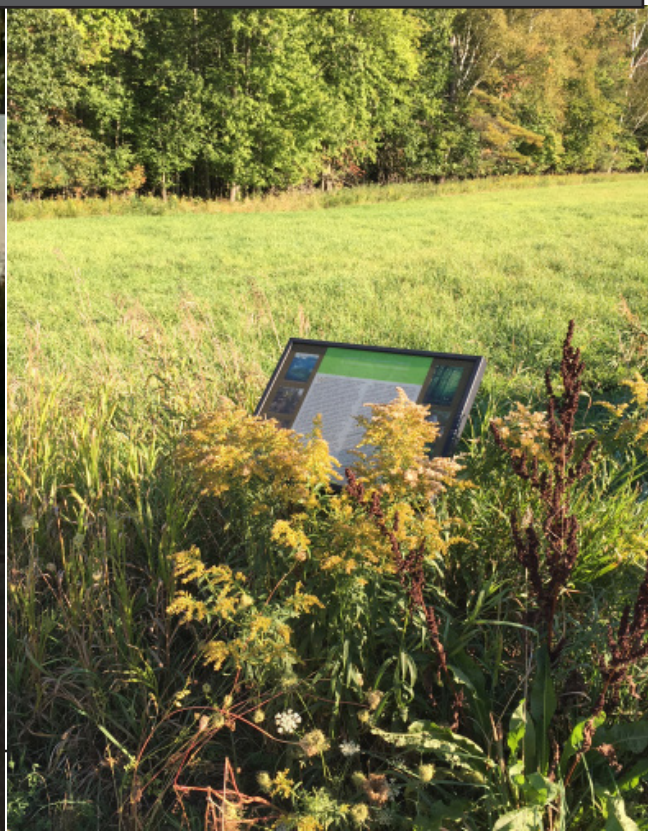




# Burt Township Master Plan 2020



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# BURT TOWNSHIP MASTER PLAN

2020

CHEBOYGAN COUNTY

MICHIGAN

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# CHAPTER ONE

## INTRODUCTION

### Purpose and Planning Process

The purpose of the Burt Township Master Plan is to provide guidelines for future development while protecting the natural resources and rural character of the Township. This plan presents extensive background information including socio-economic data on the Township; description and mapping of natural resources and existing land use; and inventory of existing community facilities. The background information is analyzed to identify important attributes and trends characteristic of Burt Township. Updated community concerns were identified based on a property owner survey conducted in 2019, previous planning efforts, and input from the planning commission. Goals and policies were developed to guide future development based on background studies, key land use trends, and community issues. These goals, along with a detailed map of existing land use, provide the basis for the Future Land Use Map which specifies where the various types of future development will locate in the community. This plan also provides suggestions for the implementation of the identified goals and policies. The guidance provided by this Master Plan will be used to update the Zoning Ordinance for Burt Township.

In 2019 and 2020, the Burt Township Planning Commission conducted a comprehensive review of the Master Plan and incorporated updates primarily in the social and economic characteristics (Chapter 2), natural features (Chapter 3) and the goals and objectives (Chapter 6) portions of the plan. The Plan update was conducted in accordance with the Michigan Planning Enabling Act.

### Regional Setting and Context

Burt Township is located on the western border of Cheboygan County, which is situated in the north-central part of Michigan's lower peninsula. While technically Burt Township is one standard geographic township in area, slightly more than half of the Township is water (Burt Lake).

Burt Township takes its name from Burt Lake, which in turn, was named after a state surveyor. The lake is part

of an important inland water route, stretching from Crooked Lake and Conway (nine miles from Petoskey) in the south to Lake Huron in the north via the mouth of the Cheboygan River. Native Americans used the route before European settlement and it was used for commercial purposes to transport logs in the second half of the 1800s.

In the last two decades of the nineteenth century, the Michigan Central Railroad and the Grand Rapids & Indiana Railroad laid track through to Cheboygan, leading to the foundation of several villages, including that of Burt Lake. Around the time lumbering was slowing down, the resort business began to grow in the area, creating the beginnings of the seasonal tourist industry that is still important today. The water route is still in use and frequented by small recreational craft.

### Township History

On the west side of Burt Lake, one of the first settlements in Burt Township was an intermingled tribe of Ottawa and Chippewa Native Americans located on Indian Point, now often called Colonial Point. The 1836 Census indicated 117 Native Americans lived there in a settlement called Pokagon's Village. There was a legal controversy over unpaid taxes by this tribe that resulted



*Burt Township Hall*



MAP 1: REGIONAL LOCATION



in a writ and eviction notice to vacate their 611 acres of land, and, in 1900, subsequently resulted in the burning of their homes by the Cheboygan County Sheriff.

On the east side of Burt Lake, there is very little history written except for a hotel that was built by a Mr. George Voightlander on land he bought from Mr. John Schennaman in 1885. The building was a splendid architectural wonder called “Fresh Breeze” and was completed in 1890 and operated as a 60-room hotel, bringing guests by horse-drawn wagon from the train station in Topinabee or by boat through the inland waterway. In 1903 the Weatherhead brothers, Albert J. Weatherhead and Edward J. Weatherhead bought the hotel from Mr. Voightlander. It was never again operated as a hotel but was always filled with friends and family.

## The Status of Planning and Zoning in Burt Township

Cheboygan County formed its Zoning Commission and Board of Zoning Appeals in December of 1969 and adopted the County’s first zoning ordinance that same month. The County’s first Comprehensive Plan was adopted in August 1979. Burt Township adopted its zoning ordinance in 1976, being one of the first townships in northern lower Michigan to do so. The Township had not had a Master Plan until 2004.

In 2009, the Township reviewed and updated the master plan per the Michigan Planning Enabling Act. The update was relatively minor because new Census

data was not yet available and there had not been major land-use changes or activities in the Township. The goals were updated as appropriate to address a few needs and/or plans which changed or evolved, such as the intended non-motorized connector route between the North Central State Trail and the Petoskey to Mackinaw City Trail.

In 2014, the Burt Township Planning Commission updated the Master Plan per the Michigan Planning Enabling Act. The most significant changes included update census information, revisions to the goals and objectives based on the 2013 property owner survey and public input. In 2019, the Township Planning Commission again proceeded with a 5-year update of the master plan. This again entailed researching and current demographic and economic information from the U.S. Census and American Community Survey, as well as a review of the goals, objectives, and future land use map from the 2014 plan.

A zoning ordinance supported by an up-to-date local master plan is considered the main tool Michigan communities have at their command to control land use patterns and development pressures. To provide a strong legal foundation, a zoning ordinance should correspond to an up-to-date adopted Master Plan. Since the Township administers a Township Zoning Ordinance, it should maintain an up-to-date Master Plan to guide future development and provide a stronger legal foundation for its regulations.



*Crump Road*



Maple Bay Road

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# CHAPTER 2

## SOCIAL AND ECONOMIC CHARACTERISTICS

### Population

According to the U.S. Census Bureau, Burt Township’s population in 2010 was 680 individuals (336 male - 344 female). American Community Survey (ACS) figures suggest that the Township’s population declined to 624 between that year and 2017, although measurement error could account for some of the change. The community’s recorded 2017 population means approximately 31.6 persons per square mile across the community’s 19.7 square miles of land area. This population density is lower than the estimated 35.6 persons per square mile across Cheboygan County and the estimated 170.8 persons per square mile across Michigan in that year.

In discussing the Township’s population, however, it is important to note that the 2017 ACS figure does not reflect the Township’s seasonal population, which adds substantially to the total. Large seasonal populations are characteristic of many Northern Michigan communities.

The Census tally, taken on April 1st, does not count residents who winter elsewhere. Respondents are asked to declare a permanent residence separate from their April location if more than six months are spent at the alternate address. However, many fail to do so for reasons of misunderstanding or tax purposes.

Housing data from the American Community Survey indicates that 431 of the community’s housing units or 54.9 percent of the total were seasonal, recreational, or occasional use homes in 2017. Based on the average household size in Burt Township of 2.02 people in 2017, the corresponding increase in seasonal residents would be 870 persons. Bearing this in mind, the Township’s resident population likely increases by at least 50 percent during the summer months. Many summer visitors also stay at private lodging places or with family or friends.

Table 1 illustrates population statistics for permanent residents of Burt Township and Cheboygan County between 1970 and 2017. As can be seen, the

TABLE 1: POPULATION CHANGE BY GEOGRAPHY 1970-2017

Geography	1970	1980	1990	2000	2010	2017	% change 1970-2017
Cheboygan County	16,573	20,649	21,398	26,448	26,152	25,475	54
Burt Township	212	520	533	654	680	624	194

TABLE 2: AGE DISTRIBUTION

Age	Burt Township	Township %	Cheboygan County	County %	State %
Under 5	10	1.6	1,011	4.0	5.8
5-17	63	10.1	3,455	13.6	16.5
18-24	13	2.1	1,787	7.0	10.0
25-44	64	10.2	4,798	18.8	24.1
45-54	69	11.0	3,500	13.8	13.8
55-59	50	8.0	2,100	8.2	7.3
60-64	54	8.7	2,385	9.4	6.6
65 +	301	48.3	6,439	25.3	15.8
Total	624	100	25,475	100	99.9
Median Age	63.6	--	50.1	--	39.6

Township experienced population growth during each decade in that timeframe, with the most substantial growth occurring between 1970 and 1980, when the township population increased by about one quarter. More recently, the Township experienced a slight growth of four percent between 2000 and 2010, although numbers suggest that flipped to a net loss of 8.2% between 2010 and 2017. Cheboygan County experienced positive growth each decade from 1970 to 2000, although the population decreased very slightly by 1.1 percent between 2000 and 2010, a drop that continued to 2017.

## Age Distribution and Racial Make-up

Information on a population's age distribution can assist the community in matching public services to community characteristics and in determining what special needs resident groups might have.

Age distribution in Burt Township in 2017 is shown in Table 2 and reflects a slightly older population compared with Cheboygan County and the State of Michigan as a whole. While the school-age (5-17) and young adult (18-24) demographics are very underrepresented in the Township relative to the County and State, the proportion of older adults in the wage-earning years (25-54 years) is closer to the County and State proportion but still underrepresented, and all age groups over age 55 comprise larger shares in the Township than in the County and State. Table 2 provides the statistical comparison of the age distribution for the Township, the County and the State, based on 2017 ACS data.

The 2017 American Community Survey estimates that the median age in Burt Township was 63.6 years while Cheboygan County and the State of Michigan were 50.1 years and 39.6 years, respectively. The Township's population is, therefore, significantly older than both the State and County. It is important to remember these statistics do not include seasonal residents.

The racial make-up of the Township in 2017 was primarily white (596 persons). Native Americans are the primary minority population (7 persons), and there were four residents listed as African American.

## Income and Employment

Income statistics from the 2013-2017 American Community Survey reflect information from the 2017 calendar year. Table 3 compares income statistics for Burt Township to Cheboygan County and the State.

Employment data on the civilian labor force is also compiled annually by the American Community Survey. Although measurement error is high at the Township level, the trends at the County and State level give a general depiction of how these indicators have changed over time. Table 4 shows the County and State data for, 2010, 2012, 2014, and 2016.

Another method of describing the economic characteristics of a community is to analyze the different categories of employment. Along with employment and unemployment data, resident employment by industry are provided for the Township and County in Table 5 for the years 2013-2017.

TABLE 3: INCOME BY GEOGRAPHY

Geography	Median Household Income (\$)	Per Capita Income (\$)
Burt Township	66,042	40,547
Cheboygan County	42,876	24,956
State of Michigan	52,668	28,938

TABLE 4: CIVILIAN LABOR FORCE AND EMPLOYMENT BY GEOGRAPHY

Labor Force Measure	County				State (in 1,000's)			
	2010	2012	2014	2016	2010	2012	2014	2016
Labor force	12,508	11,998	11,741	11,628	5,844	4,889	4,848	4,862
Employed	10,233	9,726	9,847	10,163	4,269	4,269	4,293	4,449
Unemployed	2,265	2,249	1,845	1,465	568	614	554	412
Unemployment rate	18.1	18.8	15.8	12.6	11.5	12.6	11.4	8.5

As the data shows, the highest percentage of residents' jobs are in the educational, health and social services industries at both the Township and County level. Given the limited employment opportunities in Burt Township, an assumption can be made that the majority of residents are self-employed or find employment elsewhere, possibly in Cheboygan, Indian River, or Petoskey.

## Education

Among Burt Township residents over the age of 25, 95.9 percent had attained at least a high school education in 2017, while 36.6 percent had attained a bachelor's degree or higher (U.S. Census American Community Survey 2013-2017). The share of residents with at least a high school education is greater than the share across the County as a whole (90.6%) and the share statewide (90.2%) in that year. The percentage of residents with at least a bachelor's degree was also high compared with only 19.5% in Cheboygan County.

## Housing Stock and Property Values

Evaluating housing stock and property values can be beneficial in determining community characteristics and housing needs. For example, a large percentage of

seasonal housing units are indicative of a large seasonal population, as is the case of Burt Township. Statistics from the 2013-2017 American Community Survey show a total of 785 housing units in Burt Township; 757 single-family units and 28 mobile homes. Mobile homes are about 3.0 percent of the housing stock in Burt Township.

When compared to the State as a whole, seasonal housing comprises a large share in the Township and County, as shown in Table 6.

## Household Size

2017 American Community Survey data indicates that Burt Township has a household size of 2.02 residents, which is low compared with 2.22 residents in Cheboygan County and 2.49 across the State of Michigan as a whole. These figures are a significant change from prior years. Over the past few decades, many communities across the state have experienced a shrinking average household size. This trend to smaller households is important, because it creates a demand for additional housing units, even in the absence of a numerical increase in population.

TABLE 5: EMPLOYMENT BY INDUSTRY

Industry	Burt Township		Cheboygan County	
	Number	Percent	Number	Percent
Agriculture, forestry, fishing, hunting, and mining	3	1.6	188	1.8
Construction	14	7.7	1,151	11.0
Manufacturing	18	9.9	923	8.8
Wholesale trade	2	1.1	194	1.9
Retail trade	25	13.7	1,772	17.0
Transportation, warehousing, and utilities	0	0.0	536	5.1
Information	1	0.5	163	1.6
Finance, insurance, real estate, and rental leasing	12	6.6	448	4.3
Professional, scientific, management, administrative, and waste management services	17	9.3	725	6.9
Educational, health, and social services	45	24.7	1,807	17.3
Arts, entertainment, recreation, accommodation, and food services	28	15.4	1,370	13.1
Other services (except public administration)	5	2.7	668	6.4
Public administration	12	6.6	498	4.8

## Ownership

In Burt Township, 94.2 percent of the permanently occupied housing units are owner-occupied, compared with 81.7 percent at the County level and 71.0 percent at the State level. The renter-occupied housing in Burt Township accounts for 5.8 percent of the total housing units (median monthly rent \$643), compared with the statewide level of 29 percent and median rent of \$824.

## Housing Value

Another comparative measure for housing is their value as shown in Table 7. According to the 2013-2017 American Community Survey, the median value of owner-occupied year-round housing units is \$276,600 in Burt Township. This was relatively high compared with \$116,900 across Cheboygan County as a whole, and \$136,400 across the State of Michigan overall. This information, while collected by the Census Bureau, is provided subjectively by the general population depending on what he or she thinks is the value of his or her house, and therefore this information should be used with caution.

Some people may intentionally underestimate the value of their homes due to concerns that accurate reporting might raise their taxes.

## Property Value

Property values can also be analyzed by reviewing the State Equalized Value (SEV) figures. By law, SEV, which constitutes a community's tax base, is equal to approximately one-half of the true market value of the real property and certain taxable personal properties. The total SEV for Burt Township increased substantially between 2015 and 2019. Table 8 provides data for 2015, 2017 and 2019. As shown in Table 8, as of 2019, the largest valued nonresidential class of properties continues to be agricultural land, although it accounts for less than one percent of the Township's total SEV.

TABLE 6: SEASONAL HOUSING CHARACTERISTICS BY GEOGRAPHY

	Total Units	Seasonal Units	% Seasonal
Burt Township	785	431	54.9
Cheboygan County	18,438	5,510	29.8
State of Michigan	4,568,200	289,802	6.3

TABLE 7: VALUE OF OWNER-OCCUPIED HOUSING UNITS

Housing Values	Percent of Units
Less than \$50,000	5.2
\$50,000-99,999	15.8
\$100,000-149,999	11.3
\$150,000-199,999	10.3
\$200,000-299,999	10.0
\$300,000-499,999	17.5
\$500,000-999,999	23.4
\$1,000,000 or greater	6.5



TABLE 8: STATE EQUALIZED VALUE BY PROPERTY CLASS

Class	2015 SEV (\$)	2017 SEV (\$)	2019 SEV (\$)
Agriculture	828,300	846,800	835,800
Commercial	138,800	156,300	125,200
Industrial	-	-	-
Residential	151,527,800	153,991,600	168,629,800
Timber Cutover	-	-	-
Developmental	-	-	-
Total real property	152,494,900	154,994,700	169,590,800
Personal property	1,179,250	3,192,400	4,281,300
Total SEV	153,674,250	158,187,100	173,972,100

TABLE 9: DISTRIBUTION OF SEV BY GEOGRAPHY

Real property	Burt Township		Cheboygan County	
	Amount (\$)	Percent of total	Amount (\$)	Percent of total
Agriculture	835,800	0.5	33,954,550	1.9
Commercial	125,200	0.1	159,405,650	8.9
Industrial	-	0.0	5,977,600	0.3
Residential	168,629,800	99.4	1,517,899,630	84.89
Timber Cutover	-	0.0	100,000	<0.1



Scenic Birchwood Road



*Crump Road*

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# CHAPTER THREE

## NATURAL FEATURES

### Climate

Burt Township's position in the interior of northern lower Michigan means it lacks the climate moderating effects that proximity to the Great Lakes provides. Due to the inland location, the growing season can be as short as 70-80 days. However, Burt Lake does provide some moderation of the Township's temperature extremes, as it encompasses slightly more than half the community's area.

County-wide the presence of the Great Lakes tends to keep the temperature near the shoreline portions of the county warmer in the winter months and cooler in the summer months than in inland areas. This affects the length of the growing season in the various portions of the County. The lakeshore region of the county may have a growing season of as long as 140 days, whereas the interior portions of the county are limited to a shorter season, typically 70 to 80 days.

The average temperature in the summer months as recorded by the Cheboygan weather station is 65 degrees Fahrenheit, while the winter average is 19 degrees (data from NOAA; 1960 through 1990). The overall annual average temperature for Cheboygan County is 52 degrees, although variations occur. Historical temperature data illustrates the following county temperature extremes. The highest recorded temperature of 104 degrees (8/6/47) and lowest recorded of 38 degrees below zero (2/6/95). Precipitation is well distributed throughout the year with the growing season with May to October receiving an average of 17.3 inches and 61% of the total annual average. The average annual snowfall for Cheboygan is 81.8 inches, which varies considerably throughout the County.

### Geology

The bedrock underlying the County was formed from an ancient sea, which covered the area some 250-600 million years ago. The bedrock underlying Burt Township was formed during the Middle Devonian ages of the Paleozoic Era. This bedrock is Bell shale, Dundee Limestone, and Traverse Group. The primary surface geologic features in Burt Township are moraines, course

textured glacial till and dune sand. Moraines, linear hilly ridges, were formed by the deposition of unsorted sand, gravel, rock and, clay at the margins of the glacier. A moraine represents the position of a glacier's edge in the past. Till is composed of unsorted sands and gravels left by the glacier. Moraines are predominant in the Township and occur in the area surrounding Burt Lake, with pockets of dune sand and some glacial till in the community's northwest. The surface geology of Burt Township is shown in the map "Quaternary Geology".

### Soils and Farmland

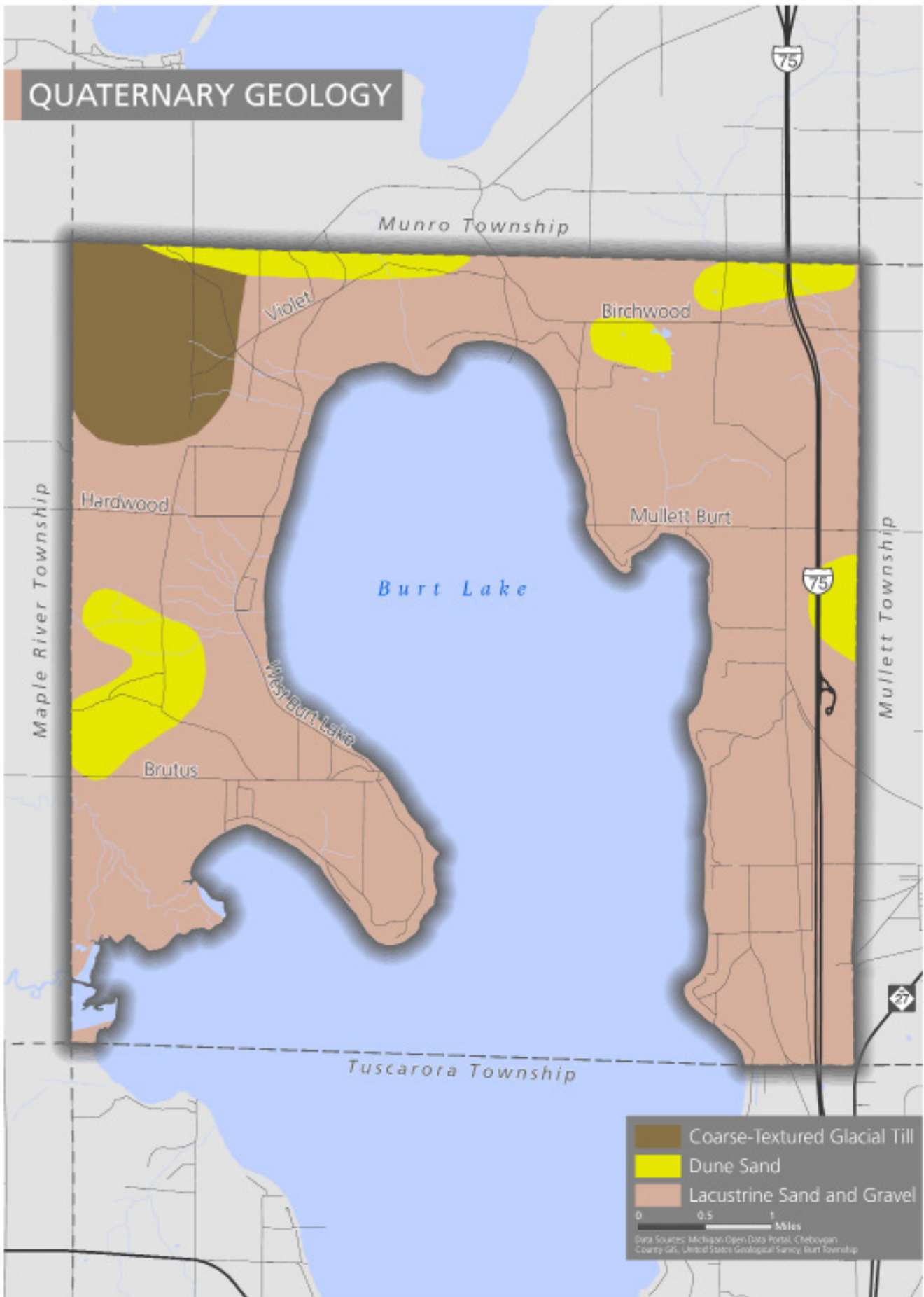
One important determinant of land use is the soil's suitability for development. Land uses must correspond with the capacity of the soils on which they occur, and the soil's suitability for each use should be determined before development occurs.

Approximately 13.1 percent of Burt Township is wetland area, comprised of soils which are hydric (wetland) soils or have hydric inclusions (see the "Wetlands" map). Soils identified as having hydric inclusions are soil types that may have some wetland areas but where the extent of wetlands cannot be determined by the soil type alone. These soils must be field checked to verify whether wetland areas exist. Soils and topography also determine which areas are classified as prime farmland, which is a locally-important resource. The



*University of Michigan Biological Station Property*

MAP 2: QUATERNARY GEOLOGY



prime farmland classification indicates soils that are ideally suited for agricultural or timber production. Unique farmland is land other than prime that is used to produce specific high-value food and fiber crops. Locally important farmland includes soils that are nearly prime but are located on slightly steeper grades. These soils can produce high yields when treated and managed according to modern farming methods. With good management, these soils may produce yields equal to that of prime soils. Agricultural soils are a valuable natural resource in the Township and region. Areas currently being used for agricultural purposes are in the community's northeast, as shown in the "Land Cover 2016" map on page 31.

The map "Soils-Septic Limitations" identifies areas with limitations for septic systems because of soil types. The limitations identified are either related to slope, hydric soils, or both. These limitations do not preclude the development of specific sites. Potential developers should realize, however, that construction on some soils may be more costly in time and money. A more detailed analysis of the soils by the District Health Department will determine suitability for siting a septic system. Health Department approval is required by State law.

## Solar Energy

In 2019, Burt Township has explored the possibility of allowing solar energy systems through the community's zoning ordinance. The Township considered allowing three types of solar installations; energy farms, in which solar energy is generated on non-prime farmland and

subsequently sold, roof-mounted installations on private property for consumption on-site, and ground-mounted installations on private property for consumption on-site. Allowing these uses is accomplished by incorporating solar installations as permitted uses in the Township's agricultural, commercial, and residential zoning designations. In March 2020, the Township passed a zoning amendment allowing for these installations on private property. The new regulations could help households moderate their energy costs and promote the varied use and preservation of farmland.

## Water Resources

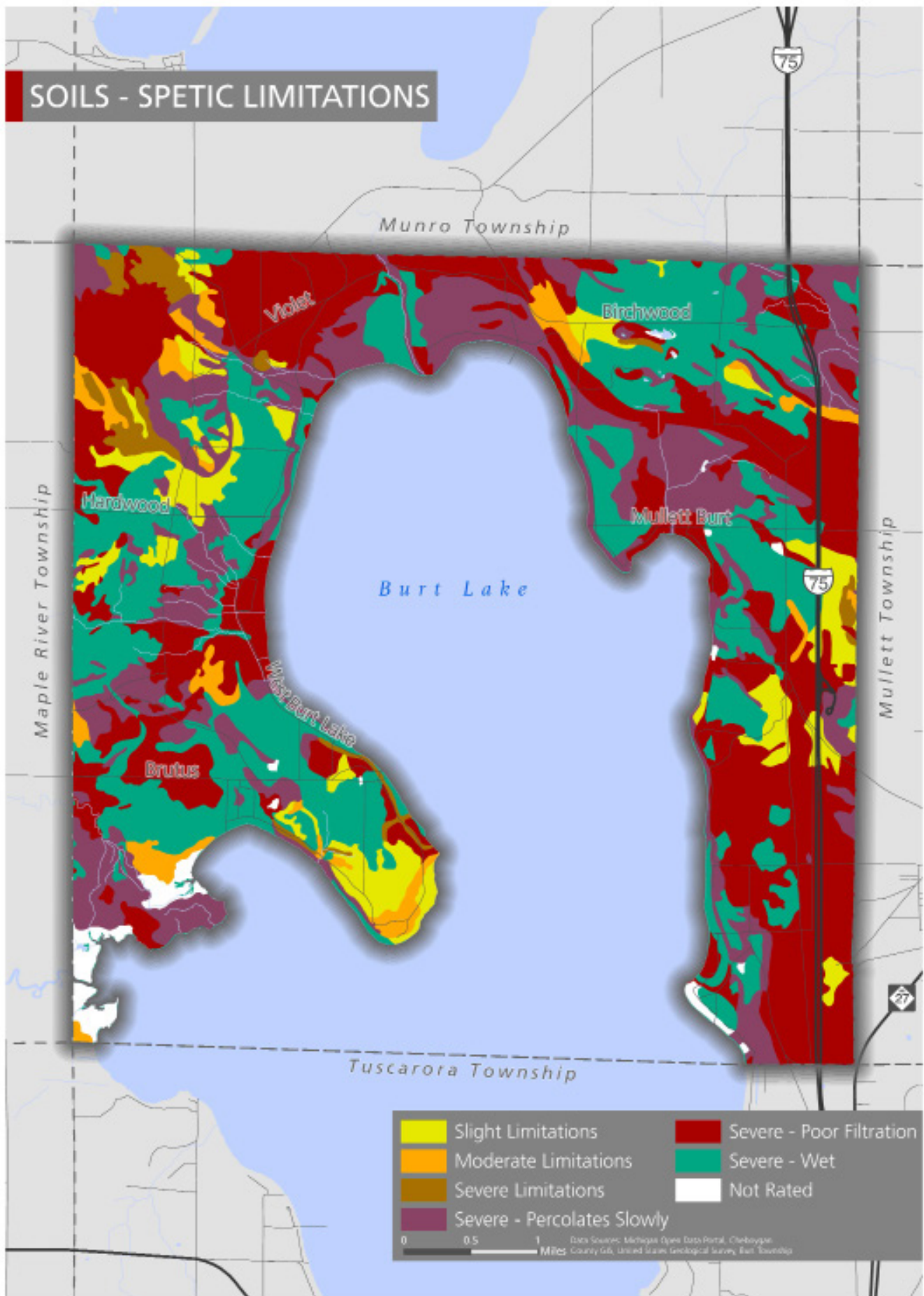
One of the most valuable natural resources in Burt Township is water. The Township is located within the Cheboygan River watershed, which is a sub-basin of the Lake Huron watershed. The waters of Burt Lake provide for a variety of recreational activities such as fishing, boating, and swimming.

Both groundwater and surface water are vital resources within Burt Township. Because the Township has no water distribution system, residents must rely upon individual wells for drinking water. The vulnerability of drinking water aquifers to surface contamination is high in the Township, with its highly permeable soils. Surface waters in lakes and creeks of the Township are an important resource for the scenic, recreational, and groundwater recharge amenities. It is therefore important that water resources be protected and managed in a manner that would ensure their quality.



*Burt Lake*

MAP 3: SOILS-SEPTIC LIMITATIONS



## Groundwater

Important factors in the evaluation of groundwater are the quantity and quality of the water. The geologic and hydrologic features of the Township provide residents with sufficient water quantities. Water availability will not likely be a factor in limiting growth. In Burt Township, water quality is more of a limiting factor than water supply. Water hardeners, iron content, salinity and septic field contamination are problems encountered in Burt Township. While hardness and salinity are minor problems, high iron content is common throughout the Township. A more significant concern is the potential contamination of wells by septic fields. The possibility for such pollution exists, although the Cheboygan County Health Department record has no documented occurrences of contamination to date.

## Surface Water

The major body of water in Burt Township is Burt Lake. Burt Lake is located (approximately half) in Burt Township, the southern half in Tuscarora Township. The lake's surface area is 17,120 acres and it has a maximum depth of 73 feet and an average depth of 39 feet. The lake and its associated tributary streams and creeks offer scenic and recreational amenities to Township residents and visitors. It is extremely important that the quality of these surface waters be protected from the negative impacts of development, such as pollution and loss of scenic views to open water.

The Burt Lake Preservation Association is an active organization of interested citizens and property owners concerned with the protection of Burt Lake.

Lakes, creeks, and wetlands are important for surface drainage, groundwater recharge, and wildlife habitat. Alterations to the water features can contribute to flooding, poor water quality, insufficient water supply and loss of valuable wildlife habitat.

Water quality testing includes dissolved oxygen and temperature profiles, pH levels, Total Phosphorus, Nitrate/Nitrite, Conductivity, Chloride, and Water Clarity Secchi Disc readings. Dissolved oxygen (D.O.) is an important factor in determining the lake's water quality since most aquatic organisms depend on having an abundant supply of oxygen available. The pH level is a measure of the acidity or alkalinity on a scale from zero to 14. Low pH indicates acidity, high pH indicating alkaline conditions and a pH of 7 is neutral. The higher than background levels of Phosphorous results in excessive growth of algae and aquatic plants. Phosphorous is considered the most important nutrient

influencing lake water quality. Nitrogen is considered the second most important nutrient affecting water quality. Low concentrations of nitrogen indicate good water quality. Conductivity and chloride are usually not water quality problems but are valuable indicators of human influence on water quality.

Overall the results of the Tip of the Mitt volunteer lake-monitoring program do not indicate a significant change in the water quality of Burt Lake in recent years. The Trophic Status Index Value for Burt Lake has typically ranged between 30 and 35 since 2000. In 1994, the trophic status of Burt Lake changed to oligotrophic and TSI values have been in that range ever since. What was once a moderately productive lake appears to have changed for the long-term to a low productivity lake: clear, nutrient-poor, but oxygen-rich. Overall, data show that Burt Lake has exceptionally high-quality waters.

While the current quality of surface waters in Burt Township is good, the threat of potential water pollution from non-point sources is a concern. Proper land-use management can help control water quality conditions in Burt Township. Some methods to curb pollution include runoff control measures, proper treatment of sanitary wastes, fertilizer application restrictions, and septic tank regulations, which are discussed in detail later in this chapter.

## Wetlands and Woodlands

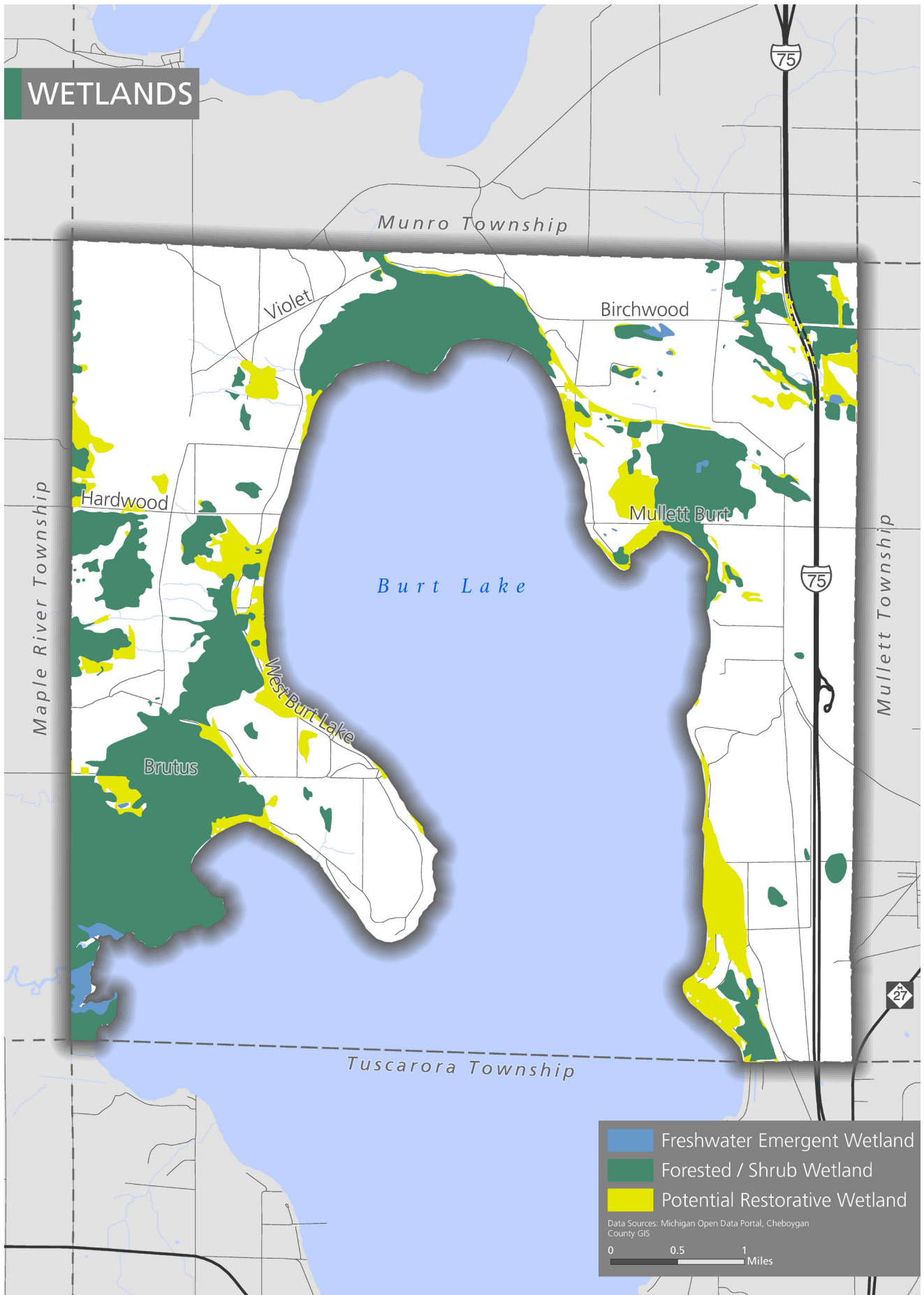
In addition to the scenic characteristics of woodlands, forested areas provide habitat for wildlife, protect the soil from erosion, and act as a buffer from noise on heavily traveled highways. The map "Forests" shows the distribution of forested land within the Township. The forested and wetland areas are located throughout much of the community and some are under public, or quasi-public ownership, such as the property owned by the University of Michigan. Other forested lands are protected in land trusts or with conservation easements.

The dominant forest associations in Burt Township are northern hardwoods (maple, beech, and basswood), aspen and pine in the upland areas. In the lowland or wetland areas, common hardwood species include ash, elm, and red maple. The common coniferous associations are cedar and tamarack in the wetlands.

## Fish and Wildlife

Trout, pike, walleye, perch, bass, and bluegill are the primary species found in Burt Lake, creating good recreational fishing opportunities. Burt Lake fishery





management strategy includes stocking and periodic surveying to assess the survival and growth of stocked species and the status of fish populations. The lake is stocked periodically with lake sturgeon and rainbow trout by the Michigan Department of Natural Resources (MDNR). Additional stocking of walleye in Burt Lake is conducted by a private organization under permit with the MDNR.

Habitat for populations of songbirds, wild turkeys, muskrat, mink, and raccoon are also supplied by the Township's wetlands. Predominant mammal species found throughout Burt Township are fox, squirrel, rabbit, raccoons, porcupines, coyotes, and deer. Bear are occasionally spotted in the Township. Additionally, the Michigan Monkeyflower is an endangered species both at the state and federal level, and the Hungerford crawling water beetle is a state-listed endangered species, both species are found in Burt Township. Also, two "threatened" species, the bald eagle and osprey have been sighted in Burt Township. The following "special concern" bird species are known to nest in Burt Township: Cooper's hawk, northern goshawk, American bittern, red-shouldered hawk, and common loon.

## Scenic Features

The dynamic, year-round views of Burt Lake from along its shoreline are another important asset in Burt Township. Development that occurs along the Burt Lake shoreline area is visible to many other property owners and boaters on the lake. Just as consideration is given to the impact of development on water quality, the impact on visual quality should be considered.

In addition to Burt Lake, wooded areas, farmlands, streams and creeks, rolling topography, and historical structures are all important attributes found within Burt Township. Extensive panoramic views encompassing these features help create the pleasant rural and scenic character appreciated by residents and visitors alike.

## Sites of Environmental Contamination

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) provides for the identification, evaluation and risk assessment of sites of environmental contamination in the State, under part 201 of PA 451 of 1995.

The Environmental Response Division (ERD) of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) is charged with administering this law. A site of environmental contamination, as defined by the ERD, is "a location at which contamination of soil, groundwater, surface water, air or other environmental



*Burt Township Trail*

resource is confirmed, or where there is potential for contamination of resources due to site conditions, site use or management practices."

The agency publishes an annual list of environmentally contaminated sites by county, showing the sites by name, Site Assessment Model score, pollutant(s) and site status. As of August 2019, one environmentally contaminated site was listed in Burt Township, due to gasoline leakage from a previous underground storage tank, although this has since been removed. EGLE does not list any land-use restrictions for the property.

## Surface Water Discharge Permits

All point source discharges into surface waters are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit which is issued by the Michigan Water Resources Commission upon recommendation by MDNR (now EGLE), Surface Water Quality Division. Permit requirements generally address discharge limitations, effluent characteristics, monitoring, and reporting requirements, along with facility management requirements. Currently, there are two point source permit holders are listed in Burt Township, the Cheboygan County Road Commission for S. Extension Road, and MDOT for I-75 northbound between Topinabee Mail Route and Riggsville Road.

## Septic Tanks

Although water quality in Burt Lake remains high, pollution from septic tank effluent from surrounding residences could pose a concern if measures are not taken. Despite its freshwater resources, Michigan is the only state in the United States without uniform

MAP 5: FORESTS



standards for septic system design, installation, and maintenance; this is left to Counties and municipalities. Still, only 11 of the state's 83 counties had requirements for septic inspections in 2017, and in most cases, inspections were only mandated at the time of transfer or sale of a property. The lack of oversight of private septic systems poses a threat to water resources; public health experts in the state believe that most septic tank failures go unreported or undetected for large periods. Monitoring conducted in 2017 concluded that nutrient contamination associated with septic systems affected all the Lower Peninsula river systems studied. This has the potential to adversely affect lake ecosystems and public health.

Municipalities are left to deal with much of the challenge, however, with about half of the frontage on Burt Lake, Burt Township is in a unique position to do so and affect positive outcomes on water quality. Several types of mandates could reduce the risk of contamination. The Township could consider implementing a time of transfer ordinance or point of sale inspection program, which would mandate a septic inspection by the district health department at the time of property transfer or sale. The ordinance could also mandate remediation if a private system is found out of compliance. Success has been achieved by Milton Township in Antrim County, and Long Lake Township in Grand Traverse County, and among the many benefits, the ordinances have increased residents' awareness of their septic system and how they work. The ordinance has not discouraged new homeownership in the area, although as a drawback, the inspection mandate doesn't catch problems of long-term property owners' systems, which often need the most attention.

Other more stringent regulations are options as well. Mandatory inspection programs would require owners to undertake an inspection at a specified time interval, while mandatory pumping ordinances require the pumping of septic systems at a specified time period. All of these regulatory options are possibilities although a time of transfer ordinance is a good starting point; the majority of respondents to the 2019 Burt Township property owner survey indicated support for one.

## Air Quality

Air Quality is monitored by the Air Quality Division of the Michigan Department of Environment, Great Lakes, and Energy. Standards have been established as acceptable levels of discharge for any of the following air pollutants: particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone, lead, and trace

**"Potentially 40% of the aging septic systems in Cheboygan County have not been replaced or will need replacement in the near future."**

*Source: Tip of the Mitt Watershed Council. The Septic Question: Cheboygan County Report*

**61%**

**of respondents to the Burt Township property owner survey reported that they would support a septic tank inspection ordinance at the time of property transfer**

*Source: Burt Township Community Survey 2019*

metals. These pollutants are monitored on a continuing basis at selected locations around the state. Monitoring in recent years has shown the level of pollutants in the region to be within the established acceptable standards.

Air discharge permits are required for businesses discharging more than the acceptable level of any regulated air pollutants. Within Cheboygan County there is one active permit, however, none are currently listed in Burt Township

On-going air quality monitoring and research is being conducted at the University of Michigan Biological Station in adjacent Munro Township. This research includes acid rain deposition research, mercury deposition research, and in-depth research in the areas of carbon monoxide and ozone.

## Summary

The review of the natural resources in Burt Township indicates the natural features and agricultural resources are currently relatively unimpaired; however, these resources are extremely vulnerable to change. Residents place value on the community's natural resources and scenic features, as indicated in the community survey. The Township's environmental features are important to the community and need continued protection.

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# CHAPTER FOUR

## EXISTING LAND USE

### Pattern of Land Division

As development occurs, larger tracts of land are generally broken down into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Land division patterns in Burt Township are discussed below.

The two largest landowners in the Township are the University of Michigan (over 2,300 acres), followed by the State of Michigan (over 2,000 acres). Both entities have large contiguous areas of undeveloped land, which are currently maintained for recreation, conservation, and educational purposes. Additionally, the Little Traverse Conservancy owns some large parcels. Privately held tracts ranging in size up to approximately 150 acres or greater are scattered throughout the interior of the Township.

Subdivisions and small tracts are primarily located along the lakefront of Burt Lake. Other small tract land divisions are occurring as small parcels along the roads are split from larger parcels. In terms of land division patterns, it is worth noting that some of the

newer residential developments in Burt Township are being created as site condominiums rather than traditional subdivisions. A site condominium does not actually create lots by land division. Therefore, a site condominium project may continue to appear as a large, undivided tract when it has already been converted to relatively dense residential use.

### Existing Land Use Statistics and Characteristics

According to the Census Bureau, Burt Township's land area is 19.7 square miles.

The map "Land Cover, 2016" illustrates the distribution of land uses within the Township. Table 10 graphically represents the percent of the township in each land use category. The existing land use map is a compilation of data provided by the State of Michigan's open data portal and from the Cheboygan County GIS Office.

### Forests and Wetlands

Forests, which include deciduous and coniferous types, accounted for 40 percent of the Township land area in 2016. Heavily wooded areas are located in the

Table 10: Existing Land Use in Burt Township

Land Use Category	2016 (percent of Township)
Developed, Open Space	5.7
Developed, Low Intensity	2.7
Developed, Medium Intensity	0.3
Developed, High Intensity	0.0
Barren Land	0.5
Deciduous Forest	37.4
Evergreen Forest	2.7
Mixed Forest	12.4
Shrub/Scrub	0.1
Grassland/Herbaceous	2.5
Pasture/Hay	4.4
Cultivated Crops	2.1
Woody Wetlands	28.3
Emergent Herbaceous Wetlands	0.9
Total	100.0

MAP 6: LAND COVER, 2016



northwestern portion of the Township, as can be seen in the map “Land Cover 2016”. A map depicting the woodland areas, both deciduous and coniferous forests, is shown on page 27 in chapter 3. Of the forested land, nearly 250 acres are protected in conservancy preserves. Additional private lands are protected through conservation easements see the “Other Protected Lands” subheading in chapter 5 for more detail.

Wetlands include land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes, or bogs. Wetland areas may also include land that supports lowland hardwoods and conifers. Wetland information was not verified by field inspection when these maps were compiled. Thus, the areas shown as wetlands may not meet State and Federal criteria for legally regulated wetlands.

Wetland areas comprised more than 29 percent of the Township. As illustrated in the map “Land Cover 2016”, a significant portion of the Township’s wetlands are in the southwest portion of the community and at the north end of Burt Lake. Wetlands also occur in scattered locations throughout the Township which have not been developed.

## Nonforested

The nonforested land category consists of herbaceous open and shrub land. As shown in Table 10, the percent of nonforested land in the Township was 2.5 in 2016. Nonforested lands are scattered throughout the Township, as shown in the 2016 land cover map.

## Agricultural

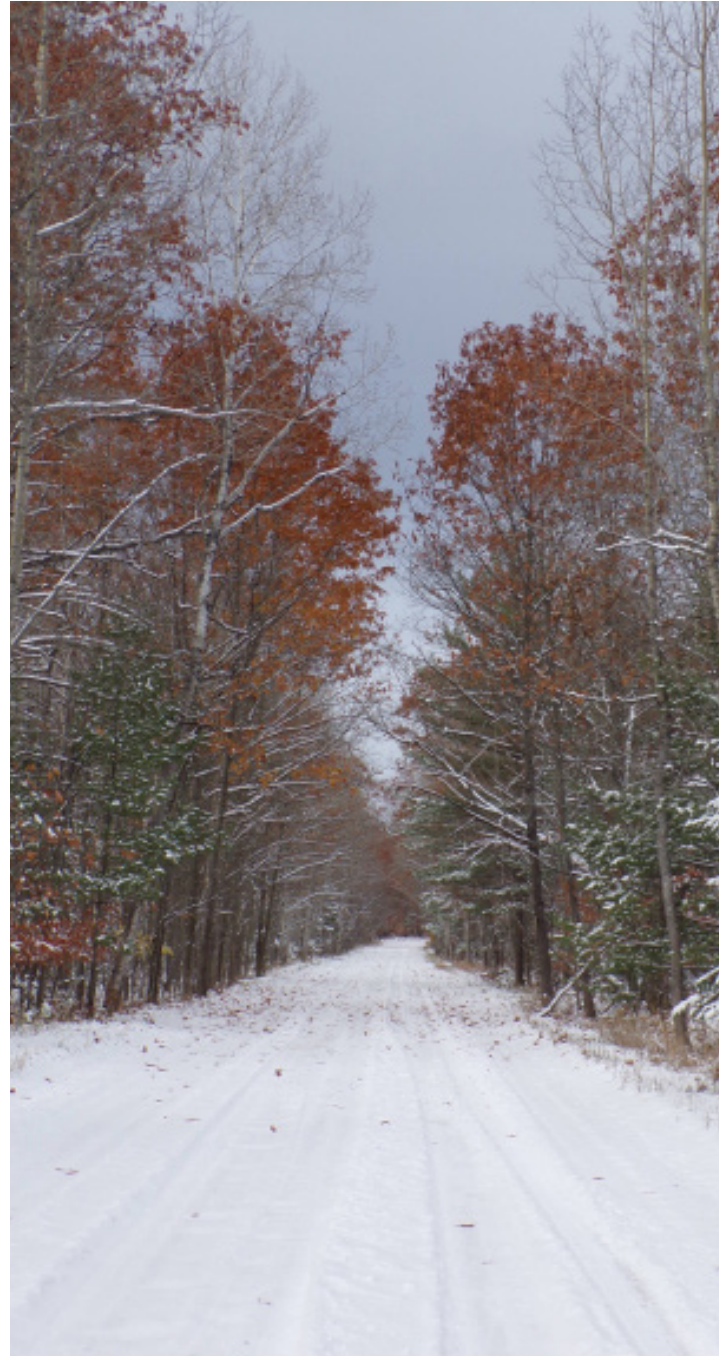
As shown in Table 10, agricultural lands occupied more than 6 percent of Township land area in 2016. As is illustrated in the land cover map, the active agricultural lands are dispersed across the Township.

The agricultural classification also includes agricultural lands that have been placed in the Conservation Reserve Program. This program pays farmers to remove certain erodible lands from agricultural production.

## Developed Areas

Table 10 shows that approximately 8.7% of the Township’s area was classified as “developed” in some way in 2016. A large portion of the land area classified as developed was “open space” or other low-intensity forms of development. The land cover map shows that much of the developed areas are the lakefront residential neighborhoods situated along West Burt Lake Road, East Burt Lake Road, and Nipissing Trail Roads.

Other developed areas of the Township are located along I-75 in the community’s eastern extent. This includes the roadway and its corresponding right of way, transfer stations, some properties that were used as extractive sites in the past, as well as utility line corridors. A select few commercial properties in the Township also fall in the map’s “developed” designation, including a restaurant on the corner Mullett-Burt and East Burt Lake Roads. The former commercial structures immediately northeast of the intersection of Brutus and Mundt Roads are also shown as developed land.



*Crump Road*



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# CHAPTER FIVE

## COMMUNITY SERVICES, FACILITIES, AND TRANSPORTATION

### Water and Sewage Disposal Systems

Burt Township does not have a public drinking water system or a public sewer disposal system. A limited number of residential developments located around Burt Lake have shared septic systems, however, most of the Township residents have on-site private wells for domestic drinking water and individual septic systems. Septic systems and wells are regulated by the Cheboygan County Health Department.

Two important determinants for siting a septic system are soil suitability and depth to bedrock. Chapter Three - Natural Resources discusses the geology and soils of the Township.

### Solid Waste

Residents of Burt Township have several options for the disposal of solid waste. The Township owns and operates two transfer stations within the Township. Private haulers offer residential weekly curbside trash pick-up.

Since its inception in summer 2003, the Burt Township sponsored township-wide spring clean up day, which has become an annual event. This clean-up event allows Township residents to bring “large items” (not typically accepted) to the transfer stations for disposal.

Currently, recycling occurs at the Cheboygan County level with local drop-off sites located at both the east and west side transfer station. Some Township residents may recycle using Emmet County facilities, or utilize the weekly household hazardous waste drop off available at Cheboygan County fairgrounds.

### Other Public Utilities

Burt Township residents receive electric service from Consumers Power Company or Presque Isle Electric and Gas Co-operative. Natural gas is available in the majority of Township. Residents choose from several providers of local and long-distance phone service. Cable service, where available, is provided by Charter Communications. High-speed internet service (DSL) is currently available to residents only on the west side of Burt Lake and is only provided through one or two companies. Wireless high-speed service is available throughout much of the rest of Township.

### Police, Fire, Ambulance

The Charlevoix, Cheboygan, Emmet (CCE) Central Dispatch Authority communications agency provides emergency call receipt and dispatch service for Emmet, Charlevoix and Cheboygan Counties. Enhanced-911 telephone service, computer-aided dispatch, and a multi-channel radio systems are in place, including a system that identifies the actual location from which a cellular phone call is made.

The Cheboygan County Sheriff and Michigan State Police provide law enforcement services to Burt Township. Fire protection is provided under contract by Pellston Fire Department and the Topinabee Fire Department depending on where service is needed.

### Recreation

#### Burt Township Trail

The Burt Lake Trail is a new recreation asset that has boosted the community’s appeal and visitorship. The first phase of the Burt Lake non-motorized trail was constructed in 2013 from Maple Bay Road to Hogsback Road on the west side of Burt Lake. Most of the trail is a 10-foot-wide crushed limestone pathway separated from and immediately west of the roadway. In Summer 2019, construction began on the second phase of the trail, which will extend east from West Burt Lake Road for about 1.8 miles through the University of Michigan Biological Station property along Riggsville Road to East Burt Lake Road. This phase is financed with MDOT and MDNR Trust Fund grants and will be completed in spring 2020.

Subsequent phases are planned for 2020 and 2021 that will extend the trail east to Topinabee, and will also extend the trail further west to Brutus. This will require working with adjacent communities to finance the project. With these additions, the Burt Lake Trail will connect with the Northwest State Trail, which extends from Alanson to Mackinaw City and the North Central State Trail, which connects Gaylord and Mackinaw City. The latter of these coincides with the Iron Belle trail, which traverses the state from Belle Isle to the western Upper Peninsula. Similar grants from the State are planned for these portions, along with matching funds from the Township and donations.

## Water sports and other recreation

The Township has numerous other recreation facilities, which consist primarily of water-related activities (boating, fishing, swimming, etc.) and trails for hiking, skiing, biking, as well as some snowmobiling trails. There are several public access sites on Burt Lake within the Township that are well utilized both in the summer and winter seasons. The extensive network of trails in the Township is located on both public and semi-public lands, such as the State Forest land, the University of Michigan properties and the Little Traverse Conservancy properties. The Michigan Department of Natural Resources (MDNR) also maintains a campground at Maple Bay in the Township.

## Parks and Recreation Action Strategies

Parks are key resources to continue attracting residents and visitors to the community, and recognizing this, Burt Township's 2018 recreation plan update defined several strategies to improve its assets in the near term through 2022. These projects were determined by a thorough inventory of the community's facilities and with feedback garnered from residents.

Improvements to the Mullett-Burt Road end at Burt Lake, particularly to its parking facilities, is one of the community's priorities. Road end sites are popular access points on Burt Lake and residents report parking shortages at peak use times. Outside of this, the Township will work with neighboring jurisdictions in Emmet County to extend the Burt Lake Trail west to Brutus. User safety will be a primary concern and the trail will remain separated from roadways where it is

possible, considering the right of ways and easements. Some of these planned stretches will need to be designed as paved road shoulders. The Township also plans to create a trailhead at the publicly owned lot at Crump Road near the Mullett-Burt Road intersection, which will improve access for visitors.

## Other Protected Lands

There is a growing number of parcels that have been donated to or purchased by the Little Traverse Conservancy. These Conservancy Preserve parcels are shown on the "Recreational Opportunities" map and are protected from future development as public conservancy owned properties. Additionally, Little Traverse Conservancy currently holds a conservation easement or similar instrument on four other private properties, (total 104.5 acres) in the Township. These privately-owned properties are not shown on the map but are protected due to specific development restrictions associated with their respective conservation easement to limit future development on the property.

The University of Michigan owns extensive property (over 2,300 acres) primarily in the northern portion of Burt Township. While this land is considered semi-public, since the University allows residents to use the trails, it is not protected in any permanent manner.

The Mackinaw State Forest land owned by the State of Michigan is open for public use, but as with other state-owned land, it is not necessarily permanently protected.



*Maple Bay State Campground*

TABLE 11: RECREATIONAL OPPORTUNITIES

Recreational Site	Map	Facilities
Maple Bay State Campground & Boat Launch	A	Public access - boat launch improvements. Ice fishing access in winter.
Michigan Department of Natural Resources site	B	Undeveloped waterfront site
Burt Lake Chaboiganing Nature Preserve Trailhead	C	Little Traverse Conservancy Preserve
Mundt Road Public Access	D-2	Public access suitable for shallow draft boats. Ice fishing access in winter.
Indian Road Public Access	D-3	Public limited access
Roberts Road	D-4	Public access suitable for shallow draft boats. Ice fishing access in winter.
Lawless Road	D-5	Public access suitable for shallow draft boats. Ice fishing access in winter.
Mullett-Burt Road ("Hoppies")	D-6	Public access suitable for summer use, expanded parking. Ice fishing access.
White Goose Drive	D-7	Public access - suitable for shallow draft boats. Ice fishing access in winter.
Numbers Road	D-8	Public access - suitable for shallow draft boats. Ice fishing access in winter.
Needles Road	D-9	Public access - suitable for shallow draft boats. Ice fishing access in winter.

## Private, Civic, and Fraternal Organizations

Typically, there are many private, civic and fraternal organizations active in Burt Township or in which Burt Township residents are involved that are not specifically affiliated with the Township. The organizations either located in Burt Township or quite active in the Township include the following:

- Burt Lake Preservation Association
- Little Traverse Conservancy
- Tip of the Mitt Watershed Council
- Sturgeon Forever
- Northern Lakes Walleye Club
- University of Michigan Biological Station
- Burt Lake Band of Ottawa and Chippewa Indians

Other organizations are typically regional organizations that have a larger membership and service area than the Township. A listing of such organizations is available from the Regional Chamber of Commerce.

Many Township residents participate in organizations present in Cheboygan or throughout the region.

## Churches and Cemeteries

The one church in Burt Township is St. Mary's Catholic Church located on Indian Road, which in the recent past held services only during the summer.

There are two Indian Cemeteries in the Township, one located off Chickagami Trail and the other Behind St. Mary's Catholic Church, both in the western portion of the Township. Additionally, the Burt-Mullett Township Cemetery is located off Topinabee Mail Route on the east side of the Township and is owned jointly with Mullett Township.

## Transportation and Road Maintenance

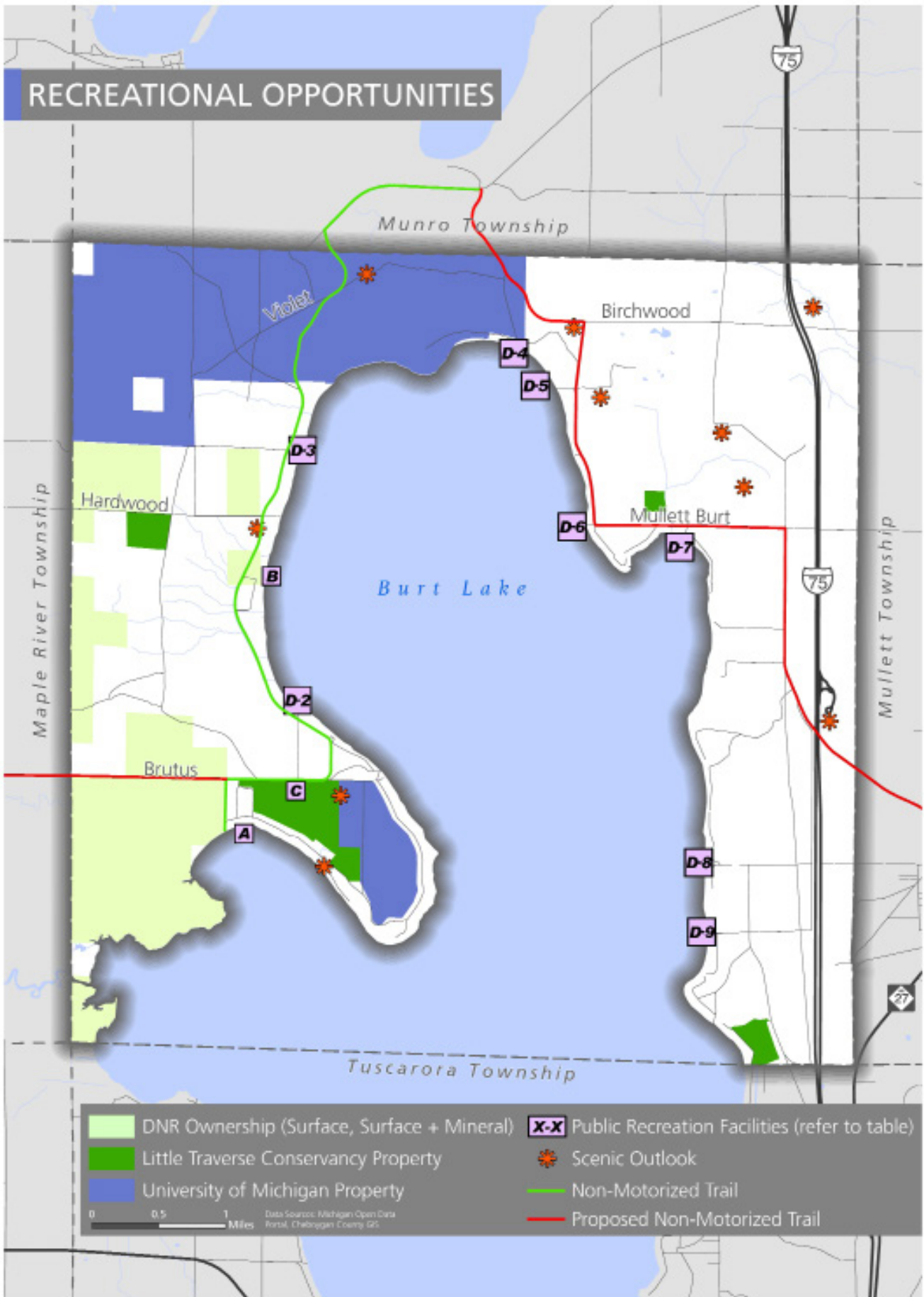
The only interstate route through the Township is I-75, which is the dominant north/south route through the Township. This highway is under the jurisdiction of the Michigan Department of Transportation. The total of I-75 passing through Burt Township is about six miles.

The Cheboygan County Road Commission provides road maintenance and snow removal services on all public non-seasonal roads within the Township.

The Straits Area Regional Ride provides an on-call dial-a-ride bus service within a multi-county area including the counties of Cheboygan, Emmet, Presque Isle, and Otsego. Commercial passenger service, as well as cargo service, is available at the Pellston Regional Airport.



Chaboiganing Nature Preserve



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# SECTION SIX

## COMMUNITY GOAL AND OBJECTIVES

In developing community goals and policies, it is important to analyze existing community characteristics, such as social and economic features, environmental resources, available services and facilities, and existing land use. In addition to examining existing characteristics, another important tool is to identify community assets, problems and other issues to be addressed.

### Community Survey

The Burt Township Planning Commission, in association with Beckett & Raeder Inc., conducted a citizen survey in June 2019 to understand Burt Township residents’ needs and preferences in terms of zoning policies and community goals and to gauge whether they had changed since the 2014 planning process. The 2019 survey was mailed to each household within the Township, including permanent addresses for property owners living outside the Township, using the Cheboygan County property tax list. A total of 370 individuals completed the survey, which equated to a response rate of about 47%, assuming 785 housing units in the Township in 2017. This is a relatively robust response rate for a resident survey for general planning purposes. Full details of the survey’s results are aggregated in Appendix A. Some highlights are portrayed below:

Category	Question	Responses
Utilities and services	Utility power lines should be buried	The majority of respondents (61%) agreed that utility power lines should be buried
	I would support a millage to bury utility lines	Almost half (43%) would support financing the action with a millage.
	Township disposal sites are adequate	Waste management was consistently rated as one of the most adequate services among respondents; about four-fifths (79%) of respondents agreed that disposal sites were adequate.
	High-speed internet services are adequate	High-speed internet was consistently ranked among the least adequate services; most respondents (58%) disagreed or strongly disagreed that internet services were adequate.
	I would support an assessment to finance high-speed internet	A large share of residents (43%) expressed support for an assessment to fund high-speed internet.
	Could recycling services be improved? If so, how?	Although most respondents reported satisfaction with recycling services, many individuals felt that bins could be emptied more frequently and that slots in the bins were too small. Meanwhile, others felt that more materials (Styrofoam, batteries, scrap metal, lawn waste) should be collected. Others indicated support for expanded hours or curbside pickup.

Utilities and services	For the Township to establish budget priorities, please provide your priority ranking of the following services	"Fire and safety were rated as the highest priority, with 54% of residents ranking it this way. Roads were a definitive 2nd, with 75% of respondents ranking it as a first or second priority. Utilities came in third, while libraries were ranked last with 60% of respondents ranking it as the lowest priority." "
	Currently, the Township levies ½ of a mil that is used specifically for new paving of dirt roads. If the Township decided to place this issue on the ballot for voter approval would you be in favor of increasing this designated millage from ½ mil to 1 mil?	A large share of respondents (32%) indicated they would support doubling the Township millage from ½ mill to 1 mill to pay for the paving of dirt roads. Many respondents skipped the question, indicating a need for more information.
	Please indicate the level of importance of the following (in reference to recreational amenities)	"60% of respondents indicated that non-motorized trails for biking, walking, or jogging, were either very important or important." "
Growth and regulation	Please rate the importance of the following types of business in Burt Township both now and for future growth:	Over three-quarters of respondents (76%) view resort or recreation land use as important or very important
		Over two thirds (69%) of respondents indicated support for farming land uses in the Township.
		61% of respondents indicated support for commercial service and retail uses.
	Please rate your level of agreement with the following statements: Burt Township should work to protect existing conservation areas	94% of respondents agreed or agreed strongly that the Township should work to protect existing conservation areas.
	Please indicate your views about growth in Burt Township	42% of respondents preferred planned and limited growth, while another 42% expressed that growth should take its own course.
	Please indicate your level of agreement with the following statements that pertain to the waterfront setback and natural vegetation strip.	Most respondents indicated support for provisions that would strengthen the waterfront setback and natural vegetation buffer along Burt Lake. For instance, 89% of respondents reported that neither septic tanks or filtration systems should be in the buffer, while 83% reported that pesticides, herbicides, and fertilizers should be prohibited in the area.
	Are you supportive of an ordinance to require a SEPTIC inspection at the time of property transfer?	Most respondents (61%) were in support of an ordinance to require a septic inspection at the time of property transfer.
	Are you supportive of an ordinance to require a PRIVATE WATER SUPPLY inspection at the time of property transfer?	Almost half of the respondents (49%) were in support of an ordinance to require a private water supply inspection at the time of property transfer.



These survey results were used to review the goals set during the Township's 2019-2020 master planning process. The following overarching goals and objectives related to each goal were determined from this process.

Topic	Goal	Actions
Natural Resources	Protect and preserve groundwater, surface water, woodlands, wetlands, open space, wildlife habitat, and steep slopes.	Explore adopting a septic ordinance and/or sanitary sewer system around the lake to protect water quality.
Agriculture & Forestry	Acknowledge the importance of agricultural lands and forestry management.	Evaluate the feasibility of commercial-scale solar installations on land marginally suited for farming.
		Work to provide economically feasible options for continued agricultural use of active prime farmland.
		Allow for and encourage farmland protection, such as through the transfer of development rights (when available), purchase of development rights, conservation easements and the clustering of non-farm development.
Parks & Recreation	Provide and maintain recreation lands and facilities for safe access and enjoyment by residents and visitors.	Establish bike/pedestrian routes along East Burt Lake Road to extend and connect with phase one of the Burt Lake Trail along West Burt Lake Road.
		Extend the Burt Lake Trail to connect between the North Central State Trail and the Northwestern State Trail (Petoskey to Mackinaw City).
		Establish legal agreements for bike and ski trail connections to publicly owned, semipublic, and conservation areas within the Township and be part of a larger regional trail.
		Establish a snowmobile connector route to link existing trail systems in Pellston and Mullett Township (west side of Mullett Lake).
Housing & Commercial Development	Retain the Township's rural and scenic character while providing for suitable housing and commercial opportunities to serve year-round residents.	Designate areas appropriate for all types of residential development including single-family, multi-family, condominium, and low- to moderate-income rental housing.
		Work cooperatively property owners to rehabilitate substandard housing and to provide needed moderately priced housing in the Township, such as through programs provided by Northern Homes and Michigan State Housing Development Authority (MSHDA).
		Explore opportunities for low impact commercial services (e.g. a general store)
Infrastructure & Public Services	Maintain and improve the Township facilities, programs and systems consistent with the community needs, and the ability to finance the improvements.	Monitor and explore the needs for water, sewer, and natural gas services as more development occurs.
		Pursue expansion of high-speed communications and fiber optic within Township.

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# SECTION SEVEN

## FUTURE LAND USE RECOMMENDATIONS

While the Planning Commission reviewed the Future Land Use categories and map as part of the 2014/2015 Update, it was determined that the desired future configuration of land fits the Township's goals and will be appropriate to guide future development.

While growth is occurring in Burt Township, according to the original 2004 land use inventory (see Chapter 4), 93.2 percent of the land area was classified as forest, farmland, or open space including forests, non-forest open space, wetlands, agriculture, and water. Meanwhile, only 5.81 percent of the Township's land was developed, including property used for commercial, industrial, institutional/recreational, and residential purposes. Through land-use planning and land use controls, Burt Township intends to ensure that existing forest, open space, and recreational land uses can continue; that irreplaceable natural resources such as water, wetlands, and forestlands will be protected; and that reasonable growth can be accommodated with minimal land-use conflicts or negative environmental impacts.

Future land use recommendations for Burt Township were developed by the Planning Commission with assistance from the planning consultant. Recommendations are based on an analysis of several factors including the pattern of existing land use, social and economic characteristics, environmental conditions, available community services and facilities, the existing patterns of land divisions, and community goals and policies.

### Land Use Planning Areas

Listed below are the seven different land-use planning areas used to develop future land use recommendations. Detailed explanations of each land use planning area is below. Map 8 is the Future Land Use Map of Burt Township which depicts the geographic locations of land use planning areas.

- Conservation / Recreation
- Rural Residential / Agriculture
- General Residential
- Mixed Residential
- Waterfront Residential

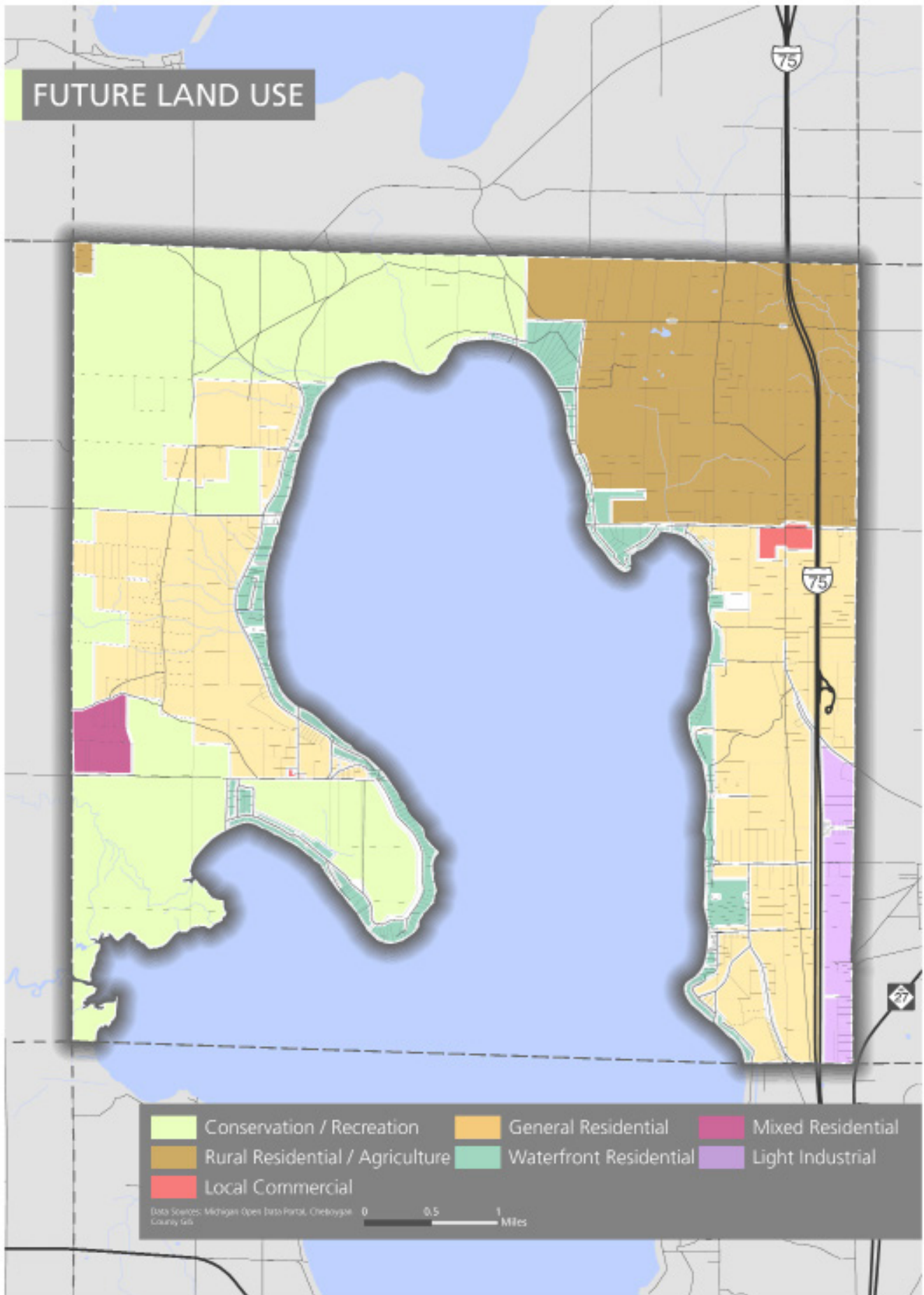
- Local Commercial
- Light Industrial

**Conservation/Recreation:** The Conservation/Recreation category is the most extensive land use category recommended for the Township. All state-owned lands within the township are shown within the Conservation/Recreation category. Additionally, the University of Michigan property is in this category, and private lands held by Little Traverse Land Conservancy or with a conservation easement are also shown. Primary uses to be encouraged in the Conservation-Parkland areas include research/education, recreation (such as hunting, fishing, skiing, hiking, camping), and forest management. This plan encourages the establishment of contiguous reserve areas, river setbacks, wetlands, quiet areas, scenic areas, and wildlife habitat.

The Conservation/Recreation category is further designed to protect existing recreation property, areas planned for future recreation use, or other environmentally sensitive areas and natural resources, while allowing for very limited and low-intensity development to occur. This development would be consistent with recreational and conservation uses. A minimum lot size of 40 acres is anticipated for the category. Very low-density residential development (one single-family house or dwelling unit for every 40 acres) would be allowed. To protect sensitive areas and maintain larger tracts available for other uses, clustering based on density equivalents of not more than one single-family house or dwelling unit per 40 acres should be required in these areas.

**Rural Residential / Agriculture:** The areas designated for Rural Residential/Agriculture use on the Future Land Use Map may not cover all the active farms in the Township. It is important to recognize where active agriculture exists in the Township and encourage the continued agricultural use of this land. The Rural Residential/Agriculture land use category has been designated consistent with the Township's goal to recognize the importance of agricultural production. Burt Township also recognizes that the presence of agricultural land contributes significantly to the scenic and rural character valued by the Township residents. The Rural Residential/Agriculture area designation is

MAP 8: Future Land Use





*West Burt Lake Road*

intended to encourage the continued agricultural use of areas on prime agricultural soils. To preserve agricultural uses, it is recommended that nonagricultural residential uses be restricted within the agricultural category.

While the designation of Rural Residential/Agriculture land use category may not prevent the conversion of farmland to other uses, it will help to control the scale and rate of conversion. There are several ways to address the agricultural conversion issue before development. The Township Zoning Ordinance could, for example, allow non-agricultural uses as uses subject to special approval. Special approval status would require site plan review by the Planning Commission in the Rural Residential/Agricultural areas for certain types of non-agricultural development. During the site plan review, a density bonus could be allowed if the proposed residential development is clustered.

The Township will encourage methods that accommodate the needs of preserving farmlands, farming, open space, natural resources, and rural character of the Township, and at the same time assist landowners who want to reduce or discontinue farming. The methods could include innovative zoning provisions that allow for the preservation or conservation of essential natural resources, farmland, or open space. Some methods that other communities have employed to help protect and preserve agricultural land while protecting a landowner's economic investment include the Purchase of Development Rights (PDR), Transfer of Development Rights (TDR), clustering requirements

for non-agricultural uses, and tax breaks or incentives for continuing agricultural use. It is recommended that these alternatives be investigated for possible application in Burt Township, to balance economic rights with agricultural preservation goals.

**General Residential:** The General Residential development category is designed to accommodate single-family dwellings at a maximum density of one unit per two acres. The large residential lots provide privacy from neighbors and/or other development. This development is located on roads with light vehicular traffic. No municipal water or sewer service will be available. Buffers or physical separation from potentially incompatible uses (industrial and agriculture) may be necessary when located adjacent to this type of development. Additional provisions are recommended to be incorporated into the Zoning Ordinance to allow for a cluster development pattern to avoid or minimize development impacts on environmentally sensitive areas, forests, or farmland. This residential land use category is consistent with the Township's resource goal to "Maintain an ecologically sound balance between human activities and the environment to retain the Township's scenic and rural character."

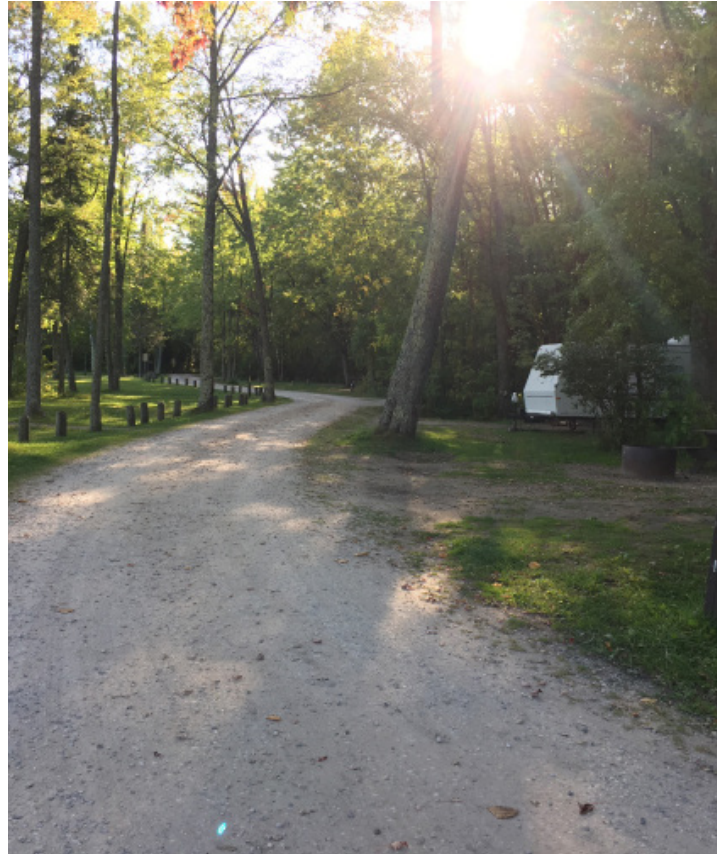
**Mixed Residential:** The Mixed Residential development category is primarily designed to accommodate single-family, two-family, and multiple-family dwellings including mobile home parks on lots varying in size. Higher density residential uses, such as apartments, townhouses, condominiums, mobile home parks, convalescent or nursing homes, and manufactured home developments would be allowed provided that water and wastewater issues are adequately addressed. Community uses such as parks, churches, schools, libraries, or cemeteries, in addition to golf courses, resorts, home occupations (utilizing space outside dwelling unit), and bed and breakfast facilities may also be allowed in this area if it is designed to be compatible with the residential setting.

**Waterfront Residential:** To preserve the scenic beauty, property value and environmental integrity of areas adjacent to Burt Lake, a "Waterfront Residential" designation is recommended. With a specialized designation, it is possible to develop and strengthen residential standards specific to the unique environment found in waterfront areas. The Waterfront Residential designation is utilized along Burt Lake in areas of existing lakefront residential development. Development regulations within the waterfront residential area should be designed to address Township residents' concerns regarding congestion of the local roads, water quality, and shoreline protection. Keyhole development or high-

density second-tier development should be prohibited within this land use category.

**Local Commercial:** The Local Commercial category includes existing commercial development and identifies specific areas for expansion adjacent to the existing commercial areas. Recommended uses include a variety of retail and service establishments with limited parking areas or a cluster of smaller retail and service businesses in specified locations. These uses serve residents and visitors and do not generate heavy vehicular traffic. Landscape buffers should be required between commercial from any residential uses, to minimize the commercial impacts on the adjacent residential uses.

**Light Industrial:** The Light Industrial future land-use category is designated to accommodate light industrial or commercial uses compatible with the limited services and environmental sensitivity of the Township. The Light Industrial future land use area is designed to provide sites for wholesale activities, warehouses, repair operations, retail operations that require large outside storage areas, manufacturing, and other low-impact industrial or commercial operations. Operations are subject to performance standards relative to impacts on the community. This district is compatible with commercial uses but may not compatible with residential districts without a required buffer.



*Maple Bay Campground*



*Burt Township Hall*

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# SECTION EIGHT

## PLAN ADOPTION AND IMPLEMENTATION

### Draft Plan Circulated for Comments

The draft Burt Township Master Plan 2020 Update was transmitted to the Township Board for review and comment in December 2019. The Board authorizes the distribution of the plan to the adjacent Townships and Counties, as required by state statute, on December 5, 2019. Following the Board's authorization, the draft update was distributed to the adjacent Townships, as well as to the planning commissions of Cheboygan and Emmet Counties on December 16, 2019. During the review period, the draft 2020 update was available for review on the Township's website, or by contacting the Planning Commission Chair.

### Public Hearing

A public hearing on the proposed 2020 Update of the Burt Township Master Plan, as required by the Michigan Planning Enabling Act, was held on March 12, 2020. The legally required public hearing notice was published in the Cheboygan County Tribune on February 28, 2020. The purpose of the public hearing was to present the proposed Master Plan Update and accept comments from the public. All Planning Commissioners were present at the March 12 public hearing. A copy of the Planning Commission's resolution to adopt the master plan is reproduced at the end of this chapter.

### Plan Adoption

The Burt Township Master Plan 2020 update, including all associated maps, was formally adopted by the Burt Township Planning Commission by a resolution on March 12, 2020. A copy of the official resolution is on file with the Township.

### Legal Transmittals

Michigan planning law requires that the adopted Master Plan Update be transmitted to the Township Board, as well as to the adjacent Townships and the County Planning Commission. Copies of these transmittal letters are on file with the Township.

### Plan Implementation

A Master Plan is developed to provide a vision of the community's future. It is designed to serve as a tool for decision making on future development

proposals. A Master Plan will also act as a guide for future public investment and service decisions, such as the local budget, grant applications, road standards development, community group activities, tax incentive decisions, and administration of utilities and services.

According to the Michigan Zoning Enabling Act, comprehensive planning is the legal basis for the development of a zoning ordinance. Section 203 of the Act states: "The zoning ordinance shall be based on a plan designed to promote the public health, safety and general welfare, to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, to conserve natural resources and energy, to meet the needs of the state's residents for food, fiber, and other natural resources, places of residence, recreation, industry, trade, service, and other uses of land, to ensure that uses of the land shall be situated in appropriate locations and relationships, to avoid the overcrowding of population; to provide adequate light and air; to lessen congestion of the public roads and streets, to reduce hazards to life and property; to facilitate adequate provision for a system of transportation, sewage disposal, safe and adequate water supply, education, recreation, and other public requirements, and to conserve the expenditure of funds for public improvements and services to conform with the most advantageous use of land resources, and properties."

### Zoning

The Zoning Ordinance is the most important tool for implementing the Master Plan. Zoning is the authority to regulate private use of land by creating land use zones and applying development standards in various zoning districts. A zoning ordinance regulating land use activities has been in effect in Burt Township since 1976. The Ordinance has since been revised numerous times. For nearly four decades the Ordinance has guided the location, density, and standards for local development. The Zoning Ordinance should now be reviewed to ensure the Ordinance is consistent with the goals and the Future Land Use Plan presented in this Master Plan.



## Grants and Capital Improvement Plan

A Master Plan can also be used as a guide for future public investment and service decisions, such as the local budget, grant applications and administration of utilities and services. Many communities find it beneficial to prioritize and budget for capital improvement projects, such as infrastructure improvements, park improvements, etc. A Capital Improvements Program (CIP) is one tool that is often used to establish a prioritized schedule for all anticipated capital projects in a community. A CIP includes cost estimates and sources for financing for each project, and therefore, it can serve as both a budgetary and policy document to aid in the implementation of a community's goals defined in its Master Plan.



*Maple Bay Campground*



*East Burt Lake Road*

# RESOLUTION

BURT TOWNSHIP  
CHEBOYGAN COUNTY, MICHIGAN

BURT TOWNSHIP PLANNING COMMISSION  
RESOLUTION RECOMMENDING THE ADOPTION OF THE  
BURT TOWNSHIP COMMUNITY MASTER PLAN 2020

WHEREAS, the Michigan Planning Enabling Act (MPEA) authorizes municipal planning commissions to prepare a "master plan" pertinent to the future development of the municipality; and

WHEREAS, the Planning Commission has prepared a draft master plan for the municipality, to update and replace its previous community master plan; and

WHEREAS, the Township Board of Trustees authorized the distribution of the draft Community Master Plan to the general public and the various entities as required by the MPEA, for review and comment purposes; and

WHEREAS, the proposed Community Master Plan was made available to the various entities and the general public as required by the MPEA, and a public hearing thereon was held by the Planning Commission on March 12, 2020 pursuant to notice as required by the MPEA; and

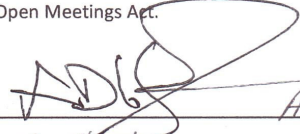
WHEREAS, the Planning Commission finds the proposed Master Plan as submitted for the public hearing is desirable and proper, and furthers the land use and development goals and strategies of the Township;

NOW, THEREFORE, the Burt Township Planning Commission hereby resolves to recommend to Township Board of Trustees the adoption of the new Community Master Plan as submitted for the public hearing, including all the text, charts, tables, maps, and descriptive and other matter therein intended by the Planning Commission to form the complete Master Plan, including the Future Land Classification Map.

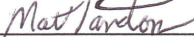
## CERTIFICATE

I hereby certify the foregoing resolution was approved by a majority of the members of the Burt Township Planning Commission by a roll call vote at a regular meeting of the Commission held on March 12, 2020 in compliance with the Open Meetings Act.

Motion by:

  
Allen Kozlowski

Seconded by:

   
Matthew Landon

 3/12/2020

Secretary

Burt Township Planning Commission

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# APPENDIX A

## 2019 COMMUNITY SURVEY RESULTS

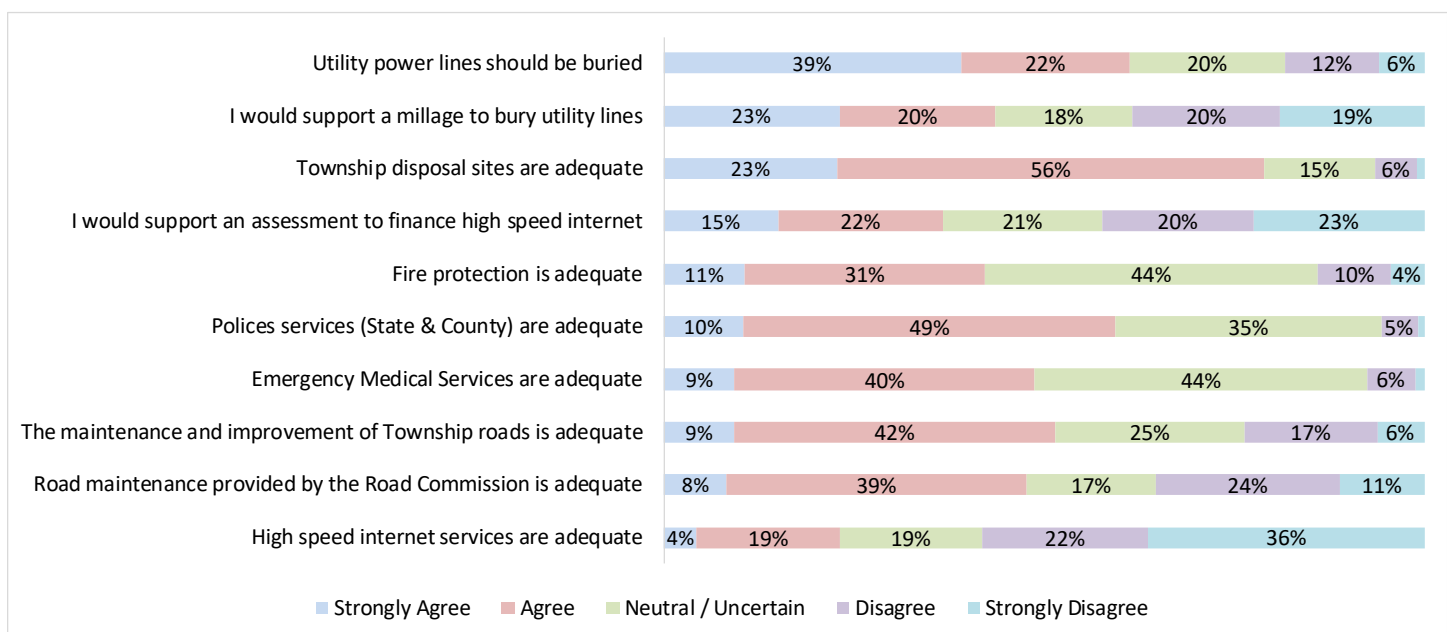
The Burt Township Planning Commission, in association with Beckett & Raeder, Inc. conducted a property owner survey during the summer of 2019. The purpose of the survey was to gather information from the property owners in Burt Township regarding their views on a variety of topics related to planning, zoning, recreation, and other township services, for consideration by the Township Planning Commission and Township Board of Trustees in creating plans and making decisions.

The survey was mailed to all property owners, using the current property owner mailing list from Cheboygan County tax list. Because of the seasonal nature of many Burt Township households, it was common for property owners to receive the survey at their permanent address outside the Township. A total of 371 individuals completed the survey, which equates to roughly a 47% response rate, considering the estimated 785 housing units in the community. This is an excellent response rate for an online survey.

The responses from the survey were aggregated and used to inform goals and actions in the action plan. The results of the survey are shown below.

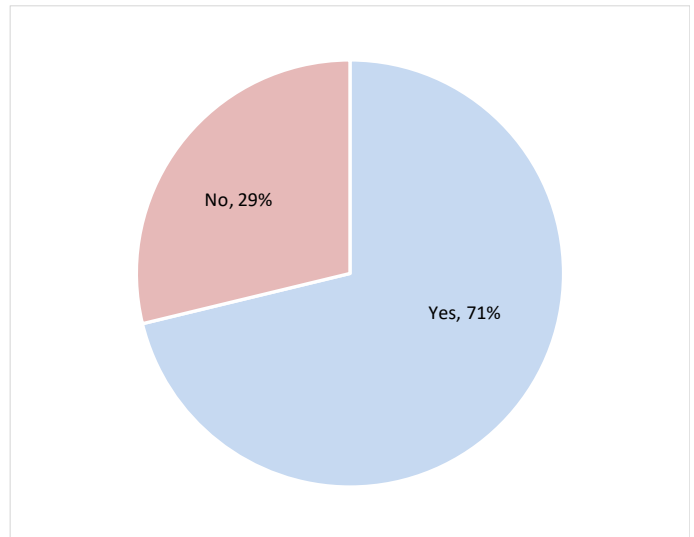
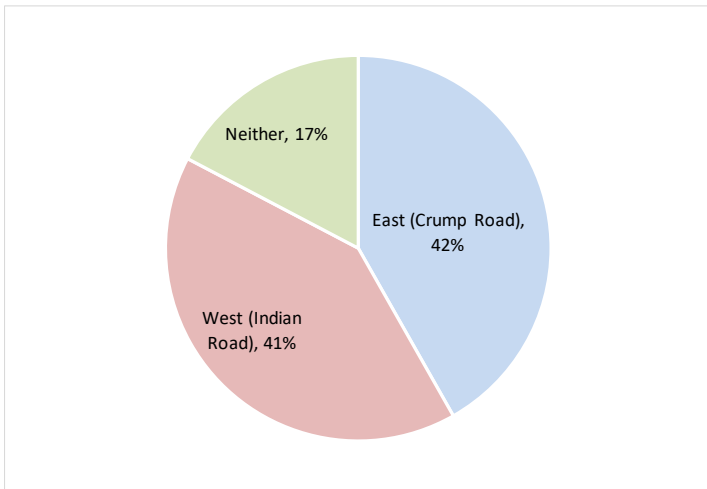
Question 1: Please respond to the following statements regarding services in the Township.

There was a high level of agreement amongst survey respondents about burying the power lines (61% either Strongly Agree or Agree). Similarly, 61% of respondents said they would or may be willing to pay for the cost of this through a millage. Respondents also indicated possible support for funding high-speed Internet (43% in agreement). There was the lowest satisfaction with high-speed internet amongst the services listed in this question. One area of agreement is waste management - 79% of respondents feel Township disposal sites are adequate.



Question 2: Which Township disposal site do you primarily use?

Question 3: Do you use the County recycling services at the Township disposal sites?



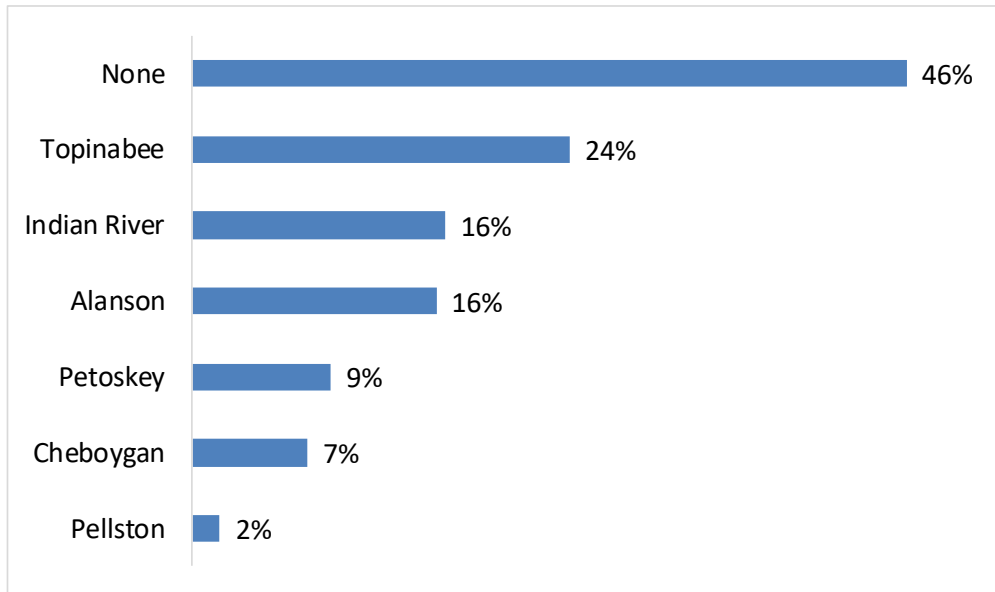
Question 4: Could recycling services be improved? If so, how?

136 individuals responded to this question. The graphic to the right illustrates words used repeatedly (larger words were used most often in survey responses). A full compilation of all responses can be found in Appendix A. Themes included the following:

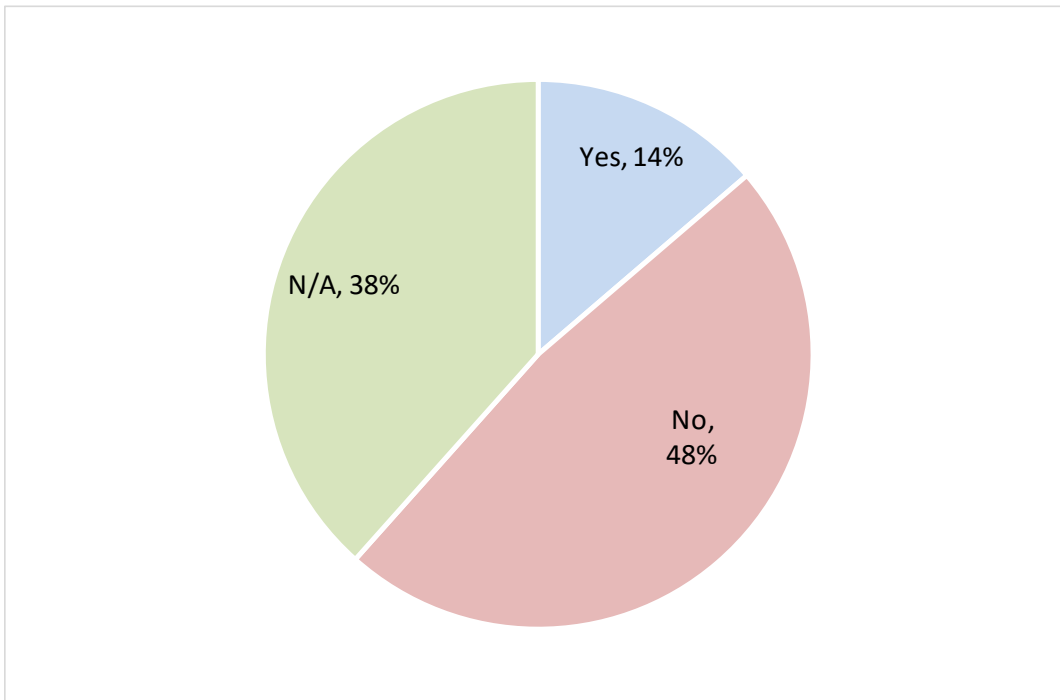


- Many of the individuals were satisfied with current services.
- A desire for the bins to be emptied more frequently. Concerns that they are often overflowing and more likely to get contaminated. A number of people also noted the slots are too small.
- Desire for more items to be collected (Styrofoam, batteries, scrap metal, used oil, lawn waste,)
- Recommendation for better labeling and instructions as to what can be recycled.
- Desire for expanded hours
- A few people desired “curbside” pick-up.
- Some respondents felt recycling was a waste of tax money.

Question 5: Which libraries do you or your family use? (mark all that apply)

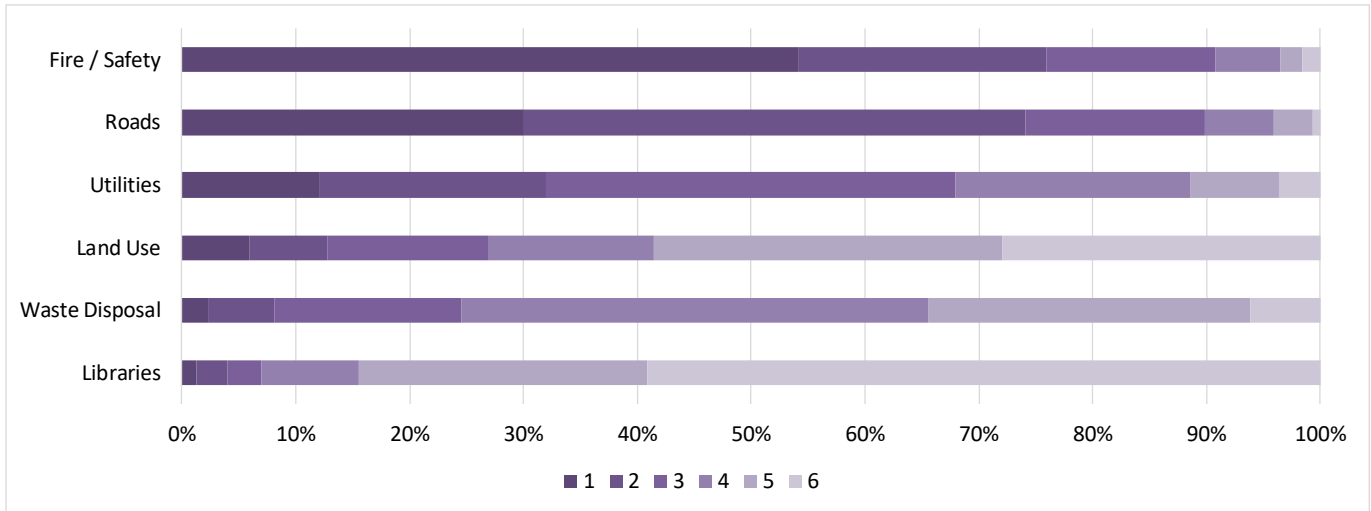


Question 6: Are you paying for your own library membership(s)?



Question 7: For the Township to establish budget priorities, please provide your priority ranking of the following services (1 being the highest priority, 6 being the lowest priority):

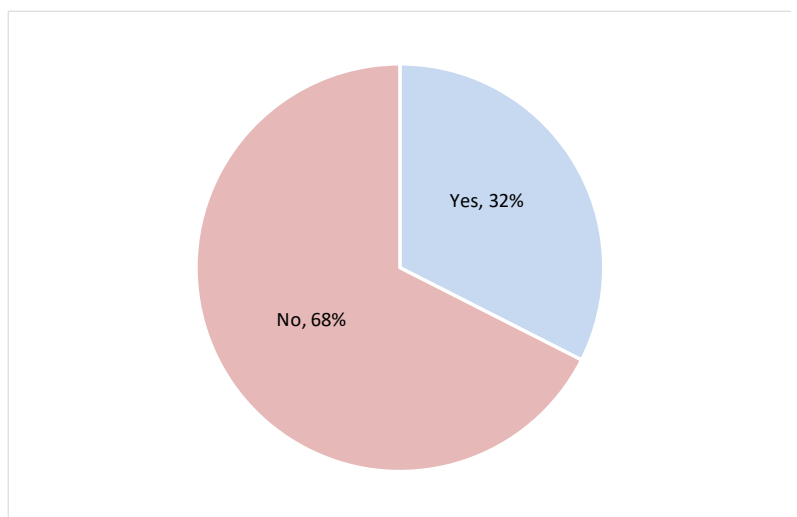
Not surprisingly, fire and safety rated as the highest priority amongst survey respondents. 54% rated Fire/Safety as the highest priority service, while another 22% rated it as the 2nd highest priority. Roads came in as a definitive 2nd, with 75% of respondents giving roads a rating of #1 or #2. At the other end, libraries were given the lowest rating, with 60% of respondents providing a rating of #6 (lowest priority).



Question 8: Currently, the Township levies ½ of a mil that is used specifically for new paving of dirt roads. If the Township decided to place this issue on the ballot for voter approval would you be in favor of increasing this designated millage from ½ mil to 1 mil? Example: 1 mil = \$1/\$1,000. If you had a \$100,000 house, your fee would go from \$50 (½ mil) to \$100 annually.

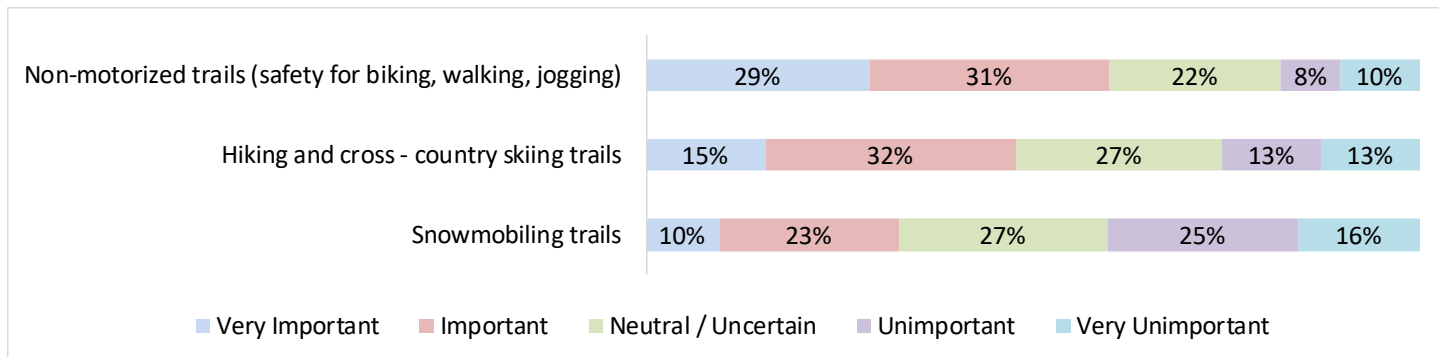
32% of respondents indicated they would be willing to support doubling the Township road millage to 1 mil to pay for the paving of dirt roads. This support is in line with other survey questions, which indicate that road condition is a high priority for survey respondents. Interestingly, 57 individuals skipped this question. This could be because they wanted additional information before making a decision on a potential millage increase.

A cross-tabulation was conducted to compare the opinions with full-time residents with part-time or seasonal residents. 38% of full-time residents supported a millage increase. This compares with 44% of those living less than a month in the Township who supported an increase and 30% of those living 3-6 months in the Township.



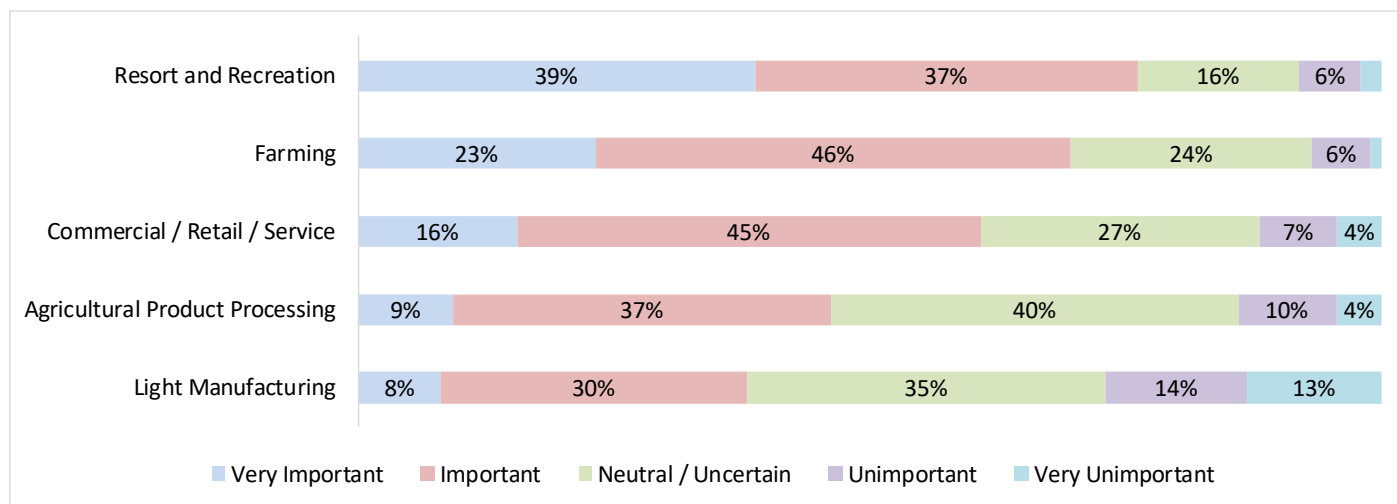
Question 9: Please indicate the level of importance of the following:

As shown in the graphic below, 60% of respondents rated non-motorized trails as either very important or important. There was slightly less support for hiking and cross country ski trails (47%) and snowmobile trails (33%).



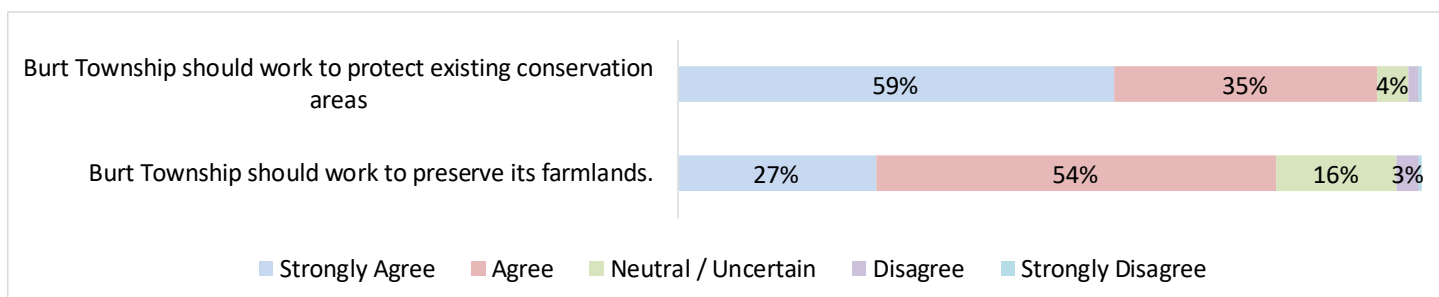
Question 10: Please rate the importance of the following types of business in Burt Township both now and for future growth:

Currently, the predominant land use in Burt Township is residential, followed by conservation/recreation areas. However, there is some limited commercial and planned future commercial according to the master plan. 76% of respondents view resort and recreation land uses in the Township as important or very important. Farming is viewed by 69% of respondents as important or very important. Interestingly, commercial and retail services are viewed by over half of the respondents (61%) as important or very important.



Question 11: Please rate your level of agreement with the following statements.

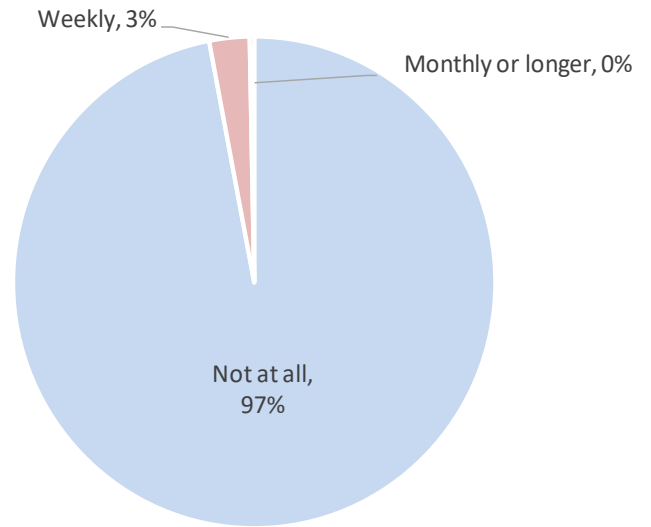
As shown by the results of this question, conservation and farmland protection is important to Burt Township property owners. Impressively, 94% of respondents agree or strongly agree that the Township should work to protect existing conservation areas.





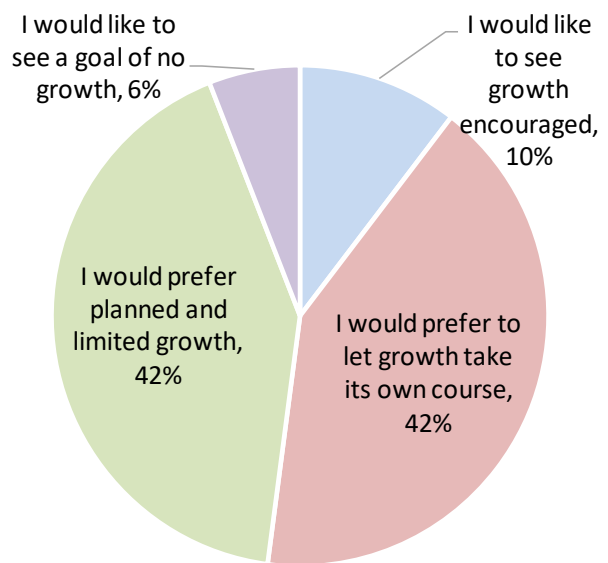
Question 12: Do you rent your house to others?

Short term rentals are becoming increasingly popular in northern Michigan with online sharing platforms like Air bnb. Although approximately half of all homes in the Township are used on a seasonal basis, these results indicate that very few property owners are renting their homes on a short term basis.



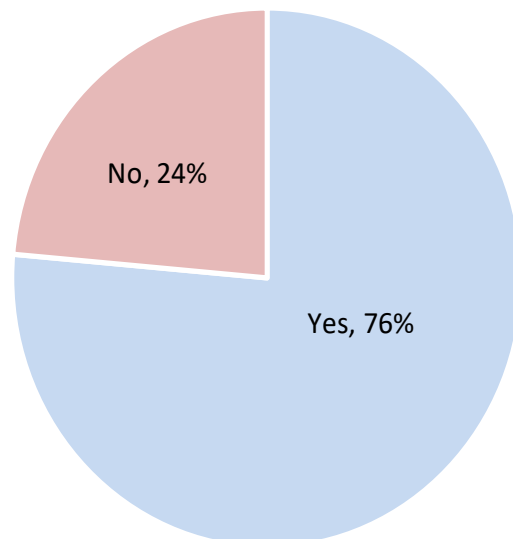
Question 13: Please indicate your views about growth in Burt Township:

Results from this question indicate a moderate approach to growth management amongst Township residents. While only 6% stated they wanted to see no growth, only 10% stated they wanted to encourage growth. The remaining 84% noted that they either wanted to see growth take its own course (42%) or plan for limited growth (42%).



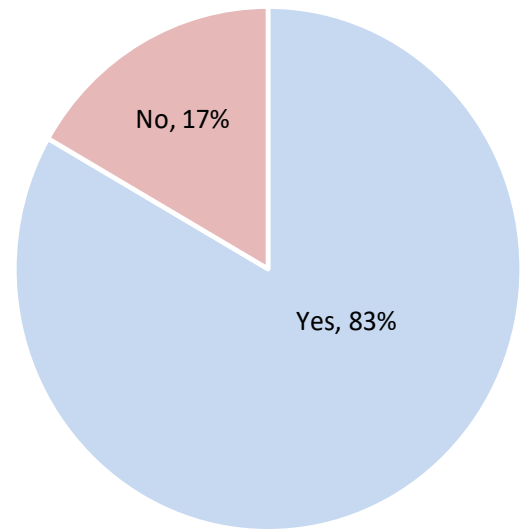
Question 14: Is your Burt Township property located on Burt Lake?

Questions #14 through #29 deal with ordinance standards on waterfront property to protect water quality both shoreline protection strip requirements and possible requirements for septic inspections when a property is sold. Please keep in mind that while all respondents had the opportunity to provide feedback on these regulations, over 3/4 of respondents were waterfront property owners.



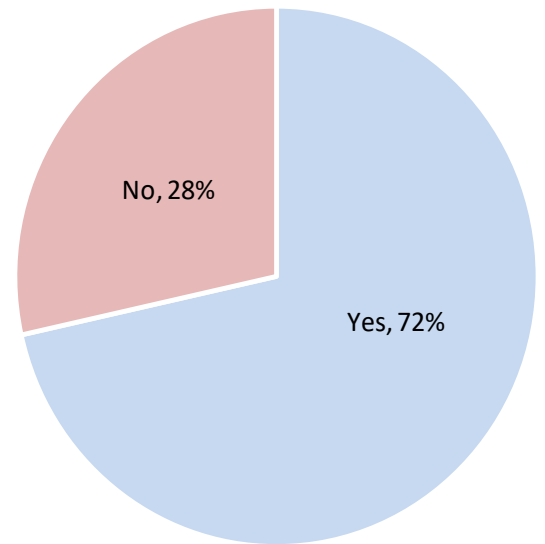


Question 17: Section 6.12 limits most development and some activities (e.g. phosphorous fertilizers) within the waterfront setback area, which extends seventy-five (75) feet back from the high watermark. Also, fertilizer, herbicides, and insecticides shall not be used within twenty-five (25) feet of the water. Are you aware of this provision of the Zoning Ordinance?



Question 18: Under certain circumstances, Section 6.12 requires waterfront properties to maintain a natural vegetation strip that includes 70% of the land area located within twenty-five (25) feet of the ordinary high watermark. Are you aware of this provision of the Zoning Ordinance?

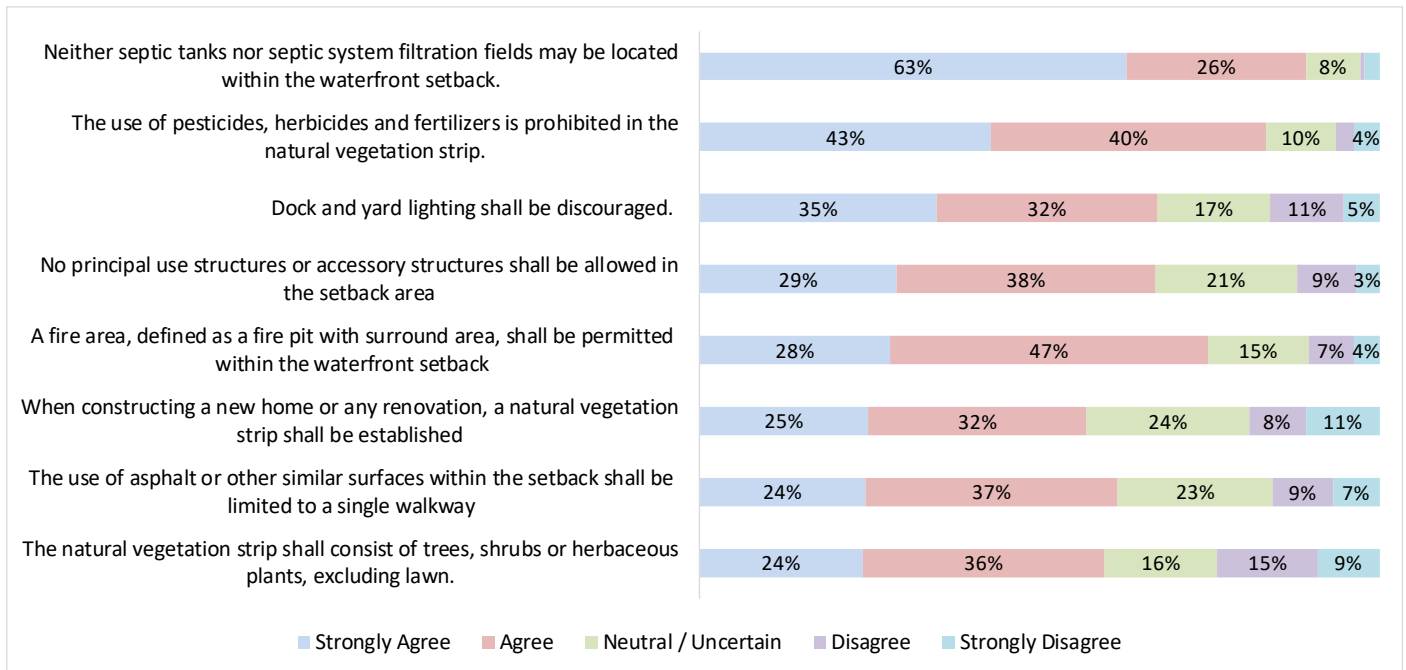
While most respondents were aware of this provision (72%), it is interesting to note that fewer respondents were aware of the natural vegetation strip as compared with those familiar with limits on fertilizer and other activities within the waterfront setback area.



Question 19: Please indicate your level of agreement with the following statements that pertain to the waterfront setback and natural vegetation strip:

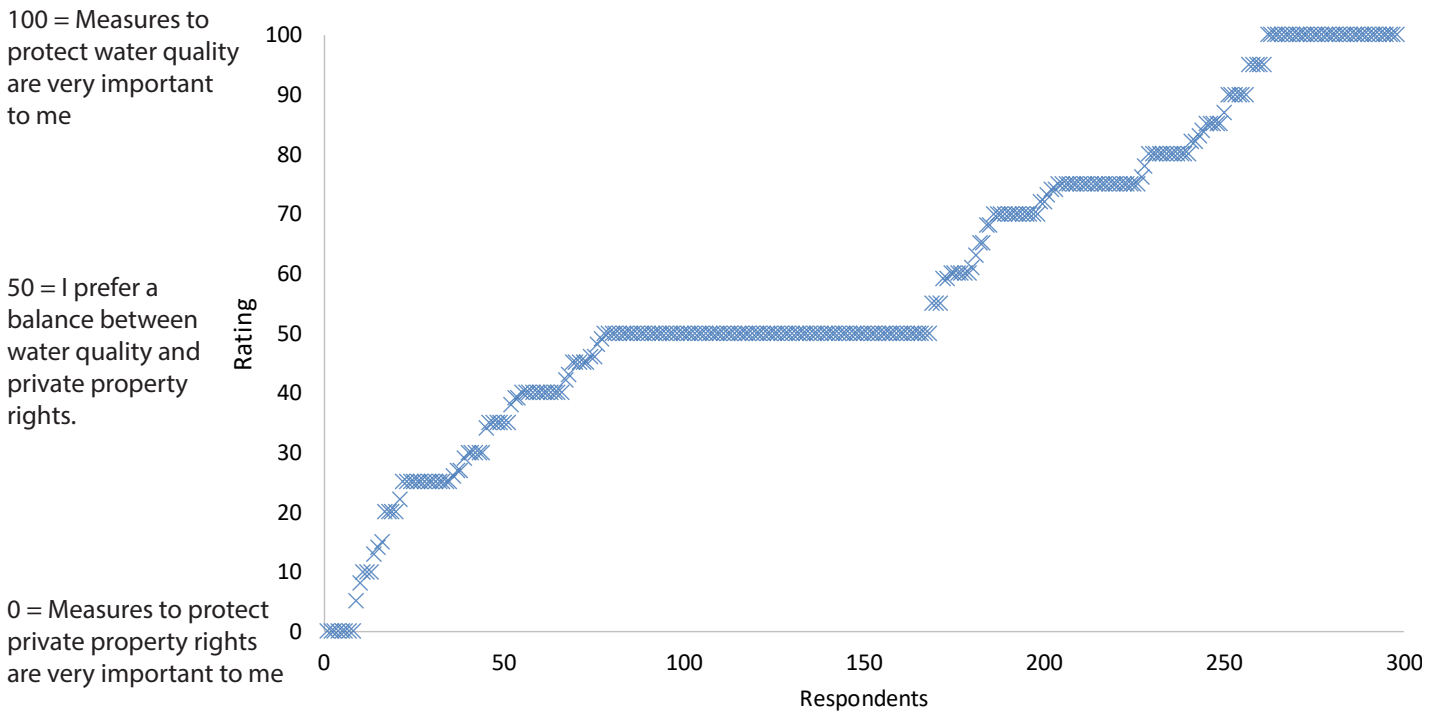
The statements included in this question were taken directly from the existing zoning ordinance as it pertains to waterfront protection. It is interesting to note that at least 60% of respondents either agreed or strongly agreed with each statement. There was the highest level of support for keeping septic systems outside the waterfront setback, followed by high support for prohibiting the use of fertilizers and pesticides within the natural vegetation strip.

There were a few statements with a high percentage of individuals selecting “Neutral/Uncertain” - 21% in response to “No principal use structures or accessory structures shall be allowed in the setback area.” 24% selected neutral or uncertain in response to the statement “When constructing a new home or any renovation, a natural vegetation strip shall be established” and 23% in response to the statement “The use of asphalt or other similar surfaces within the setback shall be limited to a single walkway.” These are areas where additional education and outreach could be appropriate.



Question 20: Please evaluate the following statement and indicate on the line where you stand: "Actions to protect water quality are sometimes in conflict with private property rights." Please indicate your viewpoint on this situation by using the sliding scale to represent your position on this matter.

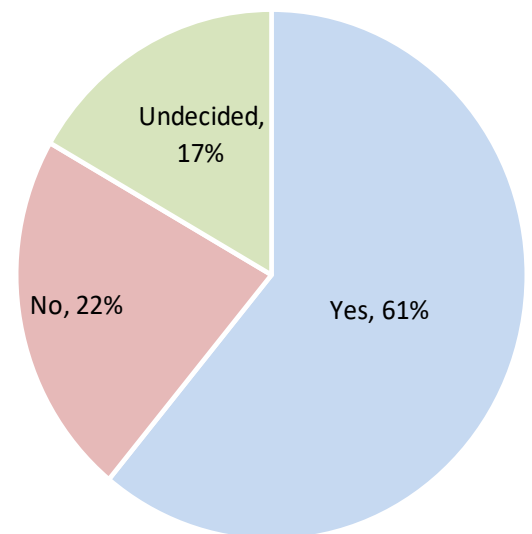
Many of the respondents to this question took a more moderate approach. 44% of respondents selected a value between 40 and 60 (50 indicating the desire for a balance between private property and water quality protection). In contrast, 49 individuals (16%) selected 90 or greater, while 13 individuals (4%) selected a value of 10 or less.



### Septic Inspection Questions

Burt Township is exploring the option of adopting an ordinance to require a septic and/or private water supply inspection at the time of property transfer. The following questions were intended to better understand opinions and perceptions of Burt Township property owners related to this policy.

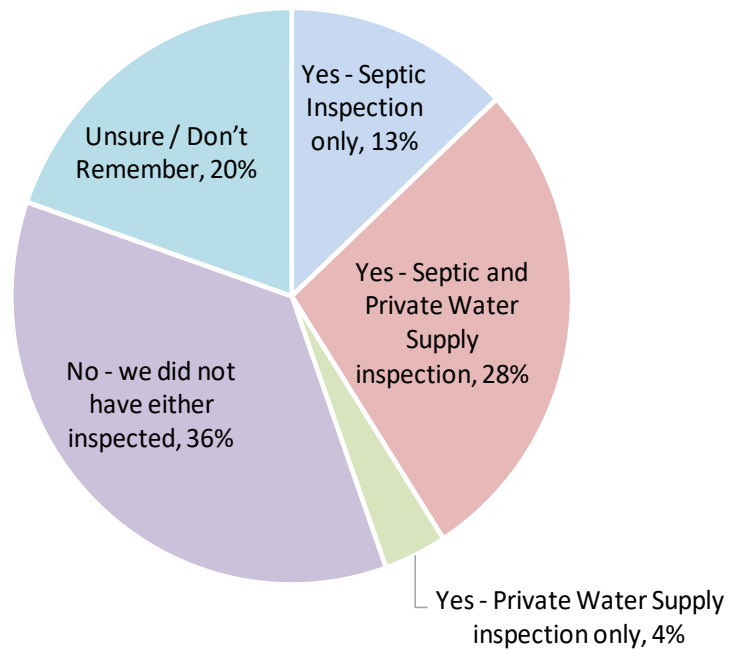
Question 21: Are you supportive of an ordinance to require a SEPTIC inspection at the time of property transfer?





Question 25: Was a septic and/or private water supply inspection conducted when you purchased, inherited, or built your property in Burt Township?

Almost half of the respondents (45%) noted that they had conducted a septic and/or water supply inspection upon transfer of property ownership. Of these individuals, most had the septic inspection done in tandem with the private water supply inspection. Very few had a private water inspection only. 20% of respondents (65 individuals) were uncertain as to whether an inspection had occurred while 36% (118) could definitely say that an inspection had not occurred when their property was transferred.



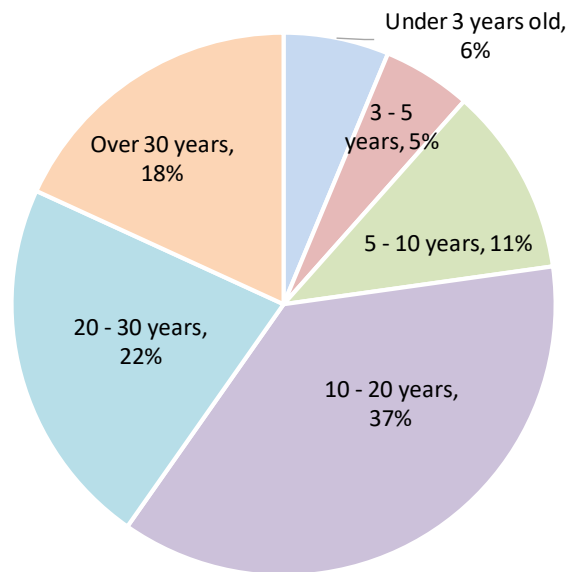
Question 26: If you answered Yes to Question 25, was the water and/or septic inspection performed on a new home or an existing home?

159 individuals responded to this question. 53% of respondents noted the inspection was performed on an existing home, while 47% said it had been performed on a new home.

Question 27: What is the approximate age of your septic system?

According to the U.S. Environmental Protection Agency, a properly maintained septic system can continue to work for you for at least 25 to 30 years. However, these numbers can vary considerably depending on the household size, septic tank size, and frequency of use.

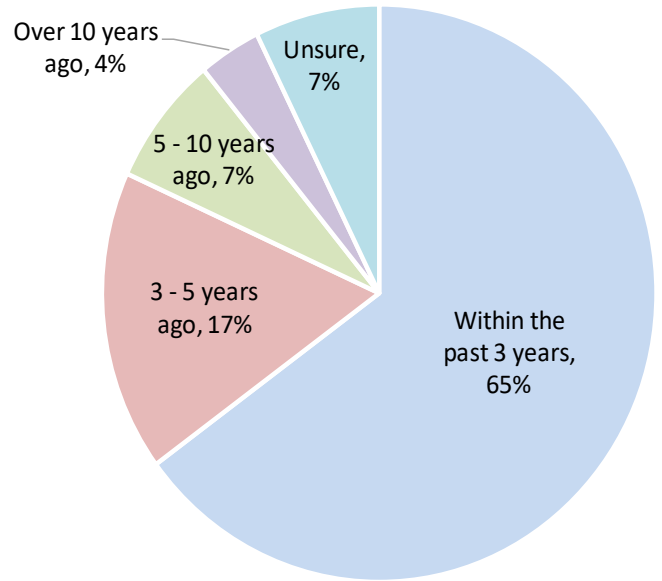
While only 18% of septic tanks are older than the 30-year threshold of when they should be replaced, the survey results indicate that 94% of systems should be old enough to require regular inspections and pumping.



Question 28: When was your septic system last pumped?

According to the U.S. Environmental Protection Agency, the average household septic system should be pumped every three to five years. Again, this number varies depending on the size of the system and the size of the household.

82% of respondents have had their system pumped within the 5-year time-frame as recommended by the U.S. EPA.



Question 29: When was your septic system last inspected?

According to the U.S. Environmental Protection Agency, a septic system should be inspected at least every three years.

It is interesting to note that amongst survey respondents, the act of pumping is more common than septic inspections. This indicates that property owners may just go ahead and have their systems pumped at a certain frequency as opposed to having the systems inspected to determine if pumping is necessary.

