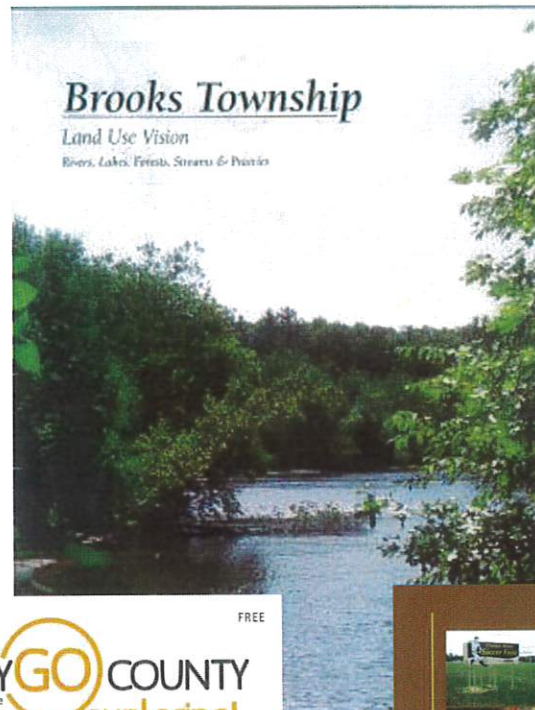
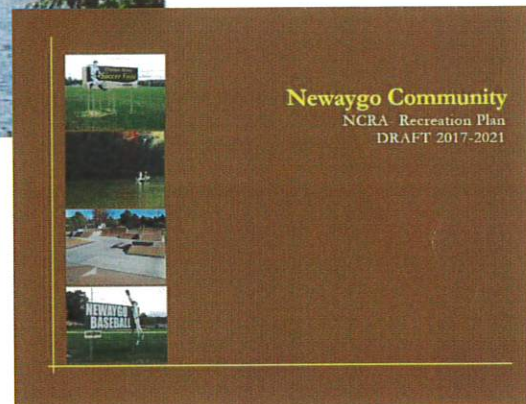
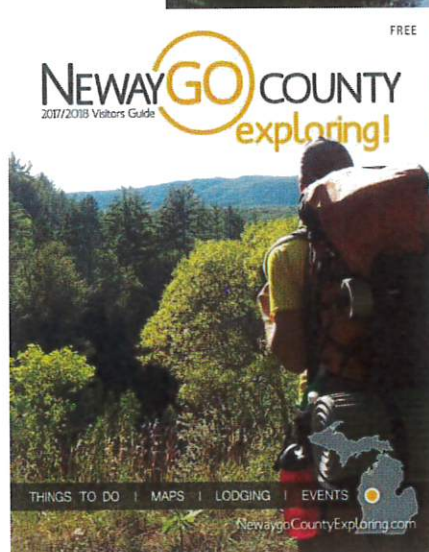


Brooks Township Master Plan 2022



*Building On
The Past...*



...Planning For The Future



Acknowledgments

A special thanks go to:

Members of the Township Planning Commission

- Mark Guzniczak, Chairperson
- Philip Knape, Vice-Chairperson
- Pat Baker, Secretary
- Mark Pitzer, Trustee
- Ryan Schultz, Trustee, Ex-Officio
- Karl Frederiksen, Trustee
- Chris Wren, Trustee

Members of the Township Board

- Cory Nelson, Supervisor
- Jennifer Badgero, Clerk
- Christina Haynor, Treasurer
- Ryan Schultz, Trustee
- Danielle Hummel, Trustee

And a heartfelt thank you to all the Brooks Township residents who participated in the update process of this plan.

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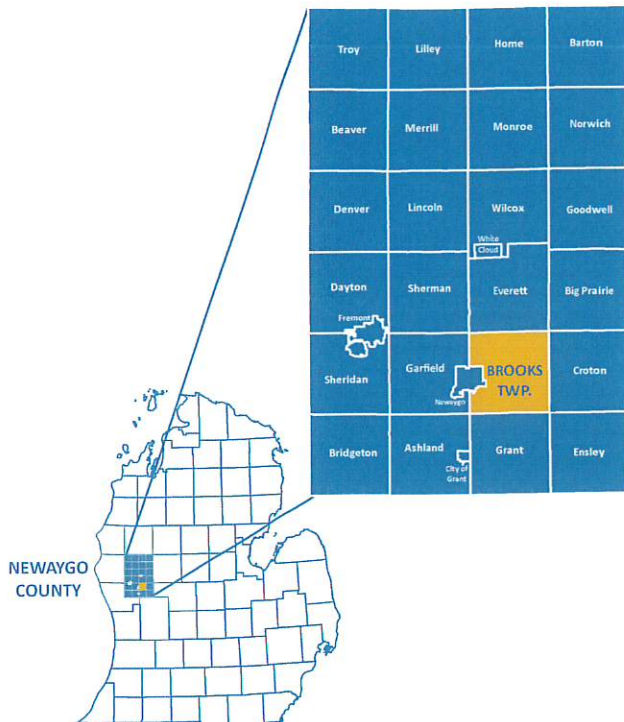
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CHAPTER 1

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 approximately 32 miles north of Grand Rapids.



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

Brooks Township and the City of Newaygo collectively 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 abundant flora and fauna. The area is characterized by low-density residential development and has an emerging commercial and industrial

opportunity base.

The qualities that make a community desirable can be lost if not carefully managed. This is of significant 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 along M-37 and M-82 for commercial purposes, as well as potential requests for the provision of urban infrastructures such as public water and sanitary sewers to serve high-growth areas near the City of Newaygo and around the township’s populated lakes, may occur, while the implementation of other facilities and services necessary to meet the needs of a growing and diverse population. The township aims 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 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 Nawaygo and neighboring townships;

- delineate land development types and patterns consistent with the needs and desires of township residents;
- recognize that the intensity and density of specific land uses require 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 Brooks Township Planning Commission prepared the Master Plan. The Commission is a body of residents appointed by the Brooks Township Board under The Michigan Planning Enabling Act 33 of 2008. According to Act 33, the Commission is charged with preparing and adopting the Brooks Township Master Plan.

The Brooks Township Planning Commission is responsible for various zoning functions, including site plan review and initial preparation of zoning ordinance text and map amendments.

The Master Planning 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. The following chart illustrates that the master plan is a visionary document supporting 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

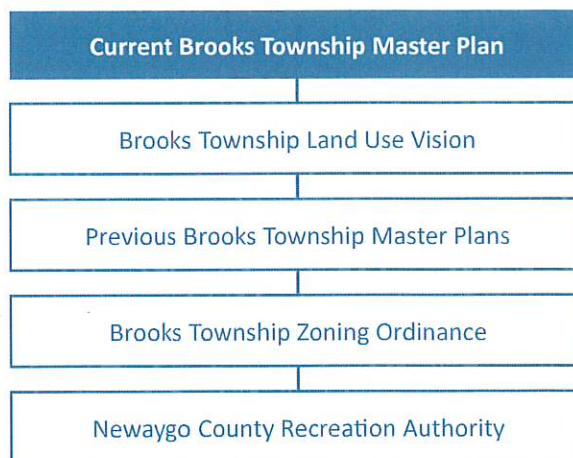
MASTER PLAN [Visionary-Establishes Policy]
Guides Land Use
Future/Visionary Document
Supports Zoning Ordinance
Adopted by Planning Commission and/or Township Board, if desired.

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

of the master plan.

Building on a Foundation of Legal Activity

In addition to the zoning relationship, the Master Plan is intrinsically linked to several other township planning instruments



The Land Use Vision represents a unique plan (planning exercise) combining the input and expertise of local, regional, and state agencies and organizations to identify land use issues of concern and methods for resolving those issues. 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 historical makeup and patterns of change. The plan also identified a series of goals and objectives to guide growth and development during the plan's implementation phase. This information served as essential building blocks for preparing the current plan.

While not a plan per se, the zoning ordinance represents a vital planning tool relative 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 recreational needs and outlining action programs for addressing those needs. Demographic and other data are shared between the two plans.

Due to their extensive use in preparing 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 a critical 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 essential 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 density for identified plan districts;

- recognizes the need to protect the Muskegon River, its tributaries, and other water resources as well as surrounding 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 helpful during investment decisions, identifying development opportunities, and assessing needed programs and services.

Updating the Master Plan

Communities experience change. That change may involve aging 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 other adjustments. Brooks Township will likely experience a combination of these factors as time progresses.

Accordingly, the master plan must be periodically reviewed and, as necessary, updated to reflect community needs and desires. Updating a master plan should not be viewed as a weakness of the document or the process as a whole. State law requires that the plan be reviewed at least every five years. Master planning is an evolving process. It is a strategy by which current and future residents are allowed to build on past efforts and 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, the ancestors of the Ottawa were fur trappers who capitalized on water-dependent animals such as beaver. Historical remnants of the indigenous culture can still be found in Brooks Township.

Ancestors of the Ottawa people left burial grounds, now called Mallon Mounds, near Brooks Lake. Also, before 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

By 1837, lumbering was established as a significant economic activity in Nawaygo County. In addition, 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, constructed in 1907.

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

The river and the lakes also attracted people pursuing recreation and proximity to natural resources. Recreational tourism came from building cottages and homes along the shorelines of the Muskegon River, local tributaries, and surrounding lakes.



Photo by Dave Carlson/The Muskegon Chronicle

Advancements in technology, expansion of the use of automobiles, and the extension of electricity and other services, attracted many full-time residents in the area now known as Brooks Township.

Land Use Trends

The land division laws have primarily influenced the land-use trends in Brooks Township and the rest of the state. These laws have affected how the land has been subdivided and used.

The series of maps on the following pages are plat maps (from 1955, 1982, 2006, 2012, and 2015), illustrating the land division in Brooks Township. Over time, the larger parcels (over 40 acres) have diminished significantly outside public land areas—this land fragmentation results from people migrating into the area for a rural lifestyle. In the 2015 map, only state lands are highlighted, reflecting the relatively small percentage of privately owned land in parcels of over 40 acres.

Several significant land events occurred during the period depicted by these plat maps. First, platting around the lakes happened before 1955. Before 1955, much of the land was initially settled for farming that was not well

suited for agriculture. As a result, farming 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 four parcels without the formal platting process. This land division caused the creation of many long, narrow 10-acre "bowling alley lots," parcels with narrow frontage on county roads that are tough to divide efficiently. Perhaps this had the most significant effect on the changing character of the Township.

Land Use Trends

Land Use Category	2022 Land Use (acres)	2016 Land Use (acres)	Difference 2016 & 2022 (acres)	% Change	Annual Loss or Gain (acres)
Single Family Residential	3,181	2,107	1,074	51%	179
Manufactured Housing	35	27	8	30%	1
Commercial	95	34	61	179%	10
Public/Quasi Public ^a	889	132	989	749%	165
Industrial/Extractive	-	-	0	0%	0
Agricultural	70	262	-192	-73%	-32
Vacant Land	1,291	1,694	-403	-24%	-67

Natural Features	2022 (acres)	2016 (acres)	Difference 2016 and 2022 (acres)	% Change	Annual Loss or Gain (acres)
Forest ¹	14,370	16,566	-2,196	-13%	-366
Wetlands ²	346	346	0	0%	0
Water	1,508	1,459	49	3%	8

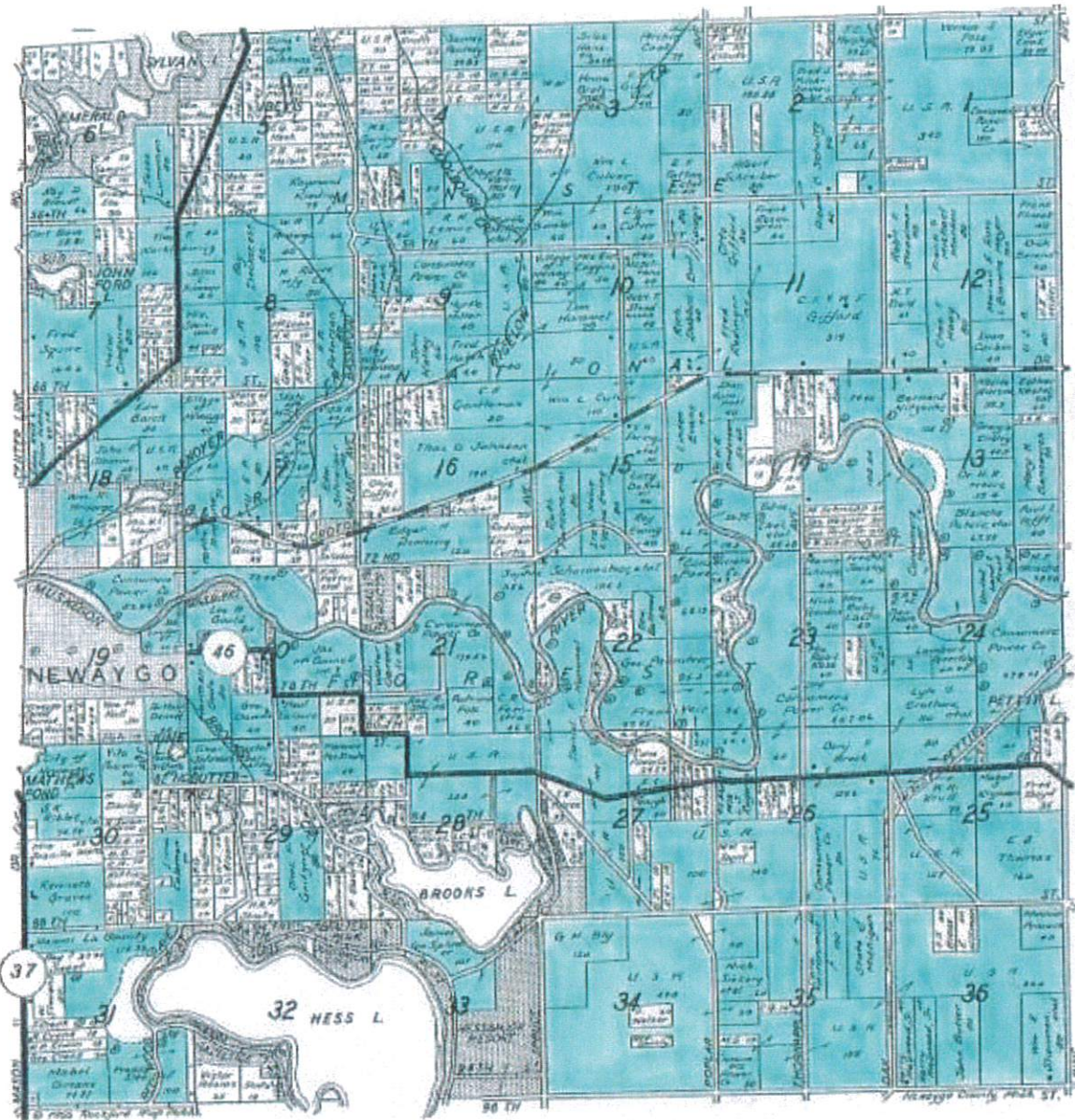
¹ The Manistee National Forest land encompasses approximately 4,151 acres.

² This acreage does not contain Wetland Hydric Soils defined by the DNR.

³ This includes the acreage of the Coolbough Natural Area.

NOTE: The data represented in this table was developed using environmental Systems Research Institute, Inc. (ESRI) Geographic Information System Technology. Land Use information from the State of Michigan Department of Natural Resources was used for natural features. In addition, the most recent land use information from Newaygo County GIS was updated using the 2022 orthophotography available from ESRI.

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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LSL
LAWSON
SILVER
DRAKE
LAWSON

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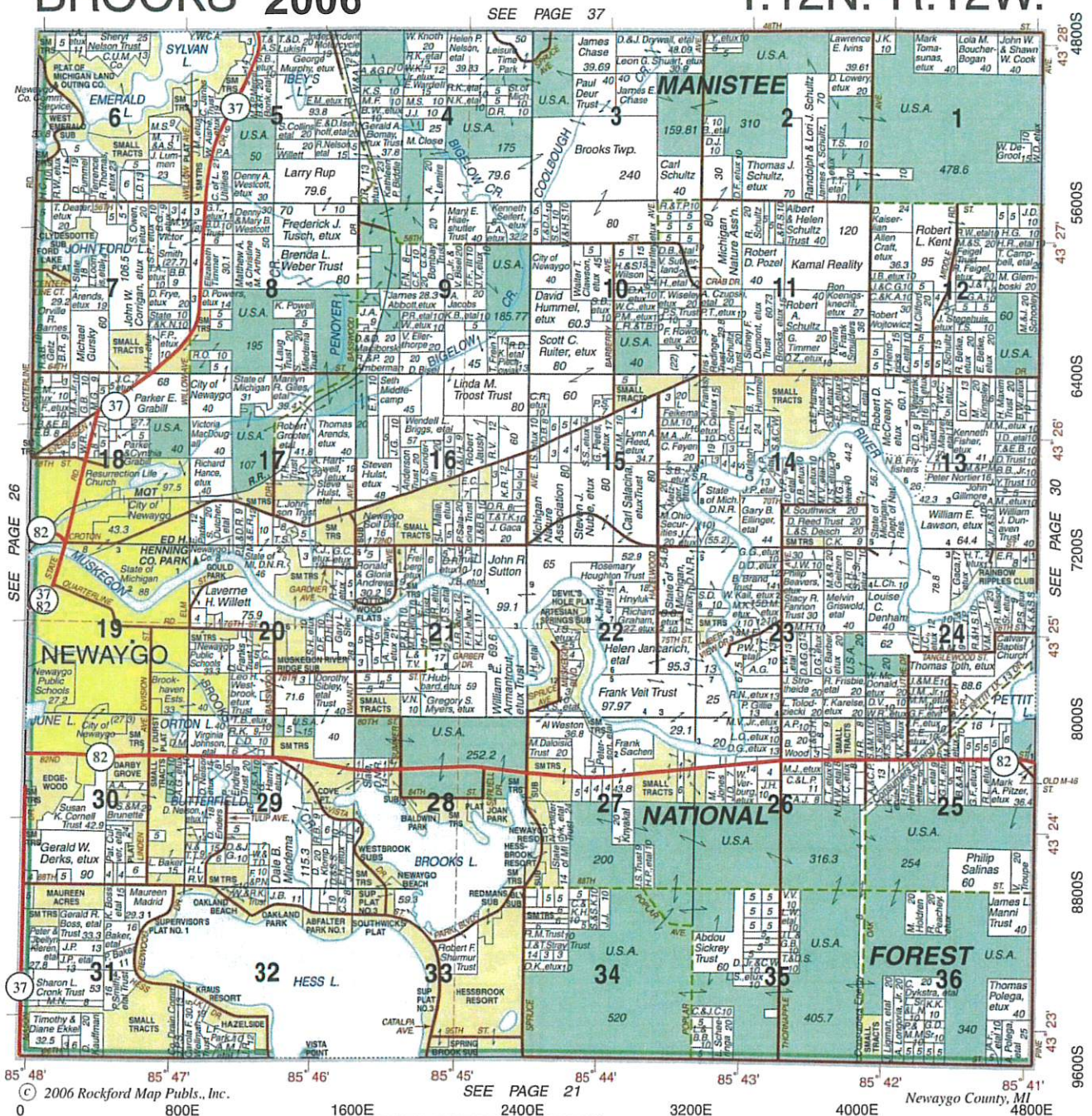
LSL
"LIVING SYSTEMS"
STRAPLES
SHIRTS
ADVERTISING

7

See Township Hall for 1998 parcel map.
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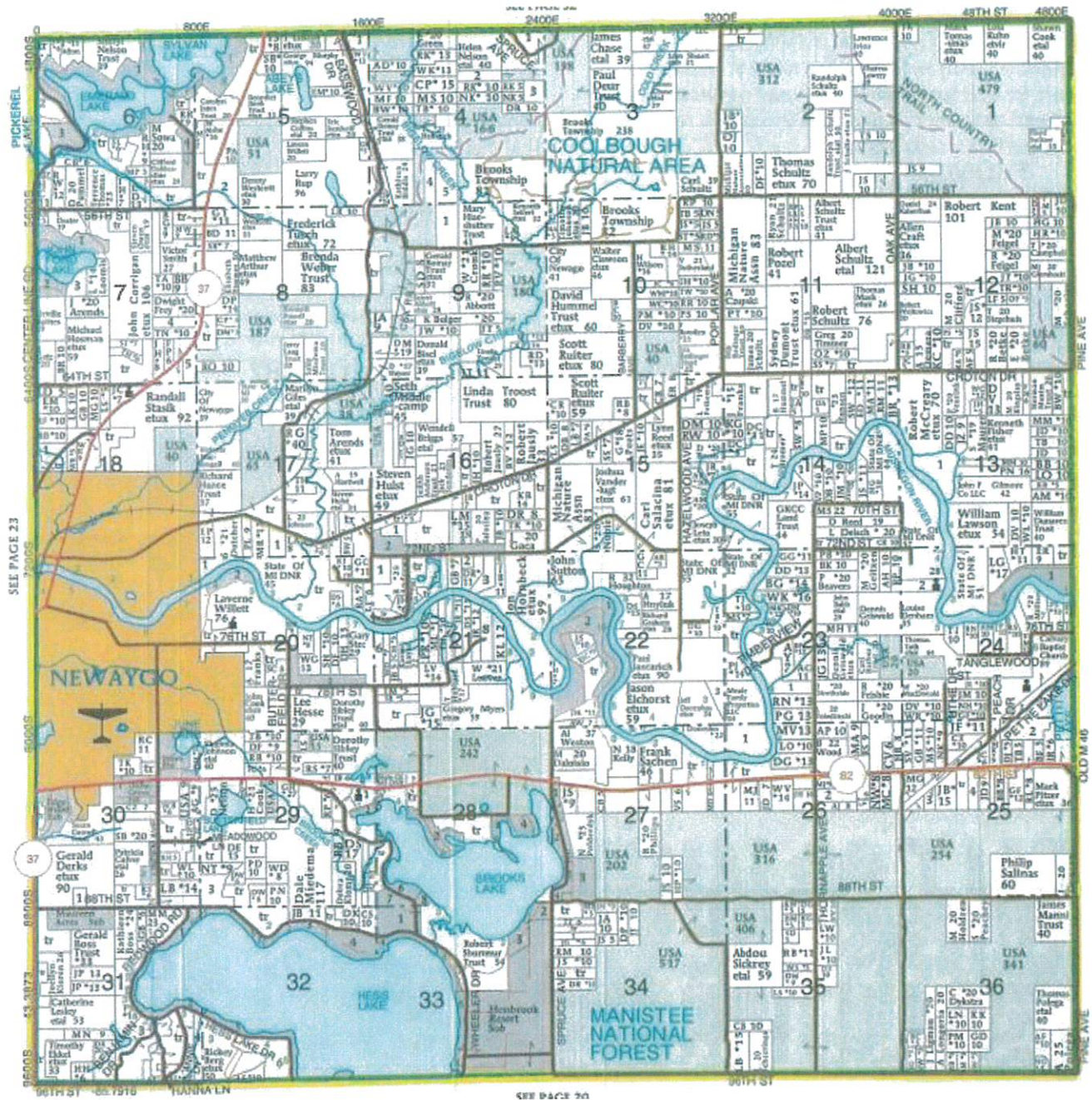
BROOKS 2006

T.12N.-R.12W.



BROOKS 2012

T. 12N – R. 12W



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BROOKS 2015

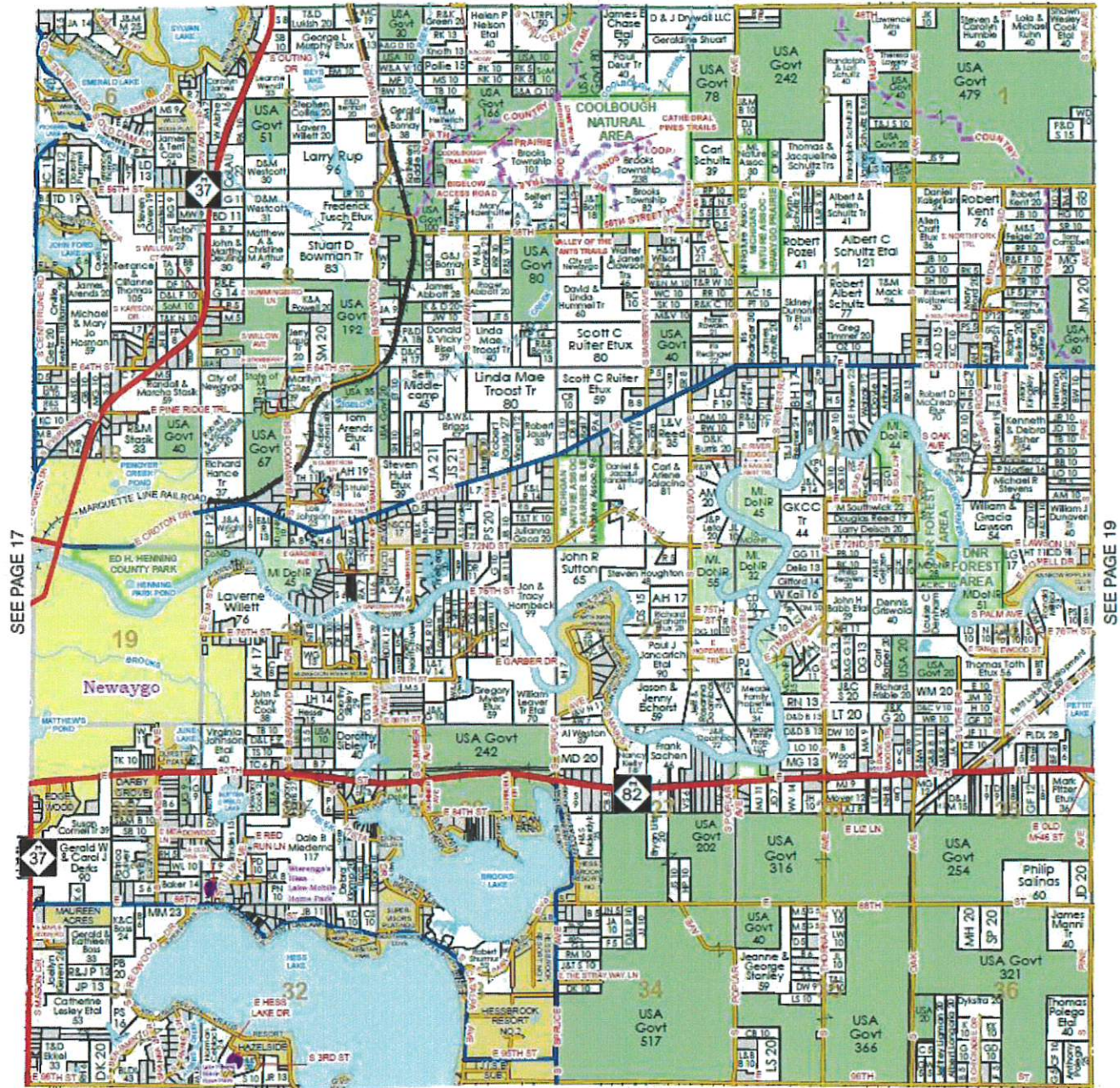


Brooks

Township 12N - Range 12W

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SEE PAGE 24



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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 near 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 essential to document measurable trends.

The table on page five summarizes land-use trends in the township as determined by aerial photography. It is helpful in that relative ratios of land cover can be determined (e.g., forest vs. subdivisions), but it does not reflect actual suburbanizing trends. For example, a 20-acre piece of land that has a home built in the woods may still be reflected as "forested," but it may not be used for forest products because it has become a homestead.

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

- The number of acres devoted to residential land use has doubled since 1978 to over 3,200 acres. This land has been converted from other uses such as agricultural production, vacant land (or open field), and forested areas.
- Commercial development has not impacted land use as a whole within Brooks Township, only increasing a net total of 61 acres since 2016. But this increase is significant because it's nearly three times the acreage used for commercial development in 2016 (34 acres). The Township is currently devoid of industrial or extractive land uses.

- Land used for agricultural purposes has decreased from 262 acres to 70 acres. (This can be attributed to several factors, including the cessation of Christmas tree production. In addition, some of this land has been sold for residential development.)
- Forested land has decreased by about 13% (366 acres) since 2016 and has been mainly developed for single-family homes.

Existing Land Use

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

- identify the spatial patterns of land use and 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:

- 2022 land use information was developed from 2016 land use information from Newaygo County GIS and updated with 2022 aerial photography available from ESRI.

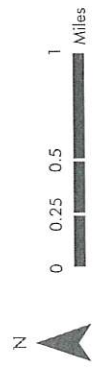
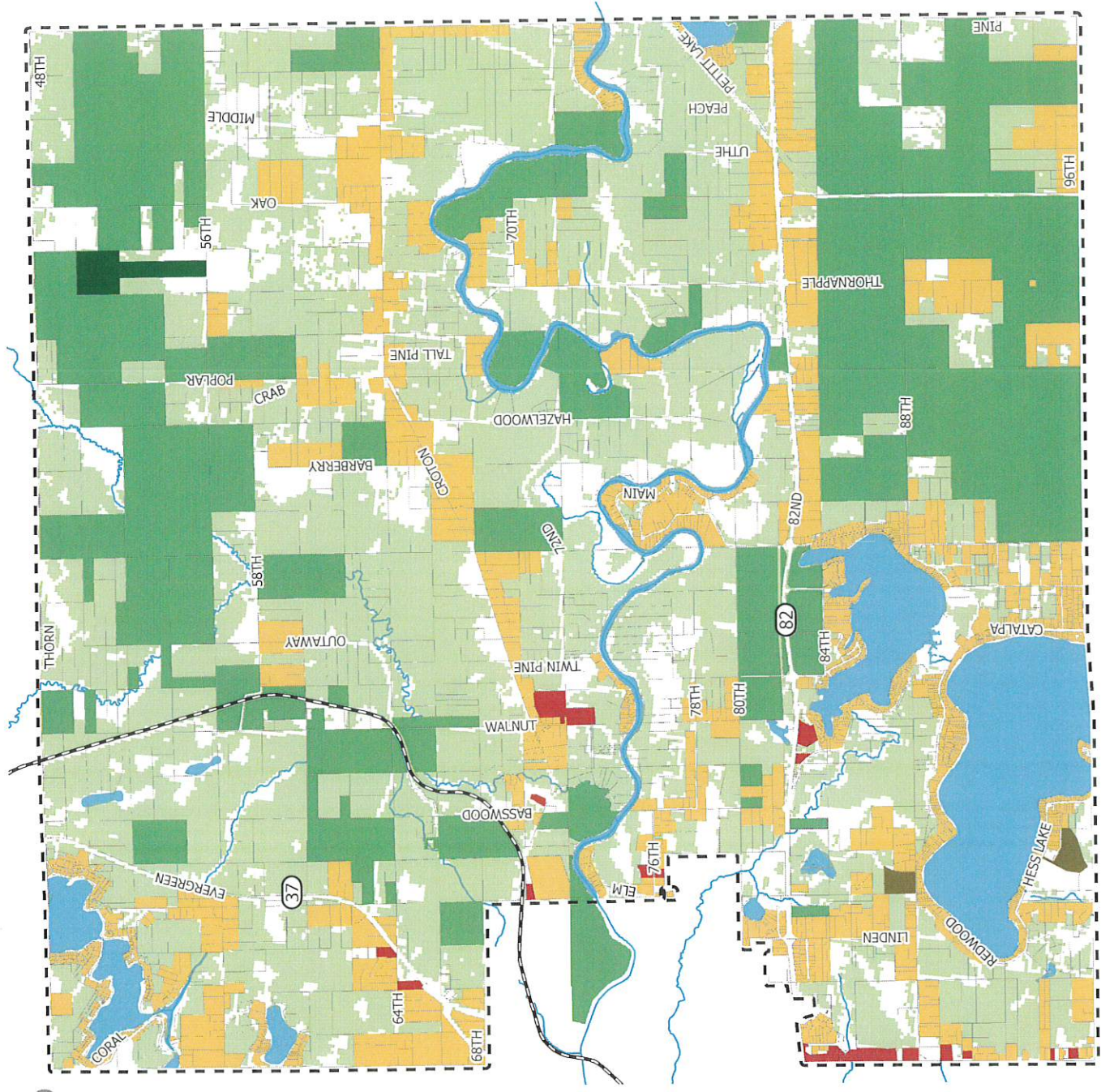
Brooks Township

Newaygo County, MI

Existing Land Use Map

Legend

- Agricultural
- Commercial/Institutional
- Residential
- Public/Semi-Public
- Manufactured Home Park
- Forest
- Water



Single Family Residential

Historically and more recently, people have moved to Brooks Township to escape more urbanized areas drawn by openness and nature.

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. Proximity to the city provides natural growth progression outward from a developed 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, their quality, and maintenance have 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. Conversely,

when a roadway is improved, development pressures increase.

Building permits (shown on page 15), as recorded by the township section, also help identify where residential development has been concentrated in recent years. For example, from 2009 to 2014, residential buildings dramatically slowed due to the economic recession.

As in much of the rest of Michigan, single-family housing increased rapidly during the period between 2016 and 2021. The township hasn't witnessed the same levels of construction for new homes on new residential land since before the 2008 recession and sub-prime housing crisis. As a result, hundreds of additional acres have been converted into single-family land use. While many are still covered mostly by wooded land, the property is classified as single-family residential.

Multiple Family Residential

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

Residential Building Permits by Section in Brooks Township

New home construction in Brooks Township saw significant growth over the previous five years (2012 – 2016). Between 2012 and 2016, 32 new homes were constructed in the Township. Between 2017 and 2021, new home construction rose to 42 new homes, an increase of 24%. The busiest construction

years were 2021 (21 total building permits) and 2019 (15 total building permits). Each year increased the number of new home building permits except for 2020 (12 total building permits), most likely impacted by the COVID-19 pandemic and supply chain issues.

2017 - 2021
New Housing Building Permits by Township Section

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

Manufactured Housing

Individual isolated manufactured homes can be found scattered across the Township. The concentration of these units, known more commonly as manufactured home communities, is located south of 76th Street and Brooks Creek (Section 20) and to the north and south of Hess Lake (Sections 29 and 32). In addition, a concentration of single-wide manufactured homes located on non-park, scattered sites are found just south of M-82 in Section 30.

Commercial

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

commercial development in the township has occurred along M-37, just south of the City of Newaygo. In addition, home occupations currently exist in other areas of the township.

Brooks Township has not experienced random nodes of commercial development. In many other townships in West Michigan, where this type of sprawl has occurred, there has been duplication of services, scattered residential growth, and expensive (and often, needless) infrastructure extension. This plan intends 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, where infrastructure and other City services are readily available.

Agricultural

The identified agricultural areas on the existing land use map are primary fields actively farmed.

In years past, Christmas tree farming was more prevalent in the Township. However, 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 forests and open fields. 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 chiefly in the northeast quadrant of the township.

Public/Quasi-Public

These uses entail:

- Churches
- Camp Newaygo
- Land owned by the Michigan Department of Natural Resources
- Coolbough Natural Area
- Approximately 4,151 acres of state forest land.

NATURAL FEATURES

The latest Michigan DNR data depict forests covering over 63% of the township, water another 7% (1,508 acres), and wetlands 1.5% (346 acres) of the land area. Significant natural features occupy over 76% of the land in Brooks Township.

Forest

The Manistee National Forest accounts for over 4,151 acres of forested land in Brooks Township, representing about 29% of all forest land in the Township.

The Huron-Manistee National Forest is unique because they were created from abandoned farms and resource-exhausted lumbering wastelands.

"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 1930s and early 1940s, the Civilian Conservation Corps (CCC) planted an impressive 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;
- tubing and kayaking
- fishing;
- hunting;
- trapping;
- ORV trails (designated);
- scenic drives and lookouts;
- hiking; North Country Trail
- cross-country skiing (designated).



A majority of the forested land in the township, more than 14,000 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 is 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:

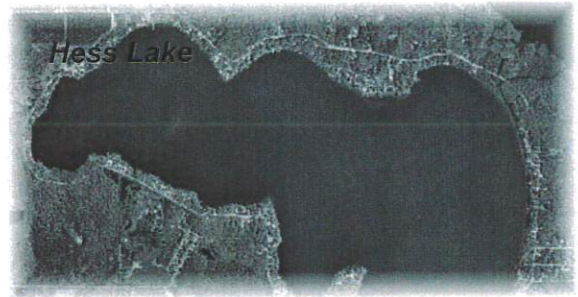
- Hess
- Brooks
- Sylvan
- Emerald
- Butterfield
- John Ford
- Abeys
- June
- Pickerel
- Petit

The township's lakes range from a few acres to Hess Lake, which is more than 700 acres in area. The lakes are typical for west Michigan in that they go from mesotrophic (having a depth conically shaped; having clear, cooler waters with native vegetation) to eutrophic (shallow water, warm and nutrient-rich including murky and weedy waters, having both native and non-native vegetation)



Most lakes are home to many year-round residents and supporting seasonal dwellers. However, the year-round population is growing. Seasonal use has now become

nine months rather than three or four. These trends are creating more stress on the water quality in the lakes. Increased recreational use and nutrient loading from on-site septic systems, landscaping, fertilization, and the building of new or additional dwellings and accessory buildings



contribute to poor water quality.

The lakes are recognized as an essential part of the quality of life in Brooks Township. Thankfully, the inhabited lakes have Lake Associations and Lake Boards. In addition, residents and non-resident property owners are supportive of and aggressive regarding water quality, green spaces, building and zoning issues, and public health and safety issues.



Several ongoing projects have been completed or contemplated concerning the care of these precious resources, our lakes.

Rivers & Streams

The rivers and streams throughout the township provide a connected greenway network. This greenway is as vital to the residents of Brooks Township as it is for habitats for many species of animals and birds.



The Muskegon River is the largest 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 is still one of concern. Sediment erosion can cover existing fish spawning areas in the river, increase water temperatures and degrade the 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 preventing further degradation by future development. Even with erosion concerns, the Muskegon River remains a cool water fishery which means it can support cold-water fish (e.g., trout and salmon) and warm-water fish (e.g., bass and walleye).

A 2015 MDNR creel study estimated that the fishery generated over 1.9 million dollars in revenue annually between Croton

Dam and Muskegon Lake. Presently Ferris State University and the MDNR are working on creel studies throughout 2022-2023 to update this information. Stocking efforts represent a significant investment from the MDNR. For example, between 2018 and 2022, the MDNR stocked over 53,000 Brown Trout and 117,000 Rainbow Trout at Henning Park in the City of Newaygo. This example represents an estimated \$2.5 million state investment in the fishery.

"The gravel and cobble beds in the Muskegon River currently provide some of the best spawning habitats 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 237-mile-long river system. Bigelow Creek and Penoyer Creek are quality cold-water tributaries of the Muskegon River. These systems are unique 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

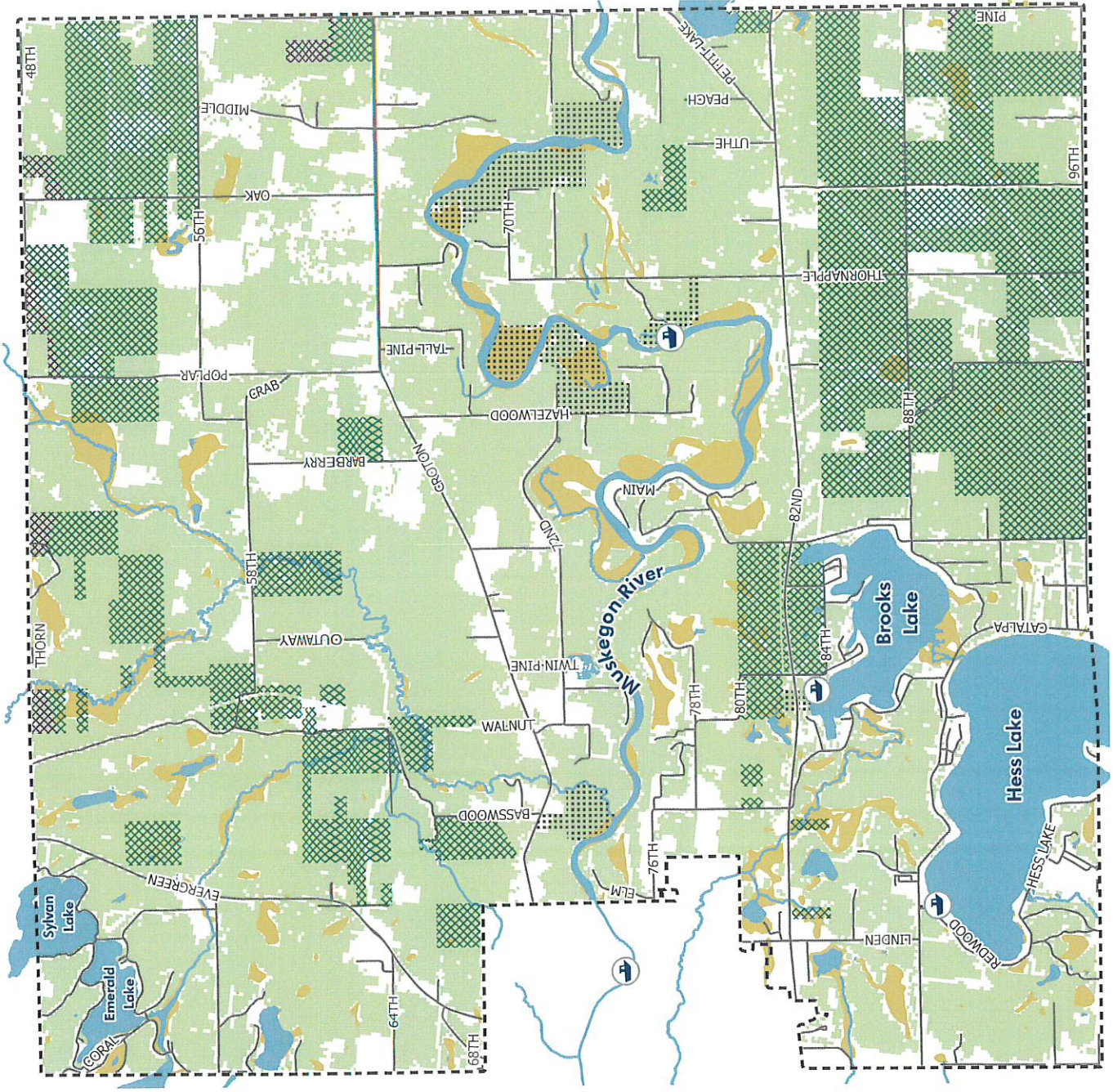
Brooks Township

Newaygo County, MI

Natural Features

Legend

-  Mainste National Forest
-  Michigan DNR
-  Forest
-  Wetlands
-  Lakes
-  Boating Access Sites
-  Rivers
-  Roads
-  Township Boundary



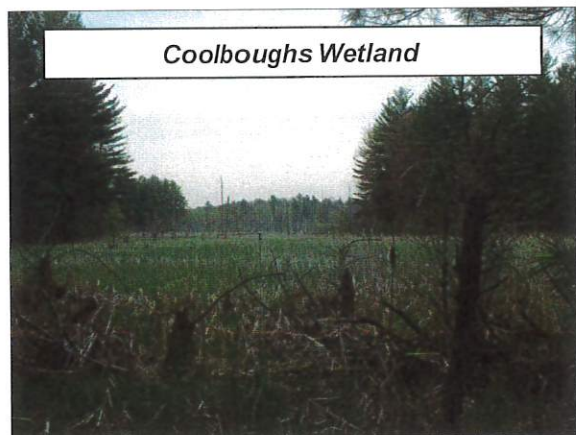
Brooks Township Land Use Vision

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 essential 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.



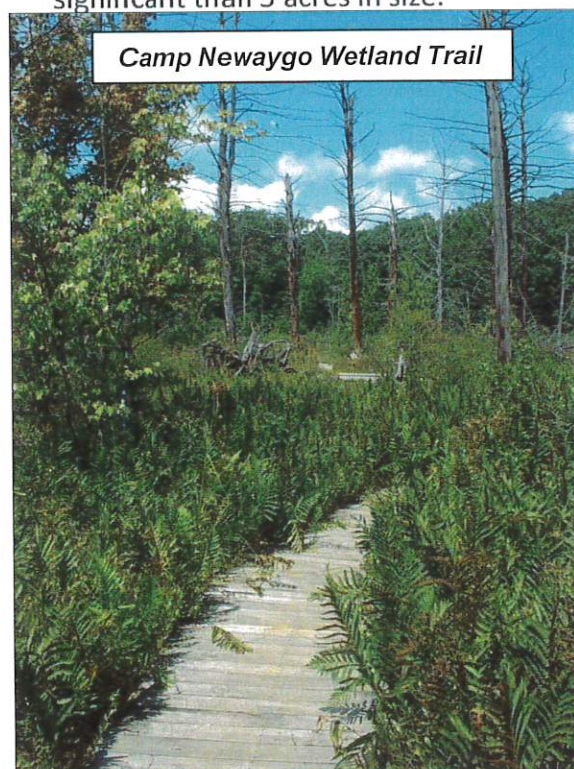
The "Brooks Township Land Use Vision" identifies the presence of rich conifer swamps that act as buffers to wetlands.

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 the State of Michigan. (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 Environment, Great Lakes, and Energy (EGLE). Those include:

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



Ground Water

The residents of Brooks Township rely on groundwater to supply their potable water needs. Groundwater, the primary drinking water source, is expected to continue over the life of this plan. Accordingly, it is imperative to maintain land use (zoning) regulations conducive to the long-term protection of groundwater and to educate

the public on the need for groundwater protection measures. (See also the section on Soils.)

Prairies

As detailed in the Brooks Township Land Use Vision, Brooks Township is blessed with various dry sand prairie plant species.



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

The presence of the prairie offers a unique quality to the Township's environmentally sensitive, rural character. However, modification of prairie lands may quickly occur unless protected from overdevelopment and use.

Rare Species

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



Bald Eagle

Fish and Reptiles

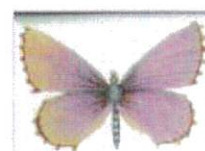
- Lake Sturgeon
- Pugnose Shiner
- Wood turtle



Wood Turtle

Butterflies, Moths, and Other Insects

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



Karner Blue Butterfly

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

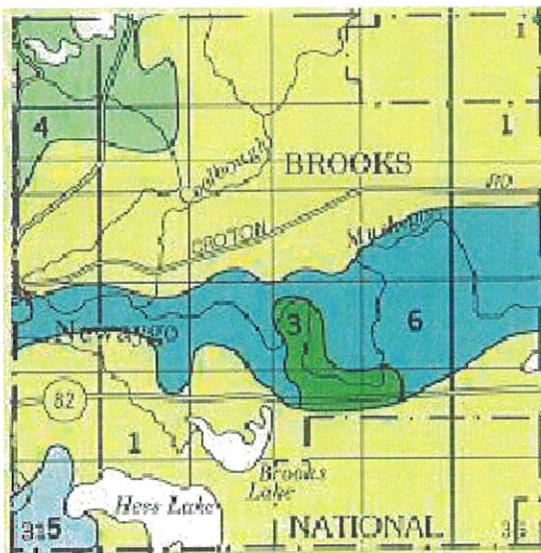
Broad Land Use Considerations

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

Soils

Too often, soil information is overlooked in planning because soil mapping is done by sampling at considerable intervals, not parcel-by-parcel. A soil survey is meant to be, and is, an excellent overall guide where



a site-by-site examination is necessary.

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

- What types of vegetation (native or non-native) will grow (for example, pine 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.

Many of Brooks Township's soils are well-suited to forest production. Their sandy texture is ideal for pine species.

Many of the soils that were cleared for farming were not productive. This texture may also make some areas reasonably suitable for development but raises significant concerns regarding septic suitability for standard (tiles) systems due to the rapid rate of percolation in these soil types. Areas typically unsuitable for development of septic include the northwest portion of the township and the central section along the Muskegon River floodplain. Along the river, soils may be suitable for development and septic tank

1. Plainfield-Grattan-Brems; suitable for building except for on steep slopes, poorly suited for septic tanks³.
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

absorption; however, steep slopes are 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:

- 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 more extensive network that operates regionally, statewide, and nationwide. It is principally made of roads. For planning purposes, roads are classified by movement and access functions. (Refer to the map on the following page)

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 is 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 significant roadways in the township are M-82 and M-37. M-82 traverses Brooks Township East to West, intersecting M-37 in the City of Newaygo. It runs 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 referred to as two-track or seasonal roads. These roads fall under the jurisdiction of the Newaygo County Road Commission. Several

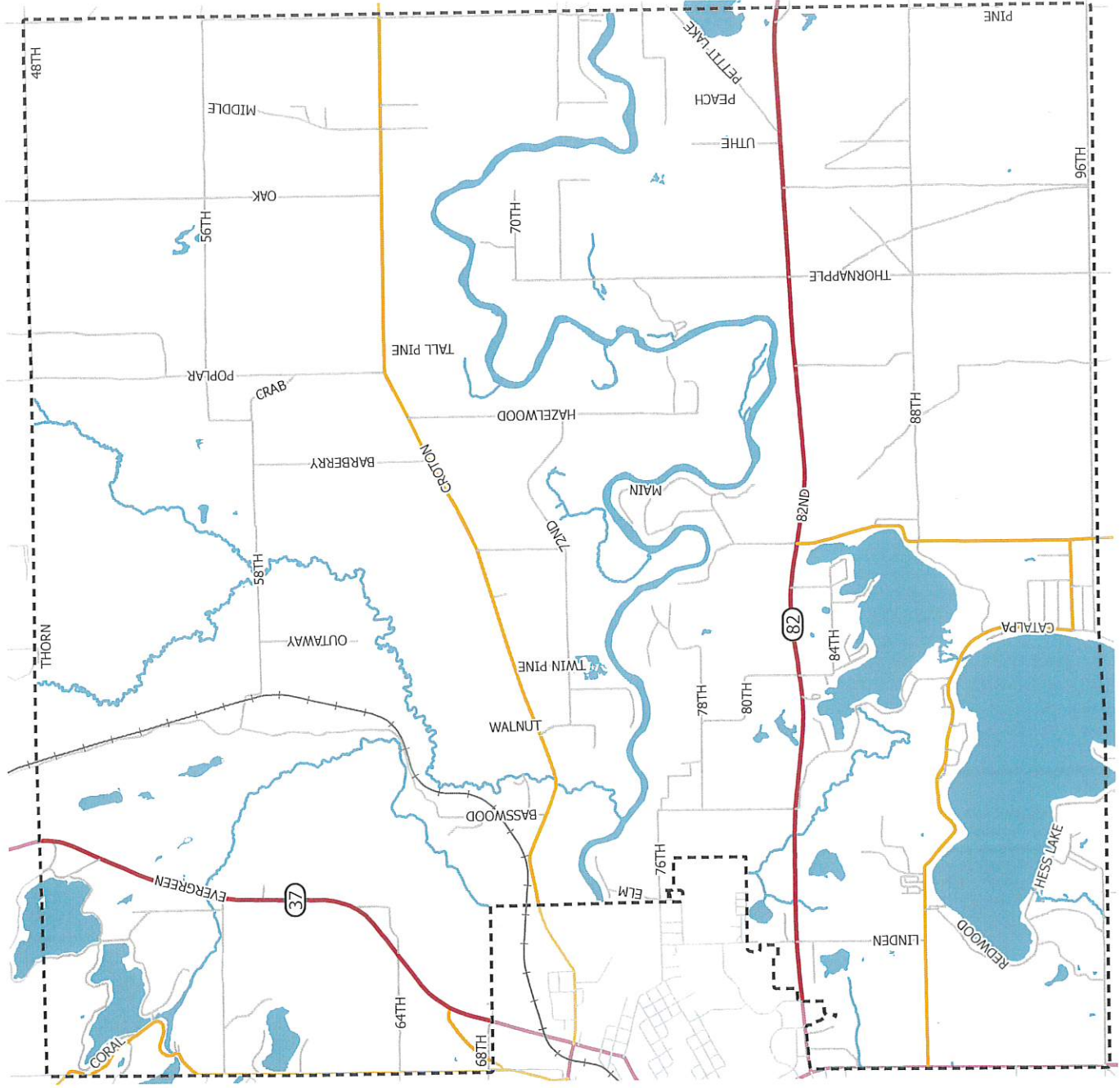
Brooks Township

Newaygo County, MI

Transportation

Legend

- Highways
- Principal Arterials
- Minor Arterials
- Railroad
- Rivers
- Lakes
- Township Boundary



other access roads are private, some nonconforming with current township design standards.

Roadway Character

A majority of the roads in the township are currently tree-lined, which contributes significantly to the area's rural character. For example, pines and various deciduous tree species line M-82 carry more traffic yet are less developed than Croton Drive. This paved county east-west road traverses the township South of the Muskegon River.

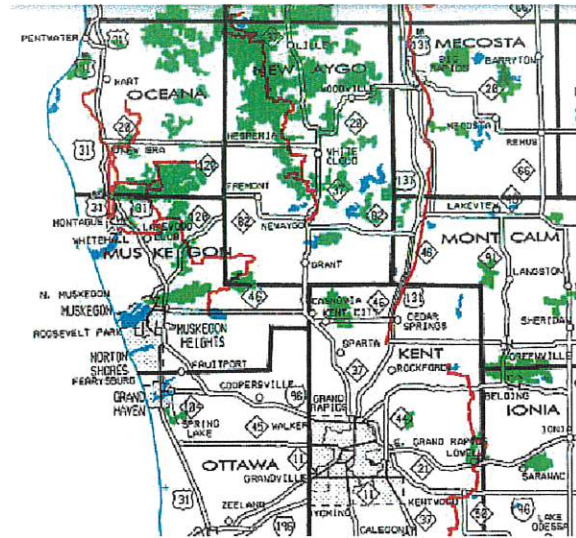
Existing Transportation Studies

M-37 Corridor Study (1998)

This study, completed by the West Michigan Shoreline Regional Development Commission and the M-37 Corridor Study Steering Committee, met 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 considered in this study as recognition of the corridor's economic importance. As a result, the following are issues and recommendations brought to light in the study as related to Brooks Township:

- Traffic congestion and turning between 88th Street and M-82 should be addressed by 1) an MDOT traffic study to look at decreased speed limit along this stretch and 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



Regional Transportation

along M-37 to provide a cooperative, unified approach to development along the corridor.

Newaygo M-37 Pilot Program

In 2019 – 2020 MDOT and Progressive AE worked with the City of Newaygo to create a pilot project for traffic calming and non-motorized solutions. These culminated in re-stripping of the roadways, road diets (the bridge crossing the Muskegon River went from 4 lanes to 2 lanes, etc.), and several mid-block crosswalks and corner bulb-outs were provided to test this new concept in the City of Newaygo. It received mixed reviews from local and nearby residents, but MDOT and Progressive AE concluded that this study was a successful pilot program.

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 5 Year Road & Bridge Program published by MDOT 2023 - 2027). Nor are any projects outlined for Newaygo County municipalities in the 2020 – 2023 Regional Transportation Improvement Program (RTIP).

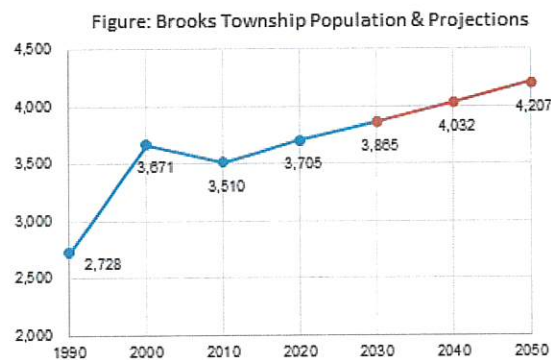
The improvements of other roads in the township are the responsibility of the County Road Commission. The commission is responsible for the construction of all roadway and bridge improvements. However, the township is typically called upon to fund a significant part of any improvement. Discussion with 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 influencing the development and the movement of people and goods in the township is the limitation of natural features. Because of surface waters, North/South movement is also limited in the township. In addition, any east/west movement is also limited, and large sections of the township have no roadways (e.g., north of 58th 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 give a historical perspective and valuable comparisons with neighboring communities.



Population

The U.S. Census (2020) reported a township population of 3,705. This represents an increase of 195 people (5.6%) since the 2010 Census. This compares to a population change for Newaygo County between 2010 and 2020 of less than 1 percent. Between 1990 and 2020, the township's population increased from 2,728 to 3,705 persons, a 30-year growth rate of 36 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. However, compared to Newaygo County, the township's population density is increasing much faster.

Increases in density equate to increases in land development area (e.g., the break-up of parcels to support housing development,

the 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 the township area. In 2010, the township's population density was 102 people per square mile. In 2020, the density increased to 109 people per square mile.

Despite the growth and development pressure 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.

Population Projections

Using the same census numbers for population, population projections through the year 2050 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, as evidenced by the economic recession from 2007 to 2012. Nevertheless, the township's resident population, as well as the population of surrounding governmental entities, is anticipated to continue to grow between the 2020 to 2050 period.

The presence of the City of Newaygo at the western boundary of Brooks Township has planning-related implications, especially concerning commercial and industrial development. Thus, data for the city is also included periodically in this section. In addition, the growth rate for the City of Newaygo and Brooks Township shows a similar growth projection.

Age

The age of township residents indicates 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 Brooks Township maintain its high quality of life and provide the opportunity for housing and services which benefit every segment of the population.

Population Age Breakdown - Brooks Township 2010-2020

Age	Total	Total %	% Change (2010- 2020)	Change in Total Persons
Preschool (0-4)	102	2.9%	-43%	-76
School Age (5-19)	743	21.2%	-1%	-8
Post School (20-24)	115	3.3%	-18%	-26
Family forming (25-44)	755	21.5%	0%	-3
Empty Nester (45-64)	1110	31.6%	12%	123
Retired (65+)	684	19.5%	19%	109

The table above details the township's resident population by age category based on the data gathered between the 2010 U.S. Census and 2020 ACS 5-year estimates. The information indicates:

- Slightly over 20 percent of the township's population comprises young adults and children between the ages of 5-19.
- 19% of the population is 65 years or older.
- The population of the township has aged over the last ten years. The only segments that gained population were those aged 45-64 and 65 and over.

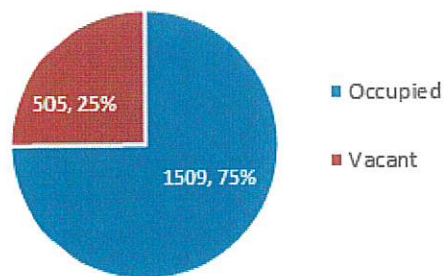
The median age of Brooks Township residents is 46.1 older than in 2010. In addition, male residents slightly outnumber female residents (52% to 48%).

Seasonal Population

Although accurate counts are not available, the 2020 ACS 5-year estimates suggest that 453 housing units in the township are vacant for seasonal, recreational, or occasional use. 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 homeowners, vacationers, people using the township's system of lakes and rivers, and others. Conversely, during winter, a slight drop in population as a segment of the township's retired residents travel to warmer climates.

Sixty-Seven (67%) percent of the population resides in a family household (two or more persons). Thirty-Three (33%) percent live in a non-family home or a single-person household.

Figure: Brooks Township Housing Units by Occupancy



Housing Affordability

There was a total of 2,014 housing units in Brooks Township, according to the 2020 U.S. Census. The median housing value for Brooks Township in 2020 was \$187,500,

a 6% increase from the 2010 median housing value of \$118,100. Likewise, the median housing value in 2020 for Newaygo County was \$139,900, a significant increase of twenty-one (21%) percent from the 2010 census when the median value was \$115,800.

Income

Eighty-four (84%) percent of the population is above the poverty level (e.g., above 50% of the county median income). Seventeen (17%) percent of the population is at or below the poverty level. This is slightly up from 2010, when twelve (12%) percent of the population was below the poverty level, possibly attributed (at least in part) to high recessionary unemployment when the Census was taken.

Transportation

The rural living environment of Brooks Township does not offer a sufficient supply of nearby employment centers. As a result, residents are generally required to commute outside the township for employment.

The average commute time to work is 28.6 minutes, a decrease from 30.2 minutes in 2010. First of note is the seventy-nine (79%) percent of all commuters that commute alone by car. Only fifteen (15%) percent of the commuters carpooled, and with no public transportation provided in the township, no one was able to commute to work by that method. Additionally, five (5%) percent of the workforce worked from home, and a little more than one (1%) percent of the population walked to their workplace. These numbers were similar to those for Newaygo County.

With increased population figures in a primarily rural area with a low commercial and business development base, Brooks Township 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, rivers, 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.

This section has been refined from the 2017 Master Plan to be more attuned to the current needs of the township. 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 over-loading concerning individual septic systems.
2. 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.

3. Maintain the rural character of surface water bodies through preserving natural vegetative buffers, building setbacks, and implementing other environmentally friendly development (zoning) regulations.
4. 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 recreationists of the threats to water quality and practices to improve water resources.
5. The township supports the state's protection of wetlands in the township by ensuring that the Department of Environment, Great Lakes, and Energy has evaluated the development of properties with wetlands to limit any adverse impacts upon them.
6. Explore incentives to encourage property owners to protect wetlands, open space, and natural features on their property.
7. Coordinate with neighboring municipalities to develop measures to protect water quality.
8. Enact rules and incentives for development by promoting stormwater filtering above the Newaygo County Soil Erosion and Sedimentation Ordinance, including rain gardens, grass swales, and perennial beds.
9. Limit discharge and withdrawal of water into or out of the township's groundwater supply, promoting the long-term preservation of water resources.
10. Keep density low, and lot sizes more extensive along the Muskegon River

to protect the river corridor's natural features, water quality, and wildlife habitat functions.

11. Improve open space development standards, including provisions for contiguous open space and trail connections between developments.

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. Educate citizens on managing private sites for wildlife habitat, maintaining rural character, and protecting natural features.
4. Implement the recommendations outlined in the Brooks Township Land Use Vision and other planning documents as an integral part of protecting the environment.
5. Encourage natural vegetation greenbelts along the township's major arteries (e.g., M-37, M-82, and Croton Road) in residential districts to maintain or create visual impressions of rural character.

RESIDENTIAL

GOAL: To provide 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 by retaining an integrated greenway network throughout the township.
3. Maintain a low-density residential environment consistent with current development patterns and the public's desire to retain Brooks Township as an environmentally sensitive, rural community.
4. Restrict moderate and high-density housing to areas conducive to such use. In addition, such sites should have all-season roads and proximity to public facilities and services.

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 properties within the township to protect the rural character.
2. Orient future industrial development to the city's industrial park instead of creating industrial districts within the township.
3. 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.

4. Make business areas more attractive through cooperative beautification efforts among business owners in Brooks and Garfield Townships and the City of Newaygo.
5. Promote the potential of group purchases for such things as signs and parking lot paving for the business community to improve the business district's quality.
6. Recognize that tourism is an essential part of the local economy; land use controls should include standards for the visual quality of development.

PUBLIC SERVICE AND INFRASTRUCTURE

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

Objectives:

1. Retain and improve 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. 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. Work in conjunction with the Newaygo County Road Commission, MDOT, the West Michigan Shoreline Regional

Development Center, and surrounding units of government,

3. Coordinate future utility system needs with the City of Newaygo, as opposed to the construction of township utility systems.
4. Implement the recommendations of the Newaygo County Recreation Authority.

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 and blight ordinance to maintain the township's natural beauty, consistent with feedback received in the 2006 Master Plan Survey.
2. Continue to 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 and township waterways.
3. Promote the Newaygo County Recreation Authority and support its goals of increased recreational opportunities within the township.

CHAPTER 4

Future Land Use Plan

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

The plan calls for six land use designations and the creation of four conservation overlays. The overlays are proposed to influence the zoning ordinance.

The land use designations include:

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

The proposed conservation overlays include:

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

The identification and spatial arrangement of the designations 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 characteristics (e.g., soils, water features, etc.).

3. Demographic characteristics and trends.
4. The planning and development goals have been prepared by the planning commission, building upon input from area residents, community leaders, environmental and planning professionals, the Brooks Township Board, and others.
5. The master plan incorporates recommendations of the Brooks Township Land Use Vision.
6. The plan focuses on the need and desire to protect the township's unique features.
7. The plan builds upon existing zoning regulations.
8. The plan incorporates land use development patterns of adjoining units of government.

PLAN DISTRICTS

The land use map designations 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 designation of natural character and large acreage contribute significantly to the township's desired rural atmosphere. This category is characterized by:

1. Heavily concentrated and connected large acreage sites, many more than 80 or more acres.
2. Presence of old fields, prairie, or forests, as well as combinations thereof.
3. An abundance of native flora and fauna, as well as the presence of specific, threatened, and or endangered species.
4. Naturally connected greenways highly

beneficial to the movement of wildlife

5. An abundance of surface water that is conducive to supporting cold-water fish species.
6. Interspersed with, or contiguous to, undeveloped large acreage sites in private ownership.

The Brooks Township Master Plan calls for the public designation to remain in a natural state with development highly restricted primarily. Land in this category 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 with unique flora and fauna should be protected from uses likely to disrupt or destroy these fragile resources significantly.

RESIDENTIAL

The plan designates four Residential categories. These are 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 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 designation represents those areas of the township programmed for the lowest level of residential density. Generally, Rural Residential regions are located distant from the City of Newaygo. Therefore, most of these areas are

interspersed among the lands occupying the public designation. Rural Residential is characterized by:

1. Development of at least five acres in size; however, it is common to find significantly larger sites. In addition, many of these parcels are vacant.
2. Lack of public water and sanitary sewer, nor are such facilities planned over the next twenty (20) or more years. Instead, homeowners rely on the use of on-site wells and septic systems.
3. The land area is used for outdoor recreational activities such as hunting, cross-country skiing, snowmobiling, wildlife observation, nature photography, etc.
4. This category contains a limited system of public roads consistent with the area's low-density residential, rural character.

Low Density Residential

The Low-Density Residential designation encompasses those areas of the township programmed for relatively low levels of residential density. Most of the region is identified with low-density residential located in the southwest portion of the township, between the City of Newaygo and Hess and Brooks Lakes. Smaller low-density areas are found north of the city and near Emerald and Sylvan Lakes. The designation serves as a transitional area, separating the Rural Residential regions from the city. Low-Density Residential is characterized by:

1. Parcels ranging from two to five acres.
2. Lack of public water and sanitary sewer, nor are such facilities planned over the next twenty or more years. So instead, homeowners rely on using on-site wells and septic systems.
3. Scattered presence of natural flora and

fauna.

4. The roadway system is more extensive than the Rural Residential regions due to the increased density of housing development.
5. Proximity to the City of Newaygo and the township's major lakes.

Medium Density Residential

The Medium Density Residential designation is generally confined to the "platted" areas surrounding Hess Lake, Brooks Lake, John Ford Lake, Emerald Lake, and Sylvan Lake. Much of the designation is represented by plats created years ago before local planning and zoning began. Because of this historical development, the following characterization may not be feasible in all cases. Like 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 occupation or replaced by larger new homes.

Medium Density Residential is characterized by:

1. Parcels of up to one acre in size are as follows:
 - a. unplatted areas - one acre; and
 - b. existing plats - less than one acre provided on-site water, and sanitary requirements can be met.

(It is noted that this category is characterized by a lack of public water and sanitary sewer. As a result, homeowners rely on using 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 to prevent degradation of groundwater and surface water resources.)

2. Scattered presence of natural flora and fauna.
3. The roadway system is more extensive than the Low-Density Residential category due to the greater density of housing development.
4. Proximity to the township's major lakes.

High Density Residential

The High-Density Residential Designation represents those areas of the township programmed for the highest levels of residential density. The category also provides an opportunity to place manufactured home communities and apartments. However, due to a lack of demand and public infrastructure, the geographic extent of the High-Density Residential designation is relatively limited.

The designation is characterized by:

1. One acre parcel size for single-family detached homes, with a more significant lot area minimum of five acres recommended for apartments and manufactured home parks. The plan suggests that apartment complexes be developed at not less than one acre per housing unit with a one-half to one-acre additional provided for each unit. This is to provide 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 communities establish a base site area of not less than ten (10) acres, with additional increases based on increasing park size.
2. Lack of public water and sanitary sewer. The plan recommends that apartment and manufactured home community developments 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.

3. Proximity to primary, all-season roads.
4. Proximity to the City of Newaygo and public facilities and services.

Commerical and Industrial

General Commercial

The master plan establishes one commercial designation, referred to as General Commercial. As detailed on the Future Land Use Map, the General Commercial designation is a liner strip east of M-37, between 96th Street and M-82. The designation provides various 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 designation is characterized by:

1. Minimum one (1) acre parcel size.
2. Lack of public water and sanitary sewer.
3. Immediate proximity to M-37.
4. Proximity to the City of Newaygo and associated public facilities and services.

Due to the General Commercial area's relationship to M-37, and resultant high visibility and impact on traffic, the master plan recommends that commercial development:

1. Maintain landscape buffers along M-37.
2. Limit the number of curb cuts on M-37. Where feasible, the 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 to reach an adjoining site)

4. Where feasible, use shared parking to reduce the degree of paved surface area.
5. Restrict the placement of billboards and other unnecessary signage.

Industrial

The Master Plan does not provide for an Industrial category. However, due to the township's 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 in the future if conditions warrant.

CONSERVATION OVERLAYS

The master plan calls for a series of supplementary Conservation Overlays. These overlays are proposed to be made a part of the zoning ordinance and are 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:

1. Promote natural vegetative buffers/ greenbelts along water bodies.
2. Where feasible, require the placement of buildings and structures distant (e.g.,

100+ feet) from the actual water body 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.

3. 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 preserving and maintaining a natural vegetation strip along the township's major roadways. These include M-82, M-37, and Croton Drive. Development standards should:

1. Provide a minimum of twenty-five feet of natural vegetation buffer along both sides of each roadway.
2. Require new power lines to be setback behind the natural vegetation strip.
3. In non-commercial areas, limit signs to small (residential) nameplates.
4. Larger signs for home businesses are allowed in residential districts.
5. Encourage wildflower plantings in the non-developed public right-of-way and clear vision corner locations.

Greenbelt Conservation Overlay

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

1. Promote low-density development that has minimal impact on the natural environment.
2. Promote the maintenance of the natural habitat.

Brooks Township Newaygo County, Michigan

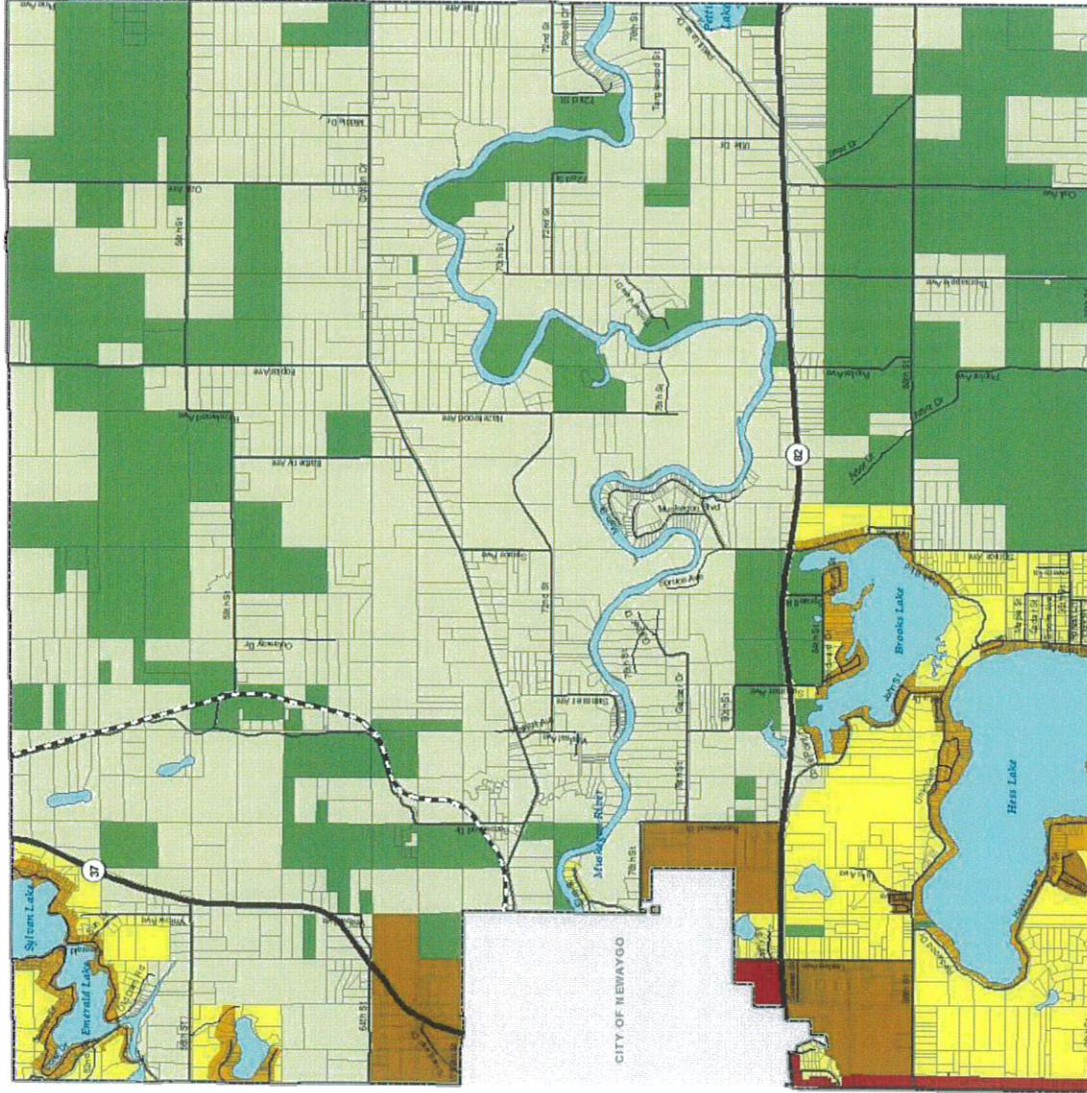
Future Land Use

- Rural Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- General Commercial
- Public/Semi-Public



williams&works
engineers surveyors planners

Source: Michigan Department of Natural Resources
Newaygo County GIS
National Wetlands Inventory



ZONING PLAN

The Michigan Planning Enabling Act (Public Act 33 of 2008) requires that a Master Plan include a "zoning plan" with an "explanation of how the land use designations on the land use map relate to the districts on the zoning map" (MCL 125.3833).

The township is divided into nine distinctive zoning districts. One agricultural, four residential, one commercial, one industrial, and two overlay districts. The ordinance also permits Planned Unit Developments. However, it is utilized as a procedure only and is restricted to properties zoned "R-1" and "R-2".

Future Land Use Plan Designation	Corresponding Zoning Districts
Public	Currently, no zoning district specifically addresses public entities' properties. However, those properties identified with this designation are generally zoned R-1 district, permitting very low residential densities. Further, the permitted land uses are limited to residential and agricultural, and it is the only zoning district where parks are allowed by right
Rural Residential	AG Agricultural District: This district intends to primarily conserve and protect lands suitable for farming operations and natural resource-based businesses. The district also accommodates very low-density residential development and other uses generally associated with agriculture. The intent of the zoning district is identical to that of the land use designation, as both are designed to protect the natural topography and resources while permitting very low-density residential and agricultural-based land uses.
Low Density Residential	R-1 Low-Density Residential District: This district is intended to conserve and protect rural township lands for single-family dwellings in low-density, rustic, natural settings. With a permitted residential density of 1 unit per 5 acres, the R-1 district aims to limit development and maintain the natural topography and rural character while permitting residential development away from agricultural activities.

<p>Medium Density Residential</p>	<p>R-2 Medium Density Residential District: The R-2 district permits single-family residential dwellings in a rural setting similar to that of the R-1 district. However, the development density becomes more intense compared to the R-1 Residential District, permitting a residential density of 1 unit per 2 acres on lands where urban utilities and services are planned in the future. The densities may be similar to the low-density designation, where urban utilities do not cover service areas. These platted areas near the township lakes are generally used for seasonal cottages.</p>
<p>High Density Residential</p>	<p>R-3 High-Density Residential District: This district is intended for single-family and multiple-family dwellings in an urban setting on lands where public utilities and services exist or have the likelihood to occur soon. These areas may include manufactured housing. However, significant infrastructure improvements may be necessary to facilitate these land uses.</p>
<p>General Commercial</p>	<p>C-1 Commercial Business District: The C-1 Commercial Business District is intended to accommodate traditional retail businesses and offices, meeting the needs of local and area residents. It plans to develop attractive and efficient business areas that are convenient and have buildings of harmonious design. In recognition of the unique character of the M-82/M-37 corridor, this district establishes requirements and incentives to improve vehicular and pedestrian safety, decrease traffic congestion, and improve the corridor's visual appearance through proper landscaping, buffering, and screening.</p>