brooks Township does not provide a sufficient supply of nearby employment centers.

Average commute time to work is 36 minutes. More than half of the workers in the township commute more than 30 minutes to work. Grand Rapids proximity falls within this commuting time frame.

With an increase in population figures in a mostly rural area with a low base of commercial and business development, Brooks will continue to see new residents attracted to a rural setting in which to live, while working elsewhere.

# CHAPTER 3

## GOALS & OBJECTIVES

*To serve Township citizens while protecting the environment and our way of life.*

*Brooks Township Mission*

Brooks Township recognizes the importance of its unique environment, including the lakes, river, streams, open prairies, and forests to the residents of the township and the region. Environmental quality is the backbone of the community, affecting the health and welfare of all.

The goals and objectives in this section attempt to maintain and protect the environment, and thus the environmental quality and rural character of Brooks Township through sound planning principles.

### NATURAL FEATURES

**Goal:** To preserve the quality of life of Brooks Township residents by protecting its natural resources and rural character.

#### River, Tributary, & Lake Objectives:

1. Support local initiatives to bring sewer infrastructure to protect water bodies from nutrient overloading with regard to individual septic systems.

2. Maintain the septic evaluation program as a means to protect surface and groundwater quality in the Township.
3. Reduce the amount of impervious surface to reduce stormwater runoff in the township by regulating the density/intensity of development and limiting lot coverage for structures and paving, particularly around surface water.
4. Maintain the rural character of surface water bodies through the preservation of natural vegetative buffers, building setbacks, and the implementation of other environmentally friendly development (zoning) regulations.
5. Develop and implement an education strategy (as outlined in the "Summary of Recommendations to the Citizens of Brooks Township" section of the Land Use Vision) to inform property owners and recreationalists of the threats to water quality and practices to improve water resources.
6. Enforce wetlands protection in the township by ensuring that development of properties with wetlands has been evaluated by professionals to limit development impacts upon them.
7. Adopt a local wetlands ordinance to protect wetlands not covered under state regulations. Also considering enacting a buffer area around wetlands as an

added measure of protection for the resource.

8. Explore incentives to encourage property owners to protect wetlands, open space and natural features on their property.
9. Limit the density of waterfront development by requiring the combination of nonconforming lots.
10. Implement anti-keyholing measures to protect the carrying capacity of the lakes.
11. Coordinate with neighboring municipalities to develop measures to protect water quality.
12. Enact rules and incentives for stormwater filtering for developments beyond the scope of Newaygo County Soil Erosion and Sedimentation Ordinance including rain gardens, grass swales and perennial beds.
13. Limit discharge and withdraw of water into or out of the township's groundwater supply promoting the long term preservation of water resources.
14. Enact a wellhead protection overlay district to protect public water supply for the City of Newaygo and consider additional measures to protect private wells of township residents.
15. Keep density low and lot sizes larger along the Muskegon River to protect the natural features,

water quality and wildlife habitat functions of the river corridor.

16. Improve open space development standards including provisions for contiguous open space and trail connections between developments.
17. Enact ordinance provisions which require the use of a Planned Unit Development for any proposal that involves over twelve (12) dwelling units.
18. Investigate the use of natural beauty road legislation to protect the rural character of roadsides.

### **Forests, Prairies, and Open Space Objectives:**

1. Promote the acquisition and protection of environmentally sensitive lands by the Michigan Department of Natural Resources, The Nature Conservancy, the Land Conservancy of West Michigan, Brooks Township and others.
2. Promote the preservation of existing public and private lands.
3. Prevent the clearing of land prior to development approvals to promote the conservation of natural resources in the design of proposed developments.
4. Educate citizens on the need to manage private sites for purposes of wildlife habitat, maintenance of rural character, and the protection of natural features.

5. Implement the recommendations outlined in the Brooks Township Land Use Vision and other planning documents as an integral part of protecting the environment.
6. Maintain natural vegetation greenbelts along the township's major arteries (e.g. M-37, M-82, and Croton Road) in order to maintain or create visual impressions of rural character.
7. Investigate requiring a natural vegetation greenbelt at all road frontages for residential development.
8. Implement zoning ordinance regulations to require a certain percentage of natural open space in all districts, not just cluster developments or planned unit developments.
9. Reevaluate landscaping standards to promote natural looking, native vegetation rather than an overly-groomed suburban landscape.

## **RESIDENTIAL**

**Goal: To provide for orderly residential growth within the township that maintains environmental quality and protects the property rights of individual citizens.**

### **Objectives:**

1. Maintain township and citizen involvement in the planning

process to continue to protect the interests of property owners.

2. Utilize PUD, cluster zoning, and other open space techniques to protect natural features to retain an integrated greenway network throughout the township.
3. Maintain a low density residential environment consistent with current development patterns, as well as the public's stated desire to retain Brooks Township as an environmentally sensitive, rural community.
4. Create less dense second and third tier development along the lakes and waterways to protect water quality while still allowing people to enjoy waterfront living.
5. Restrict moderate to high density housing to areas conducive to such use. Such areas should possess all-season roads and nearby proximity to public facilities and services.
6. In waterfront areas, promote the protection of a strip of vegetation to retain a more natural character to the lakeshore and to protect water quality.
7. Consider enacting traffic calming measures in developments to prevent speeding in residential developments. This tool could also be applied to commercial development.

## **COMMERCIAL AND INDUSTRIAL**

**Goal: To recognize and promote the City of Newaygo as the area's primary commercial and industrial center, while avoiding unnecessary sprawl into rural township locations.**

### **Objectives:**

1. Limit additional commercial re-zoning of properties within the Township to protect rural character.
2. Re-evaluate the amount of commercially zoned land in the Township to be more in line with what the area population can support in terms of commercial development.
3. Orient future industrial development to the city's planned industrial park, as opposed to the creation of industrial districts within the township.
4. Work with the City of Newaygo to investigate the potential of an "urban growth boundary" to consolidate more intense land uses close to the City.
5. In the event new commercial or industrial development is proposed for the township, encourage the use of inter-governmental tax sharing agreements with the City of Newaygo to meet the infrastructure needs (e.g. sanitary sewer and public water) of said development as opposed to the use of on-site septic systems and wells.
6. Make business areas more attractive through cooperative beautification efforts among business owners in Brooks and Garfield Townships and the City of Newaygo.
7. Investigate the potential of group purchases for such things as signs and parking lot paving for the business community as a means to improve the quality of the business district.
8. Recognize that tourism is an important part of the local economy; as such, land use controls should include standards for the visual quality of development.
9. As part of aesthetic protection, reevaluate the existing sign regulations and change as necessary to prevent clutter and improve the visual quality of the area.
10. Implement the M-37 corridor study and consider enacting access management standards in the zoning ordinance to promote shared drives and safer access along M-37.
11. Develop a similar consortium for M-82 as was developed for M-37 to prevent inappropriate development among several communities.

## **PUBLIC SERVICE AND INFRASTRUCTURE**

**Goal: To provide appropriate services and infrastructure to existing and planned development without unnecessary and costly extensions.**

### **Objectives:**

1. Retain the integrity of the transportation network in Brooks Township by utilizing Michigan Department of Transportation and Newaygo County Road Commission access management principles and techniques.
2. Work in conjunction with the Newaygo County Road Commission, MDOT, the West Michigan Regional Planning Agency, and surrounding units of government, continue the township's participation in the analysis of future improvements to roadways within the township provided they do not compromise the rural integrity of the Township.
3. Coordinate future utility system's needs with the City of Newaygo, as opposed to the construction of township utility systems.
4. Enact standards to prevent excessive light glare which inhibits resident's ability to see the night sky.
5. Evaluate the road improvement policy which considers growth control measures in the township

and consider limiting the use of private roads as a means to control development.

6. Evaluate a strategy and policy for substandard public and private roads.
7. Implement the recommendations of the Brooks Township Recreation Plan.

## **QUALITY OF LIFE**

**Goal: Protect the rural pace and comfort of a quality rural lifestyle for township residents.**

### **Objectives:**

1. Continue and expand enforcement of the township's junk/blight ordinance to maintain the township's natural beauty consistent with feedback received in the 2006 Master Plan Survey.
2. Promote the enforcement of marine safety regulations and additional measures indicated by citizen input to address concerns about noise, safety and environmental conditions on the Muskegon River.
3. Promote the Newaygo Community Recreation and Natural Conservation Plan and support its goals of increased recreation opportunities within the township.

# CHAPTER 4

## LAND USE PLAN

The future of Brooks Township is, perhaps, best expressed by the township's land use plan. The land use plan identifies the range of development districts proposed for all sectors of the community. It details the location and extent of the township's programmed land use types.

The plan calls for a series of six (6) land use districts and four (4) conservation overlays.

The land use districts include:

- Public (P)
- Rural Residential (RR)
- Low Density Residential (LDR)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- General Commercial (GC)

The conservation overlays include:

- Rural Character (RC)
- Preservation (PV)
- Highway Vista (HV)
- Greenbelts (G)

The identification and spatial arrangement of the districts and overlays were based on a comprehensive analysis and assessment of:

1. Existing land use character and development trends.
2. Analysis of the township's physical character (e.g. soils, water features, etc.).
3. Demographic characteristics and trends.

4. Planning and development goals as prepared by the Township Planning Commission based on the input of area residents, community leaders, environmental and planning professionals, the Brooks Township Board, and others.
5. The recommendations of the Brooks Township Land Use Vision.
6. The need and desire to protect the township's unique natural character.
7. Existing zoning regulations.
8. Development patterns of adjoining units of government.

## PLAN DISTRICTS

The land use plan districts are displayed on the accompanying Brooks Township Future Land Use Map and described as follows:

**Public** - The designation "Public" represents undeveloped, natural, land areas under local, state, or federal ownership. The district's natural character, combined with the large amount of acreage comprising the district, contributes significantly to the township's desired rural atmosphere. The district is characterized by:

- a) Highly concentrated/ connected large acreage sites, many in excess of 80 or more acres.
- b) Presence of old fields, prairie, or forests, as well as combinations thereof.
- c) Abundance of native flora and fauna, as well as the presence of certain

- d) threatened and/or endangered species.
- e) Naturally connected greenways highly beneficial to the movement of wildlife
- f) Abundance of surface water features conducive to the support of cold water fish species.
- f) Interspersed with, or contiguous to, undeveloped large acreage sites in private ownership.

The Brooks Township Master Plan calls for the Public District to primarily remain in a natural state with development highly restricted. Land uses should be generally limited to public outdoor recreational activities such as hunting, fishing, hiking, wildlife observation, canoeing, cross country skiing, and like activities. Certain managed areas may also be conducive to more intensive forms of recreation including outdoor camping and snowmobiling. Conversely, areas possessing unique flora and fauna should be protected from uses likely to significantly disrupt, or possibly destroy, these fragile resources.

**Residential** - The plan designates four (4) Residential Districts. These are classified as Rural Residential, Low Density Residential, Medium Density Residential, and High Density Residential. While a majority of the township's residential area falls under the Rural Residential category, the delineation of four (4) districts was determined by the Planning Commission to be necessary to support the range of residential opportunities desired by

township residents. The districts are described as follows:

**Rural Residential** - The Rural Residential District represents those areas of the township programmed for the lowest level of residential density. Generally, Rural Residential areas are located distant from the City of Newaygo. Much of the district is interspersed among the lands occupying the Public District classification. The Rural Residential District is characterized by:

- a.) Large parcel development. The district is characterized by parcels of at least five (5) acres in size, however, it is common to find significantly larger sites. Many of the parcels are void of any development.
- b.) Lack of public water and sanitary sewer, nor are such facilities planned over the next twenty (20) or more years. Homeowners rely on the use of on-site wells and septic systems.
- c.) Lack of public water and sanitary sewer, nor are such facilities planned over the next twenty (20) or more years. Homeowners rely on the use of on-site wells and septic systems.

- d.) Much of the land area is used for outdoor recreational activities such as hunting, cross country skiing, snowmobiling, wildlife observation, nature photography, etc.
- e.) Limited system of public roads consistent with the area's low density residential rural character.

**Low Density Residential -**

The Low Density Residential District represents those areas of the township programmed for relatively low levels of residential density. Most of the area identified for Low Density Residential is located in the southwest portion of the township, between the City of Newaygo and Hess and Brooks Lakes. Smaller Low Density sectors are found north of the city, and near Emerald and Sylvan Lakes. To some degree, the district serves as a transitional area, separating Rural Residential areas from the urbanized city. The Low Residential District is characterized by:

- a.) Parcels ranging from two (2) to five (5) acres in size.
- b.) Lack of public water and sanitary sewer, nor are such facilities planned over the next twenty (20) or more years. Homeowners rely on the use of on-site wells and septic systems.

- c.) Scattered presence of natural flora and fauna.
- d.) Roadway system is more highly developed (e.g. miles of road), when compared to the Rural Residential. This is due to the increased level (density) of housing development.
- e.) Close proximity to the City of Newaygo and the township's major lakes.

**Medium Density Residential -**

The Medium Density Residential District is generally confined to the "platted" areas surrounding Hess Lake, Brooks Lake, John Ford Lake, Emerald Lake, and Sylvan Lake. Much of the district is represented by plats created years ago, prior to local planning and zoning efforts. Because of this existing or historic development, the characterization that follows may not be feasible in all cases. Similar to many other inland lakes throughout Michigan, shoreline areas were subdivided into small parcels and sold for seasonal cottage development. Over the years, cottages have either been converted to year round use or replaced by new housing development.

The Medium Density Residential District is characterized by:

- a.) Parcels of up to one (1) acre in size as follows:
  - unplatted areas - one acre; and

- existing plats - less than one acre provided on-site water and sanitary requirements can be met.

(It is noted that this district is characterized by a lack of public water and sanitary sewer.

Homeowners rely on the use of on-site wells and septic systems. In this district, the township strongly supports initiatives by district property owners to investigate and, as needed, implement provisions for public utilities in order to prevent degradation of ground water and surface water resources.)

- b.) Scattered presence of natural flora and fauna.
- c.) Roadway system is more highly developed (e.g. miles of road), when compared to the Low Density Residential District. This is due to the increased level (density) of housing development.
- d.) Close proximity to the township's major lakes.

**High Density Residential -**

The High Density Residential District represents those areas of the township programmed for the highest levels of residential density. The district also provides opportunity for the placement of manufactured home parks and apartments. Due to a

lack of demand, as well as a lack of public infrastructure, the geographic extent of the High Density Residential District is fairly limited.

The district is characterized by:

- a.) One (1) acre parcel size for single-family detached homes, with larger size sites, with an overall minimum of five (5) acres recommended for apartments and manufactured home parks. The plan recommends that apartment complexes be developed at not less than one (1) acre per housing unit with a half (0.5) to one (1) acre additional provided for each unit. This is to provide for adequate parking, on-site drainage, septic and well siting, space for recreation and proper buffers between this and other uses. It is recommended that manufactured home parks establish a base site area of not less than ten (10) acres, with additional increases based on increasing park size.
- b.) Lack of public water and sanitary sewer. The plan recommends that apartment and manufactured home park developments either secure public utilities from the City of Newaygo, or construct on-site, approved, packaged systems capable of

supporting the proposed development. Linkage to city utilities should be based on arrangements acceptable to the Brooks Township Board.

- c.) Close proximity to major, all-season, roads.
- d.) Close proximity to the City of Newaygo and public facilities and services.

**General Commercial** - The Master Plan calls for one (1) commercial district, referred to as General Commercial. As detailed on the Future Land Use Map, the General Commercial District is located as a liner strip, east of M-37, between 96th Street and M-82. The General Commercial District provides for a wide range of business related facilities and services including offices, financial institutions, general retail, restaurants, convenience stores, service stations, and similar facilities. The district does not provide for industrial uses.

The district is characterized by:

- a.) Minimum one (1) acre parcel size.
- b.) Lack of public water and sanitary sewer.
- c.) Immediate proximity to M-37.
- d.) Close proximity to the City of Newaygo and associated public facilities and services.

Due to the district's relationship to M-37, and resultant high visibility and impact on traffic, the Master Plan recommends that development in the General Commercial District:

- 1.) Maintain landscape buffers along M-37.
- 2.) Limit the number of curb cuts on M-37. Where feasible, use of shared entry drives should be encouraged.
- 3.) Where feasible, implement cross (drive) connections between sites for purposes of vehicular movement from one site to another (as opposed to re-entering M-37 in order to reach an adjoining site)
- 4.) Where feasible, use shared parking in order to reduce the degree of paved surface area.
- 5.) Restrict the placement of billboards and other unnecessary signage.

## CONSERVATION OVERLAYS

In addition to the Future Land Use Districts, the Master Plan calls for a series of supplementary Conservation Overlays. These are displayed on the Brooks Township Future Land Use Map and described as follows:

**Rural Character and Preservation Overlays** - These are conservation overlays designed to protect the township's system of lakes, rivers, and streams. The Rural Character Overlay includes those areas currently developed, whereas, the Preservation Overlay encompasses locations of a more pristine character. Development standards should:

- a.) Promote natural vegetative buffers/greenbelts along water bodies.
- b.) Where feasible, require the placement of buildings and structures distant (e.g. 100+ feet) from the actual water body in order to encourage the preservation of natural shoreline vegetation, limit shoreline erosion, promote a high quality fisheries habitat, maintain property values, and limit contamination of the ground and surface water resource.

It is recognized that existing development, particularly in the Rural Character Conservation Overlay, may prevent the full implementation of the above standards. However, efforts should be made to achieve the highest levels of protection possible.

**Highway Vista Conservation Overlay** The Highway Vista Conservation Overlay calls for the preservation and maintenance of a natural vegetation strip along the township's major roadways. These include M-82, M-37, and Croton Drive. Development standards should:

- a.) Provide for a minimum twenty-five (25) feet natural vegetation buffer along both sides of each roadway.
- b.) Require new power lines to be setback behind the natural vegetation strip.

- c.) In non-commercial areas, limit signs to small (residential) name plates.
- d.) Encourage wildflower plantings in the non-developed public right-of-way and in clear zone/corner locations.

**Greenbelt Conservation Overlay** - The Greenbelt Conservation Overlay represents those areas of the township identified by the Land Use Vision as critical habitat for the preservation of unique flora and fauna. Development standards should:

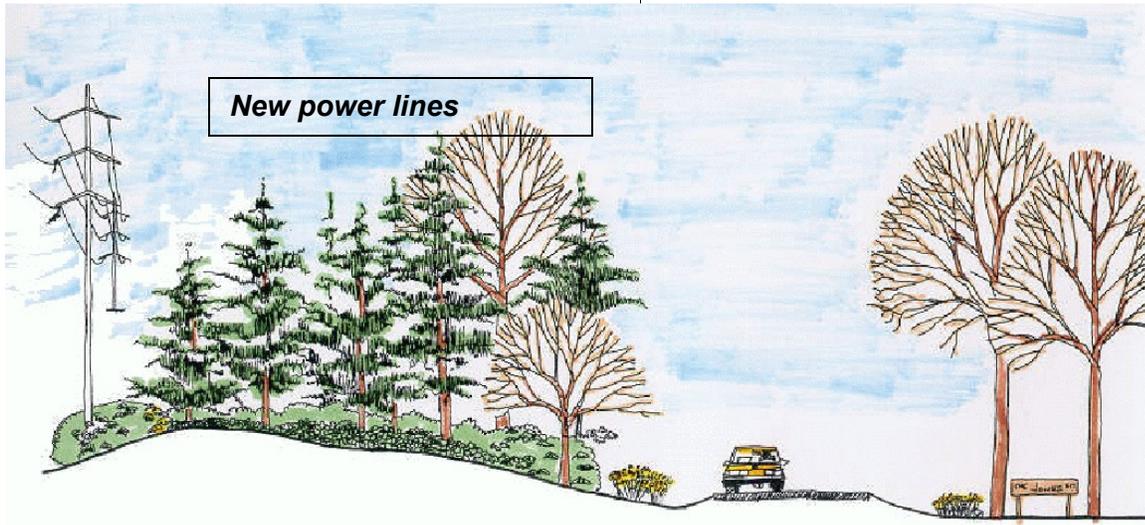
- a.) Promote low density development that has minimal impact on the natural environment.
- b.) Promote maintenance of the natural habitat.

## **INDUSTRIAL DISTRICT**

The Master Plan does not provide for an Industrial District. Due to the township's close proximity to the City of Newaygo Industrial Park, combined with a lack of public utilities and non-existent demand, the plan recommends that future industrial development be oriented to the city.

The Planning Commission will monitor industrial land area needs and, if necessary, amend the Master Plan to reflect industrial land area needs.

## Highway Vista Overlay



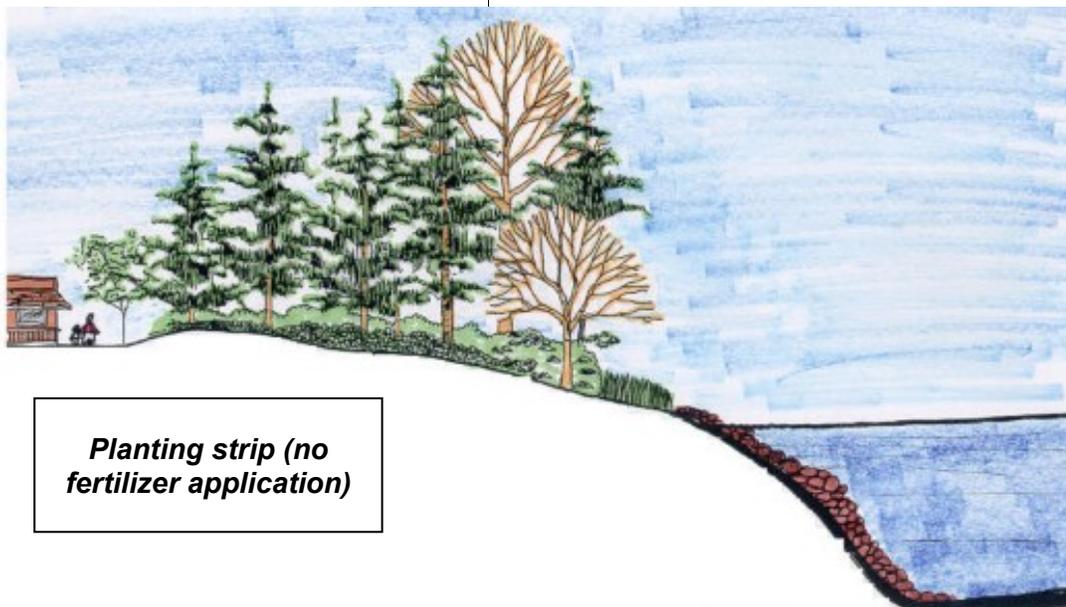
***New power lines***

***Wildflower plantings in the non-developed public right-of-way and in clear zone/corner locations***

***Signs limited to small (residential) name plates***

***Preservation of natural Vegetation (25 feet or more)***

## River, Tributary and Lakefront Overlay

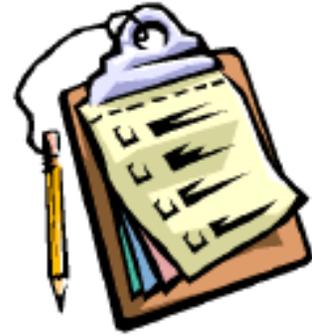


***Planting strip (no fertilizer application)***



**Insert Future Land Use Map**

# Appendix A



## 2006 Citizen Input Survey

### Brooks Township Survey Results

July, 2006

Earlier this year, Brooks Township sent a community survey to every tax payer in the township. The survey was mailed to 2,100 property owners. The Township received 175 completed surveys, for a response rate of 8 percent, which is close to the average expected return rate for mail-out surveys. Those who respond to mailed surveys tend to be individuals who feel strongly about the issues in the survey. These individuals generally provide a more educated view and may be more likely to participate in other phases of the process, making the quality of response more significant than the quantity.

This survey was conducted as part of the five year Master Plan update process, to help evaluate what issues are important-- or not important-- within the community. The intent of the survey is to both provide direction for the planning process and to evaluate the validity of the existing Master Plan goals. The Master Plan serves as a guide for the Planning Commission and Township Board as they make decisions regarding future land use and development. The surveys helps gauge community opinion, which in turn, will help guide the Master Plan update.

Survey tabulation was conducted by Brooks Township staff and standard percentages were tabulated by LSL Planning. The percentage response rates are presented on the following pages directly on the survey format that residents received. Note that an additional column of "number of respondents" has been added to the survey format, because not all people responded to all questions. The percentages given are computed only from those who responded to the question. The highlighted boxes bring attention to the highest percentage of similar responses in the majority, anything over 50%. For example, if the majority of the responses were agree or strongly agree, those two boxes are bolded. This means that most people felt strongly about the statement posed to them. If the majority of respondents did not agree there was a problem, then likewise, those boxes would be bolded. In some cases, the majority of respondents clearly "weighed in" in one category, for example, over 77% of all respondents agree

that the Township should adopt groundwater protection measures to protect drinking water. Larger percentages in single response categories are bolded if over 40% of the residents responded.

Note the “no opinion/neutral” column located in the center of the response column. In some cases, a high “no opinion” response can indicate a lack of knowledge (or concern) regarding the question. For example, nearly 40% of the respondents had no opinion when they were asked about the township’s fairness in the creation of planning and zoning policies. This response likely means that either they are not aware of the process or may not have an opinion on the statement. A noteworthy “disagree” response is the 53% response rate when asked if the Township should permit expanded residential development along the Muskegon River. This indicates support for limited residential development along the river, which is an existing goal in the Master Plan.

## **TRENDS**

Because many of these questions were tested against each other, such as asking what statements are concerns or local issues, along with what local policy would be supported if implemented, the Township appears to have consensus for several possible implementation programs, such as a wetlands ordinance and groundwater protection measures. Based on the survey results, we identified the following trends:

***Natural Features and Environmental Quality.*** As is often the case in rural communities, respondents gave high priority to preservation of natural features. For instance, for Question 1 in Section 3: “Natural features, such woods and wetlands should be protected,” respondents overwhelmingly “agree” with this statement (77%). In addition, 77% agree that protecting drinking water through groundwater protection measures should be considered (Section 2, Question 6). Sixty three percent (63%) agreed or strongly agreed that “Preserving open space and natural amenities like trees, rolling hills and natural vegetation should be done, even if it meant more regulation” (Section 2, Question 3). These responses show that Brooks Township citizens highly value the natural assets of the township; therefore, land use planning and goals should continue to advocate for the preservation of natural features that make Brooks Township attractive.

## **WETLANDS**

77% of survey participants felt that natural features, such as wetlands, should be protected. An additional 72% felt that Township regulations should preserve natural vegetation and wildlife habitat. 57% of survey respondents felt that the Township should protect wetlands not protected by the State of Michigan, and an additional 52% of respondents felt that all wetlands should be protected through a local ordinance and enforcement program.

## **JUNK/NUISANCES**

73% of all respondents agree that the outdoor storage of junk and abandoned vehicles is a problem in the Township and an additional 76% would like to see

the Township strengthen its junk/blight ordinance and enforcement. Numerous written-in comments provided significant input on the issue of junk and its effect on the rural landscape.

### **GROUNDWATER**

Protection of natural resources received strong support throughout the survey. Residents also felt policies to protect groundwater were important, through the adoption of groundwater protection measures (77%).

**Rural Character** The protection of rural character received strong support throughout the survey, which supports goals in the existing master plan. Protection of rural character received the highest consensus as a local issue out of nine selected responses within the Township at 75%. A series of questions help define 'rural character' in Brooks Township since the concept of rural character can include many things.

When asked, 'What does rural character mean to you?' in Section 3, respondents were able to select from a series of six responses, gauging rural character with the presence of active agricultural land, open space, large setbacks or limited commercial and industrial development. The top response was:

- 1) Reserving forested areas, open spaces and natural fields – 78% -Strongly Agree or Agree
- 2) Preserving active agricultural use of land – 65% -Strongly Agree or Agree
- 3) Limiting Industrial development – 61% -Strongly Agree or Agree

Interestingly, the two lowest ranked responses for rural character related to development setbacks and screening along the roadside, both ranking at 46% 'Strongly Agree' or 'Agree'. While many communities feel rural with houses 'out of sight', survey respondents in the Township seemed to related more to the presence of natural features and open spaces.

**Residential Development** The master plan discusses the continuation of a low density residential environment. Responses from the survey support this-- 60% agreed or strongly agreed that 'new development should "blend in" with the surrounding landscape' and 53% 'agreed' or 'strongly agreed' with 'not expanding residential development along the Muskegon River'. There was not a clear majority response for whether the Township should 'keep the minimum lot size along the Muskegon River at 5 acres', although many did express a concern that there is 'too much residential development along the Muskegon River' (53%).

**Commercial and Industrial Development** Discussion of commercial uses in the previous Master Plan addressed the importance of keeping commercial activities near the City of Newaygo. A large majority of respondents indicated the importance of rural character, and that limiting both 'commercial development' (60%) and 'industrial development' (61%) is related to rural character preservation. Survey respondents did

not indicate a majority preference for the planning or promotion of industrial development or commercial development. Although when asked if 'there is enough commercial development in the Newaygo area, the Township does not need anymore', the responses were equally divided with 36% in agreement with the statement and 35% disagreeing with that statement. Many survey respondents expressed an interest in preventing visual clutter of business signs by limiting the number and size in the Township (63%).

**Regulation and Enforcement** Numerous issues were identified with regulation and enforcement within the Township. Junk and Nuisances received universal support throughout the survey as both a significant issue in the Township (73%) and also a call for more enforcement (76%). Outdoor wood furnaces did not receive a majority opinion on whether the Township should restrict their use on smaller lots. While the protection of groundwater and natural resources received high marks for importance, the maintenance and inspection program for septic systems did not receive clear support in either direction. Interestingly, while many respondents called for stronger enforcement of junk and nuisances, along with the regulation of business signs, respondents did not indicate a strong majority for 'The Township should take a more assertive approach to enforcing land use and zoning regulations' (48%).

## **OVERALL REVIEW OF SURVEY**

The 5 top issues as ranked by the respondents were:

- 1) 78% Preserving Rural Character means reserving forested areas, open spaces, and natural field areas.
- 2) 77% Natural Features such as woods and wetlands should be protected.
- 3) 77% The Township should adopt groundwater protection measures to protect drinking water.
- 4) 76% The Township should strengthen the junk/blight ordinance and enforcement.
- 5) 73% Outdoor recreation and sporting facilities should be encouraged.

The highest 'agree' percentages of responses were reflected in opportunities for resource protection and rural character. Several questions resulted in a high response for the 'disagree' category and related to the expansion of growth and development, including road improvements. The 3 top subjects among respondents for strongly disagree/disagree were:

- 1) 53% 'Strongly Disagree' or 'Disagree' that the Township should permit expanded residential development along the Muskegon River
- 2) 50% 'Strongly Disagree' or 'Disagree' that promoting growth should be a major priority in the Township.
- 3) 46% 'Strongly Disagree' or 'Disagree' that the Township should ask residents for a road millage for maintenance and to maintain safe travel of roads.

The top 3 community planning issues related to growth and development (from 13 questions) asked were:

- 1) Protection of woods and wetlands – 77% -‘Strongly Agree’ or ‘Agree’
  - 2) Encourage outdoor recreation and sporting facilities - 75% -‘Strongly Agree’ or ‘Agree’
  - 3) Protection of rural character and Incentives for Property Owners and Developers to preserve natural areas – 73% - ‘Strongly Agree’ or ‘Agree.’
- Local issues in Brooks Township stressed the importance of maintaining the rural atmosphere of the Township. When given nine local issues within the Township to rank, protection of rural character was number one, with a 75% response rate, while the outdoor storage of junk and abandoned vehicles was a close second, with 73%. Loss of natural vegetation along the shores of water bodies was third with 64%.
  - When deciding on local policy, residents responded that groundwater protection measures were number one, with 77% of residents responding for ‘strongly agree’ or ‘agree’. Strengthening junk and blight ordinances and enforcement was a close second with 76% and limited the size and number of business signs to reduce visual clutter was third at 68%.

## **WRITTEN-IN COMMENTS**

A number of written comments expressed the idea that ‘recreational activities’ on the river, such as tubing, river guides, fishing and boating were ‘overcrowding’ the river and creating issues of noise, nuisance and erosion. High speed boating was noted as creating erosion issues along the river, but when asked within the actual survey, Section 1, Question 9, if ‘High speed on the Muskegon River is a problem’, 49% of the respondents agree; however, an additional 31% chose to remain neutral or have no opinion on the issue.

### **Summary**

The results of this survey essentially ratify many of the goals of the existing Master Plan. The update to the plan indicates continued support for the existing goals, and will assist in “fine-tuning” some of the strategies for implementing the plan. Based on the survey responses, there is limited support for intense development. Preservation of rural character and natural amenities is held in high regard by respondents. Statements addressing additional services like septic system maintenance and road improvements was not clearly supported or unsupported since the responses seem to be fairly evenly distributed (including those with no opinion). Likewise, there did not appear to be strong feelings with respect to regulating outdoor wood stoves.

It is likely that goals related to rural character preservation, natural resource preservation and junk and nuisance control will be strongly considered when updated Master Plan goals and objectives are formulated.

## Survey Tabulations

character should be protected.						
6. I think the Township should protect wetlands not protected by the State (generally under 5 acres).	33%	24%	11%	17%	15%	173
7. I think the Township should be involved in septic system maintenance (e.g., requiring proof of maintenance).	20%	18%	19%	22%	21%	174

8. Outdoor wood furnaces/boilers should not be permitted on lots less than 1 acre.	14%	25%	25%	16%	20%	175
9. High speed boating on the Muskegon River is a problem.	39%	10%	31%	11%	9%	174

Section 2: Policies Statement	Strongly Agree	Agree	Neutral/No Opinion	Disagree	Strongly Disagree	N = Total Response
1. Promote growth in the Township.	9%	26%	22%	26%	17%	174
2. Control growth in the Township.	26%	34%	14%	17%	9%	174
3. Preserve open space and natural amenities like trees, rolling hills and natural vegetation-even if it means more regulation.	30%	33%	6%	16%	14%	174
4. Strengthen	47%	29%	9%	9%	6%	174

Section 2: Policies Statement	Strongly Agree	Agree	Neutral/No Opinion	Disagree	Strongly Disagree	N = Total Response
measures to protect drinking water.						
7. Restrict outdoor wood furnaces/boilers in areas with small lots.	18%	25%	27%	15%	15%	174
8. Should increased regulations on the Muskegon River be considered?	26%	19%	27%	14%	13%	174
9. Protect all wetlands by adopting a local ordinance and enforcement program.	21%	31%	17%	15%	16%	177
10. Create a septic system maintenance and inspection program to mandate systems be brought up to code and to protect water quality.	21%	25%	20%	15%	19%	177
11. Permit expanded residential development along the Muskegon River.	8%	15%	24%	30%	23%	172
12. Require new development to "blend in" with the surrounding landscape.	24%	36%	18%	11%	11%	174
13. Limit the size and	39%	29%	16%	6%	10%	174

Section 2: Policies Statement	Strongly Agree	Agree	Neutral/No Opinion	Disagree	Strongly Disagree	N = Total Response
number of business signs to prevent clutter.						

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Section 3: Community Planning Statement	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	N= Total Response
7. The Township should take a more assertive approach to enforcing land use and zoning regulations.	17%	31%	26%	11%	15%	175
8. Promoting growth should be a major priority in the Township.	8%	17%	25%	32%	18%	173
9. Slowing growth should be a major priority in the Township.	18%	22%	30%	20%	10%	174
10. There is enough commercial development in the Newaygo area, the Township does not need anymore.	18%	18%	29%	20%	15%	174
11. Outdoor recreation and sporting facilities should be encouraged.	28%	47%	12%	6%	7%	174
12. Property owners and developers should be offered incentives to preserve natural areas like woodlots.	31%	42%	13%	7%	7%	175
13. The number and size of business signs should be limited in the Township.	30%	33%	20%	8%	9%	175
14. The Township should ask the residents for a	8%	19%	27%	20%	26%	173

Section 3: Community Planning Statement	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	N= Total Response
road millage for maintenance and to maintain safe travel of roads.						

Section 4: What does Rural Character mean? Statement	Strongly Agree	Agree	Neutral/No Opinion	Disagree	Strongly Disagree	N = Total Response
1. Preserving rural character means preserving active agricultural use of the land.	21%	44%	18%	11%	6%	173
2. Preserving rural character means reserving forested areas, open spaces, and natural field areas.	31%	47%	10%	6%	6%	176
3. Preserving rural character means allowing single family houses along roads as long as they have very large lots and sit back far off the road.	12%	34%	21%	21%	12%	174
4. Preserving rural character means protecting roadside vegetation (or adding to it) to screen single-family houses along roads.	12%	34%	25%	16%	13%	175
5. Preserving rural character means	25%	35%	14%	17%	9%	173

Section 4: What does Rural Character mean? Statement	Strongly Agree	Agree	Neutral/No Opinion	Disagree	Strongly Disagree	N = Total Response
limiting commercial development.						
6. Preserving rural character means limiting industrial development.	27%	34%	13%	16%	10%	174