

Bois Blanc Township 2023 Master Plan



Prepared by:
Bois Blanc Township Planning Commission

Adopted: _____

Bois Blanc Township 2023 Master Plan

Mackinac County, Michigan

prepared by:

Bois Blanc Township Planning Commission

Adam Bronkema, Chair

Polly Peyerk, Vice Chair

Lani White, Secretary

Members:

Keri Viers

Rob Cochran

Adopted

Planning Commission: _____

Township Board: _____

With planning assistance provided by:

Richard Deuell

Resource and Community Planning Consultant

3545 Camp Sherwood Road
Boyne City, MI 49712
231-499-0640

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CHAPTER 1: INTRODUCTION

Purpose of the Master Plan

Since 1959, Michigan statutes have permitted townships to play an active role in planning for the future by making and adopting a master land use plan. The planning commission is the public body responsible for preparing the plan. That law (Township Planning Act, PA 168 of 1959) was repealed and replaced by the Michigan Planning Enabling Act, PA 33 of 2008, which became effective September 1, 2008.

PA 33 of 2008 requires that, “A planning commission shall make and approve a master plan as a guide for the development within the planning jurisdiction... The master plan shall address land use and infrastructure issues and may project 20 years or more into the future.” Once the master plan is adopted, the plan provides the basis for land use and infrastructure decisions. The law also requires that the plan be reviewed at five-year intervals.

In preparing a master plan, the planning commission is authorized to:

- Make careful and comprehensive surveys and studies of present conditions and future growth of the planning jurisdiction and with due regard to its relation to the neighboring jurisdictions.
- Consult with representatives of adjacent local units of government in respect to their planning so that conflicts in master plans and zoning may be avoided.
- Cooperate with departments of the state and federal governments and other public agencies concerned with programs for economics, social, and physical development within the planning jurisdiction and seek the maximum coordination of the local unit of government’s programs with these agencies.

Planning Commission and Its Role

The Bois Blanc Township Planning Commission is a five-member body, serving three-year staggered terms. Planning Commission members are intended to represent a broad spectrum of community interests, including recreation, commerce, industry, government, education, transportation, and so on. Planning commissioners may come from many walks of life, but they all contribute their time and talents to the local planning process. In addition to the responsibility of preparing the Master Plan, the Bois Blanc Township Planning Commission is charged with making recommendations on Zoning Ordinance and Zoning Map amendments and reviewing development projects as they are proposed.

For the purpose of updating the *Bois Blanc Township Master Plan*, Bois Blanc Township has retained professional consulting services from Richard Deuell, Resource and Community Planning Consultant.

Status of Planning and Zoning in Bois Blanc Township

The first *Bois Blanc Township Master Plan* was adopted on November 1, 2001. The Planning Commission recommends that the time is due to update the plan.

The Township's first Zoning Ordinance became effective in 1979 and has seen several amendments through the present time.

Location and Transportation Links

Bois Blanc Township is an island located in Lake Huron, just east of the Straits of Mackinac. Although the Township is part of Mackinac County in the Upper Peninsula, it is accessible by ferry from the City of Cheboygan in the Lower Peninsula and by private plane from airports in Cheboygan in the Lower Peninsula and St. Ignace in the Upper Peninsula on the mainland. For reference, a general location map is shown as Map 1, while a road and parcel-line base map is shown as Map 2. All roads on the island are gravel surface.

Bois Blanc Township is somewhat remote from large urban areas of Michigan. It is a five-hour drive to Detroit, four hours to Lansing, and three hours to the Bay City/Saginaw area. Traverse City is about three hours away. In the Upper Peninsula, Sault Ste. Marie is an hour away, and Marquette is about four hours away. Compounding the remoteness of the Island, access for vehicles and freight is only available via a seasonal ferry. Passenger service is available year-round with small airplane service at the Township airport. On the other hand, the recreational and resort facilities of northern Michigan are available to local residents and draw people to the area.

Historical and Cultural Perspective

The Bois Blanc historical marker at the Township dock provides a snapshot of the history of the island.

Bois Blanc Island, known as "Bob-lo" to area residents, is twelve miles long, six miles wide and has six lakes. In 1827, the United States government platted the island. The U.S. Coast Guard established a life-station at Walker's Point in 1890. The following year the Pointe Aux Pins Association was formed. In 1908, on behalf of the association, the President Walter B. Webb hired Mason L. Brown Company, a Detroit surveying firm, to plat and record the Pointe Aux Pins subdivision. Pointe Aux Pins was the first resort community on the island. Much of Bois Blanc Island is state-owned forest land containing White and Norway pines that tower 200 feet tall. As recently as 1950s, Bois Blanc provided lumber to Mackinac Island where wood cutting is prohibited.

On August 3, 1795, Chippewa Chief Matchekewis ceded Bois Blanc to the United States as part of the Treaty of Greenville. The cession also included most of Ohio, part of Indiana, sixteen strategic sites on Michigan waterways, and Mackinac Island. During the War of 1812, U.S. Navy Captain Arthur Sinclair's fleet took shelter on the island while waiting to attack British Fort Mackinac. In 1880 the island provided a haven to alleged murderer Henry English who escaped

from Pennsylvania authorities before his trial. He was apprehended on Bois Blanc by Pinkerton agents, returned to Pennsylvania, and acquitted. During the twentieth century, Bois Blanc's wilderness supported a lucrative lumber industry before giving way to tourism. Although primarily a resort in 1990, the island had 45 permanent residents.

Pre-European History

Some 21,000 years ago as the Pleistocene epoch waned; the last continental glacier began melting away from Michigan exposing the hills, valleys, rivers, inland lakes, islands and newly formed Great Lakes. Plants, animals and fish migrated northward following the retreating ice front of the massive glaciers. Approximately 14,000 years before present, the melting ice front had receded to expose the Straits of Mackinac and Bois Blanc Island. There were periods when newly formed Great Lakes levels rose inundating the island (11,000 years ago, Proglacial Lake Algonquin and 4,500 years ago post glacial Great Lake Nipissing). Around 9,500 years ago, lake levels fell some 200 feet (Proglacial Great Lakes Stanley and Chippewa) and Bois Blanc Island was not an island but part of the lower peninsula. The Straits of Mackinac was reduced to a large river flowing through a deep gorge and the river flowed along the north side of bedrock hills that eventually became Bois Blanc, Round and Mackinac Islands.

As the glaciers melted, Paleo-Indians followed the changing landscape northwards through Michigan. Archaeological evidence has found Paleo-Indian occupation of Michigan began around 12,000 years before present. While we cannot document the exact time when Native Americans first occupied Bois Blanc Island, recent discoveries of human activities on the bottom lands of Lake Huron and the Straits of Mackinac provide an approximate timeline of early occupation in the area. These nearshore bottomlands that were once high and dry during the Lakes Stanley and Chippewa low water periods. The discoveries clearly show Paleo-Indians were occupying the area 9,500 years before present.

In 1932, Robert Braidwood from the University of Michigan discovered the Juntunen Site on Bois Blanc. While this may be the most "studied" archaeological site on the Island, it is widely recognized as one of many important Native American archaeological sites on the Island. Because of Bois Blanc Island's geographic location in the straits, its remoteness, much of the land was not cleared for farming or urban development, and remains rich with pre-European settlement archaeological sites. The following paragraphs are taken from Wikipedia.

The Juntunen Site was discovered in 1932 by Robert Braidwood of the University of Michigan, who found human remains eroding from the surface of a group of mounds Excavations were carried out over the next few years. Mr. Charles Juntunen, the property owner of the site, discovered more remains in 1959 while bulldozing a road. Juntunen contacted The University of Michigan, and the University's Alan McPherron and James Griffin conducted multiple excavations from 1960 to 1963.

The Juntunen Site provides a detailed record of Late Woodland cultural development from approximately 800 A.D. through the 1400s A.D. Because of its centralized location relative to the Great Lakes, and the importance of water travel in Prehistoric times, it shows influences from all directions. The Mackinac and Bois Blanc Phases tend to show affinities

with Wisconsin cultures, while the Juntunen Phase tends to show influence from Ontario and the Iroquois tradition. The Blackduck pottery shows influence from the north. The Middle Mississippian pottery shows influence from the south. Juntunen is also the northernmost site from which maize has been recovered.

Juntunen also shows signs of what would later become cultural practices of early Historic tribes. It is suggested that the ossuary burials were a tradition that later grew into the elaborate ceremonies such as the Huron Feast of the Dead, after European contact and the fur trade had transformed Native American cultures in the region. The “medicine kit” recovered from one of the burials, and the bald eagle burial, anticipates the practices of religious groups in early Historic tribes, such as the Midewiwin Society of the Algonkian tribe, or the False Face Society of the Iroquois. The practice of removing a plaque of the cranium of some burials, provides evidence of a Prehistoric religious practice that had apparently disappeared by Historic times.

The researchers determined the seasonality of the site to be May through October, based on analysis of the species of animal bone and plant remains present. This would coincide with the spawning season of the sturgeon (late spring to early summer) and the whitefish (in the fall). These are the two major categories of animal bone collected at the site.

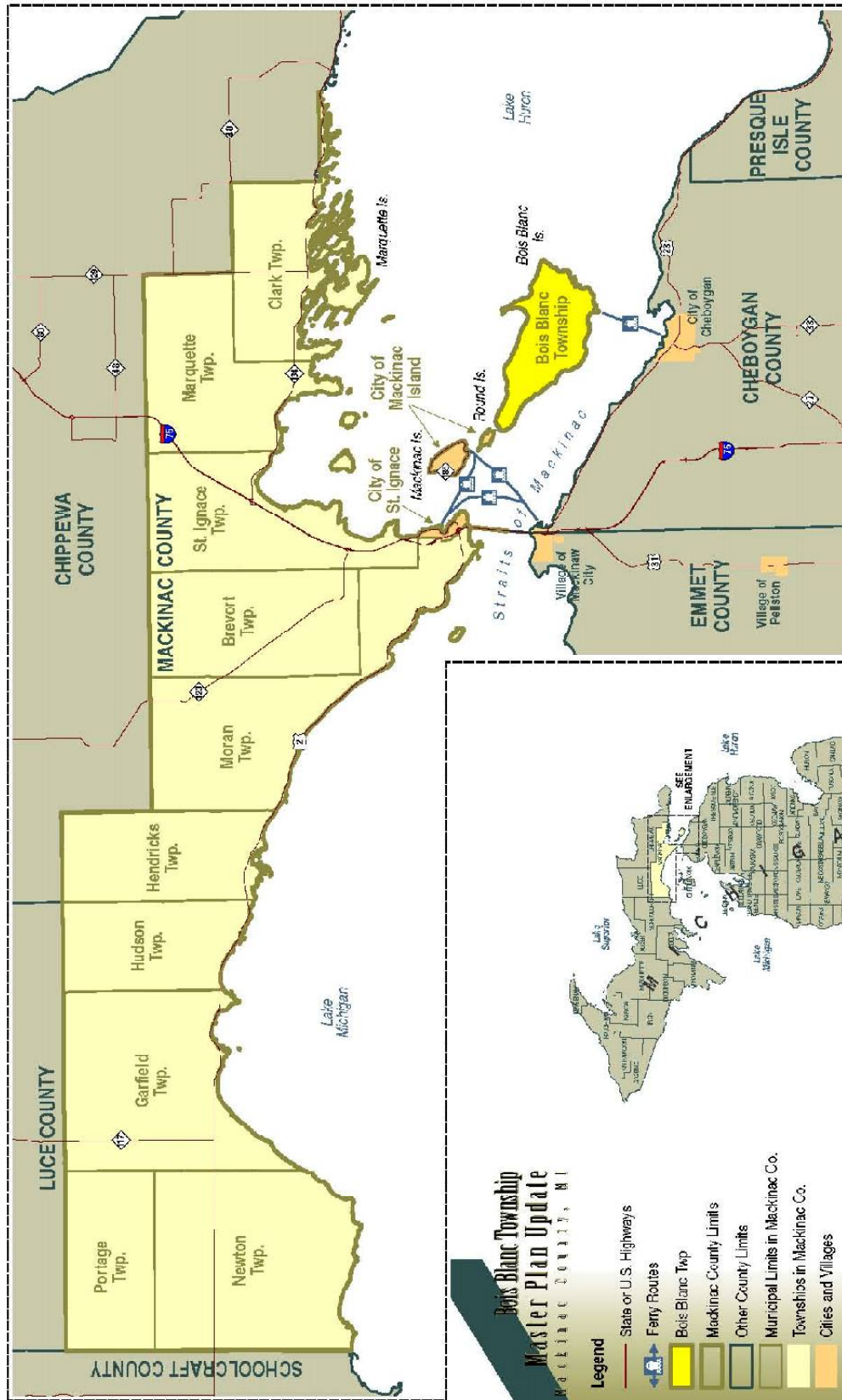
The copper industry at Juntunen is also unique in the Late Woodland period. The last time copper had such a prominent role in artifact manufacture was in the Archaic Old Copper Culture (c. 3000 B.C.-1000 B.C.)

Sources for the above information include:

McPherron, Alan (1967). The Juntunen Site and the Late Woodland Prehistory of the Upper Great Lakes Area. Ann Arbor, Michigan: University of Michigan Museum of Anthropology, Anthropological Papers No. 30.

Mason, Ronald J. (1981). Great Lakes Archaeology. New York, New York: Academic Press, Inc.

Map I: Regional Setting



WasteTalk
2115 Mackinac Island
Grand Haven, MI 49425
616.842.1144

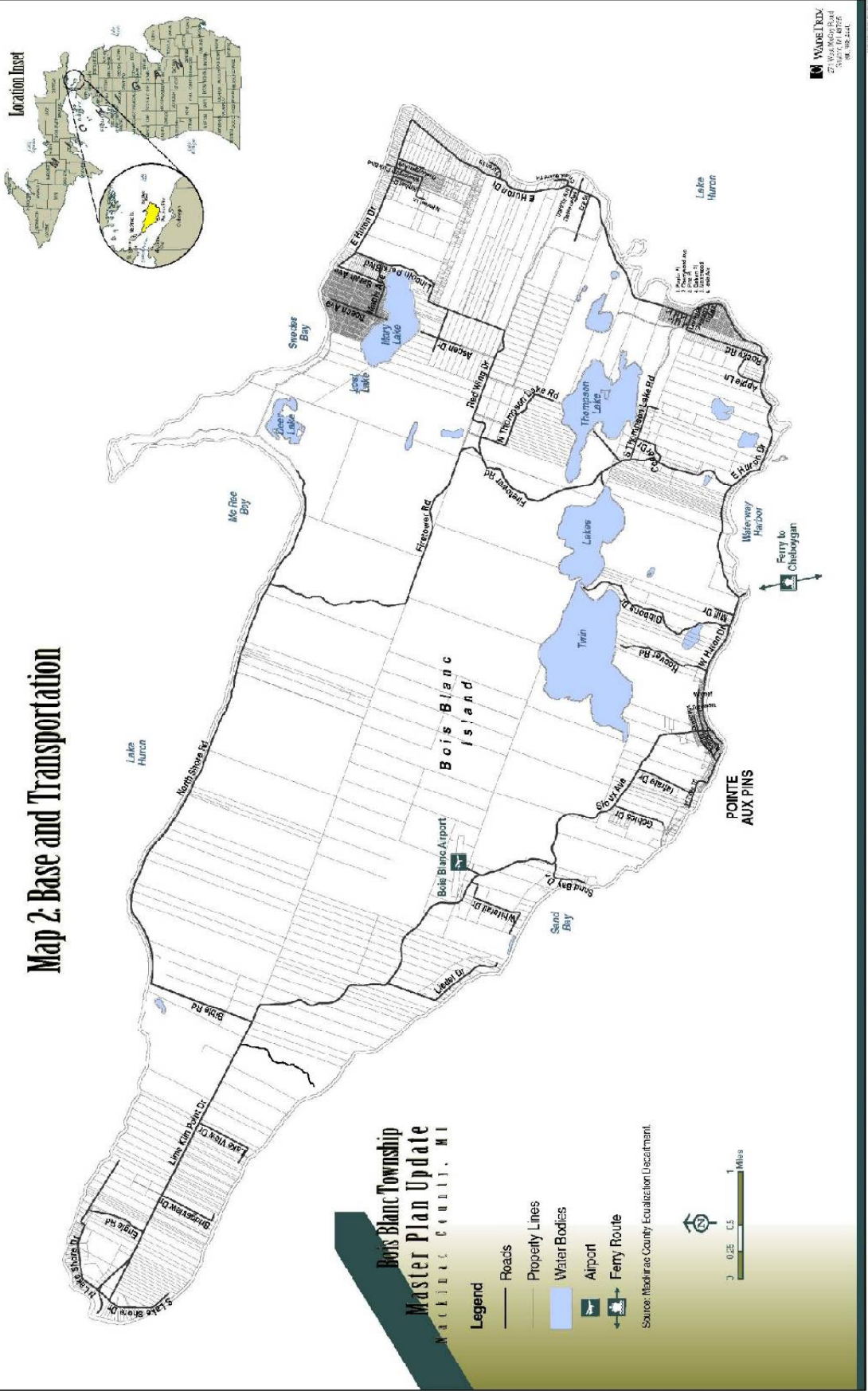
Bois Blanc Township Master Plan Update Mackinac County, MI

- State or U.S. Highways
- Ferry Routes
- Bois Blanc Twp
- Mackinac County Limits
- Other County Limits
- Municipal Limits in Mackinac Co.
- Townships in Mackinac Co.
- Cities and Villages

Source: M.O.S. Geographic Information Systems, 2008.



Map 2: Base and Transportation



CHAPTER 2: SOCIO-ECONOMIC CHARACTERISTICS

Population

In 2020, the U.S. Census Bureau tabulated a population of 100 persons for Bois Blanc Township, an increase of 29 persons from the 2000 population of 71 persons. The population density is 2.6 persons per square mile. During the same period, Mackinac County experienced a 9.4% loss in population. Table 2-1 shows population trends for Bois Blanc Township and Mackinac County for 2000, 2010 and 2020. Table 2-2 demonstrates historic population levels for Bois Blanc Township over the last six decades.

Table 2-1 Bois Bland Township and Mackinac County Population 2000 , 2010 & 2020					
Municipality	2000	2010	% Change	2020	% Change
<i>Bois Blanc Township</i>	71	95	33.8%	100	5.3%
Mackinac County Total	11,943	11,113	-6.9%	10,834	-2.5%

Source: U.S. Census Bureau

In discussing the population for Bois Blanc Township, it is important to note that the figure presented by the 2020 US Census does not reflect the actual number of persons residing in the community during the summer months or during the busy November hunting season. This situation can be seen throughout much of northern Michigan, but is even more evident on the island. The Census count, taken on April first, does not count residents who winter elsewhere. Respondents are asked to declare a permanent residence different from their April location, if more than six months are spent at the alternative address. However, many fail to do so for reasons of misunderstanding or for tax purposes.

Table 2-2 Bois Blanc Township Historic Population, 1970-2020			
Census Year	Total Population	Number Change	Percent Change
1970	25	---	
1980	62	37	148.0%
1990	59	-3	-0.5%
2000	71	12	20.3%
2010	95	24	33.8%
2020	100	5	5.3%

Source: U.S. Census Bureau

In 2020, the Census reported that 439 housing units were listed as vacant. On the Island we can assume these units are mostly seasonal, recreational, or occasional use homes. Since the decennial U.S. Census is conducted in April, the numbers only reflect those persons who live in the Township on a year-round basis. It is understood the summer population in the township is significantly higher than the population reported in the US Census. However, obtaining accurate

numbers of seasonal residents and tourists is difficult. A rough estimate of the number of seasonal residents can be calculated by multiplying the number of seasonal housing units (439) by the State’s average number of persons per household (2.0), for a total of 878 seasonal persons. This figure does not include those seasonal visitors or tourists staying in motels, campgrounds, family homes or camping on their property. Therefore, it is quite possible the population can increase tenfold during peak summer vacation times. This temporary spike in population increases the need for public safety and services.

Age Distribution

Table 2-3 compares age distributions for Bois Blanc Township and Mackinac County according to the American Community Survey (ACS). It is important to note the 2020 American Community Survey is an estimate based on a small sample of the total population, while the US Decennial Census taken every 10 years is a full count. Population counts for the 2020 US Decennial Census and the American Community Survey do not match. While this may be particularly noticeable in a small community like Bois Blanc Island, it’s the best information available to gain an understanding of the community demographics.

Overall, Bois Blanc Township has a median age considerably older than Mackinac County, Michigan and the US. A higher percentage of elderly persons (age 65 and older) live in the Township (57.1 %) in comparison to Mackinac County (25.4 %).

Table 2-3 Population by Age Bois Blanc Township and Mackinac County 2020 American Community Survey				
Age Group	Bois Blanc Township		Mackinac County	
	Number	Percent	Number	Percent
Under 5 years	3	4.80%	402	3.70%
5 to 9 years	0	0.00%	433	4.00%
10 to 14 years	0	0.00%	495	4.60%
15 to 19 years	0	0.00%	472	4.40%
20 to 24 years	0	0.00%	550	5.10%
25 to 34 years	2	3.20%	1,052	9.80%
35 to 44 years	2	3.20%	1,035	9.60%
45 to 54 years	9	14.30%	1,337	12.40%
55 to 59 years	3	4.80%	966	9.00%
60 to 64 years	8	12.70%	1,004	9.30%
65 to 74 years	16	25.40%	1,754	16.30%
75 to 84 years	20	31.70%	977	9.10%
85 years and over	0	0.00%	304	2.80%
Median Age	65.9 years		53.1 years	
Source: 2020 American Community Survey (ACS) 5-year estimate				

Households

Census data from the American Community Survey shows Bois Blanc Township has an average household size of 1.75 persons per household, as compared to 1.99 persons per household in Mackinac County and Michigan. In general, household size has decreased nationwide over the past several decades. The trend to smaller households is important, because it creates demand for additional housing, even in the absence of a numerical increase in population.

Table 2-4 demonstrates the trends in household size, and Table 2-5 compares household types for both the Township and the County for the past four decades. As the table shows, household size in Bois Blanc Township has fluctuated. Total households and married couple households have increased over the past four decades. According to the American Community Survey, there were 36 total households with 25 being married-couple families and 11 non-family households. Twenty-two percent of the households were identified as householders living alone. With a population the size of Bois Blanc Island, a small numeric change will equate to a large percent change.

Table 2-4 Average Household Size (Persons per Household) Bois Blanc Township and Mackinac County, 1990-2020							
Bois Blanc Township				Mackinac County			
1990	2000	2010	2020	1990	2000	2010	2020
1.79	1.69	1.86	1.75	2.49	2.32	2.19	1.99
Source: U.S. Census Bureau.							

Table 2-5 Households by Type: 2020 American Community Survey Bois Blanc Township and Mackinac County		
Household Type	Bois Blanc Township	Mackinac County
Total Households	36	5,268
Married Couple Family	25	2,564
Female Householder, No Husband Present	0	382
Non-family Households	11	2,079
Householders Living Alone	22%	32%
Source: U.S. Census Bureau 2020 American Community Survey		

Income

Table 2-6 from the 2020 American Community Survey (ACS) 5-year estimate provides median household and family income. The median household income for Bois Blanc Township was \$57,500. Median household income for Mackinac County and Michigan was \$50,058 and \$59,234 respectively. The high percentage of year-round residents who are retired explains the lower income levels for Township residents. Of the 50 households identified in the 2018 ACS, 37 households had Social Security Income and 36 had retirement income.

According to the 2020 American Community Survey (ACS) 5-year estimate 9.5 percent of Bois Blanc Township individuals fell below the poverty level, as compared to 15.5 percent for Mackinac County and 13.7 percent for the State.

Table 2-6 Income Statistics: 2020 American Community Survey Bois Blanc Township, Mackinac County, and State of Michigan		
Jurisdiction	Median Household Income	Median Family Income
Bois Blanc Township	\$57,500	\$60,938
Mackinac County	\$50,058	\$59,660
State of Michigan	\$59,234	\$75,470

Source: 2020 American Community Survey (ACS) 5-year estimate

Education

Education is an important factor in analyzing the capabilities of the local workforce. According to the 2020 American Community Survey for the population 25 years and over, 93.3% of Bois Blanc Township residents are high school graduates or higher, as compared to 90.6% in Mackinac County. Twenty percent of the Township’s residents have a bachelor’s degree, while 24% of the County’s population have a bachelor’s degree.

Housing Stock

The 2020 U.S. Census found 502 housing units in Bois Blanc Township. Of the total housing units, 63 units (13%) were occupied year-round and 439 units (87%) were listed as vacant. On the Island, vacant housing would be typically classified as seasonal, recreational, or occasional use. See Table 2-7.

Bois Blanc Township’s relatively high percentage of owner occupancy lends additional stability to neighborhoods and may encourage better maintenance and more reinvestment into the existing housing stock. It can also be an indicator of a lack of available rental property.

According to the U.S. Census Bureau, 2020 American Community Survey (ACS) 5-year estimate, 13% of the Township’s housing was built before 1939, while 32% of the housing units were built since 1990. The 2020 ACS found the median value of a Bois Blanc Township home was \$206,300, compared to \$136,100 for Mackinac County.

Table 2-7 Selected Housing Information Bois Blanc Township and Mackinac County, 2020		
Information	Bois Blanc Township	Mackinac County
Total housing units	502	10,519
Occupied housing units	63	5,040
Vacant	439	5,479
Owner Occupied	94.4%	73%
Renter Occupied	5.6%	27%

Source: U.S. Census Bureau.

CHAPTER 3: NATURAL RESOURCES

Introduction

Without a doubt, the greatest attractions for the residents and visitors to Michigan's Upper Peninsula are the area's environment and the rural nature of this portion of the State. Recreational activities such as hunting, fishing, snowmobiling, canoeing, and a multitude of other outdoor activities attract people from more urban areas of Michigan and other states as well. Many long-time visitors decide to move to the area upon retirement. Because of the abundant outdoor recreational opportunities, the natural environment is a major economic base and income generator.

At the same time, the environment places constraints upon human activities. Certain critical and sensitive parts of the natural landscape cannot be altered by man without creating problems that are not easily corrected. The filling of wetlands and soil erosion due to the clearing of land for construction are but two examples. It is essential then, that any future development respect the different characteristics of the natural environment. This is important to preserve the attractiveness of this part of the State, prevent potential problems related to undue alteration of the land, and maximize the economic benefits of the tourist and recreation industry.

An analysis of Bois Blanc Township's physical environment can assist local government officials in planning for future land use. Natural resources addressed in this chapter include climate, geology, topography, soils, water, vegetation, fish, and wildlife.

Climate

The climate summary describes the general nature of living conditions that affect life's daily activities. Historically, Michigan's Upper Peninsula has offered a climate desired by many visitors and recreational enthusiasts. The moderate summers allow many residents to escape the warmer conditions experienced at locations in Southern Michigan. Winters are generally longer. It is helpful to know the climate to understand building code requirements, utility depths, planning for growing seasons, and energy usage needs.

Generally, the climate of the Bois Blanc Township area is similar to other parts of the eastern Upper Peninsula and northern Lower Peninsula as residents and visitors enjoy pleasant summers, with an average May-September temperature of 70° F. The proximity to Lake Huron serves to moderate temperature extremes as compared to inland communities. Due to the Island's location in Lake Huron, spring is late arriving, and the first freeze in the fall is delayed. The average date of the first fall freeze occurs in mid-October, as compared to several weeks earlier at inland areas. The following table documents some important weather statistics recorded at two weather stations near Bois Blanc Island: Mackinac Bridge and Cheboygan. These statistics were obtained from the Midwestern Regional Climate Center Website.

Table 3-1 Climate Summary Statistics Bois Blanc Township Area, 1973-2000		
	Mackinac Bridge	Cheboygan
January average minimum temperature	12.2° F	8.2°F
January average maximum temperature	24.8° F	26.3°F
July average minimum temperature	59.6° F	57.2°F
July average maximum temperature	75.2° F	77.4°F
Average annual precipitation	26.53"	29.56"
Average annual snowfall	57.6"	90.0"
Growing season (more than 32° F, 90% of the time)	176 days	168 days

Geology

Bedrock is the solid rock under the earth's surface and may be at or near the surface, but in many places in Michigan, the bedrock is buried under hundreds of feet of glacial drift. In the case of Bois Blanc, bedrock is near the surface in the central areas of the Island. The bedrock geology of Bois Blanc Island was laid down during the Upper Silurian and Middle Devonian periods of the Paleozoic Era 220 to 540 million years ago. It is made up of types of limestone, which are heavily mined at inland locations both in the Upper and Lower Peninsulas. This non-renewable resource is very economically important to Michigan.

The physical landscape of Bois Blanc Island was shaped and transformed by natural forces. As glacial ice sheets advanced and retreated 10 to 12 thousand years ago, the appearance of the region was altered by the scouring and deposition of glacial drift material. In addition, wind and water erosion, surface drainage, and vegetation have changed the topography of the Island. In the central areas of the Island, bedrock is near the surface, and glacial drift material is shallow or devoid. Areas around the perimeter of the Island are lacustrine clay and silt in low-lying areas, formerly inundated by glacial Lake Huron.

Topography

Slope is an important development consideration associated with topographic features. Steep roadway grades, septic field failures, soil erosion, and excavation costs are some of the difficulties associated with severe grades. Development in areas with severe slopes and ravines should be restricted. If development is permitted, sensitive site planning should be required along these steep slopes to prevent soil erosion. Generally speaking, the elevation of Bois Blanc Island increases slightly toward the center of the Island away from Lake Huron. For reference, Map 3 depicts topographic features for Bois Blanc Township.

The highest point in the Township is just south of Lime Kiln Point Road, northwest of the airport, where the elevation is 680 feet above sea level. As can be noted from the surface drainage patterns in the Township, these local area topographic trends of higher to lower

elevation converge at Lake Huron, where the elevation is 577 feet above sea level. Map 3 also shows locations where slopes are greater than ten percent.

Soils

One important determinant of land use is the soil's suitability for development. Land uses must correspond to the capacity of the soils on which they occur. Soil suitability for each use should be determined before development occurs. Because all development in Bois Blanc Township relies on individual wells and on-site waste disposal systems, soil suitability is an essential consideration prior to development. Development on unsuitable soils may result in improperly functioning septic systems, which may contaminate the groundwater aquifer or surface waters. According to the *Aquifer Vulnerability to Surface Contamination in Michigan Map*, prepared by the Center for Remote Sensing and Department of Geography at Michigan State University, Bois Blanc Township is identified as “highly permeable soils over unknown drift lithology” or “moderately permeable soils over unknown drift lithology”. Rapid movement of liquid through the highly permeable soil particles allows for little or no cleansing of effluent, therefore making the aquifer highly vulnerable to contamination from runoff or malfunctioning septic systems. Moderately permeable soil is more suitable for septic system siting.

A soils map, presented as Map 4, details the drainage characteristics (hydric soils and soils on steep slopes) of the various types of soils in Bois Blanc Township. While soil information presented in this section can be used as a general guide for the management of large tracts of undeveloped land, it should not be used for the development of specific sites. For specific sites, the Mackinac County Soil Survey should be consulted.

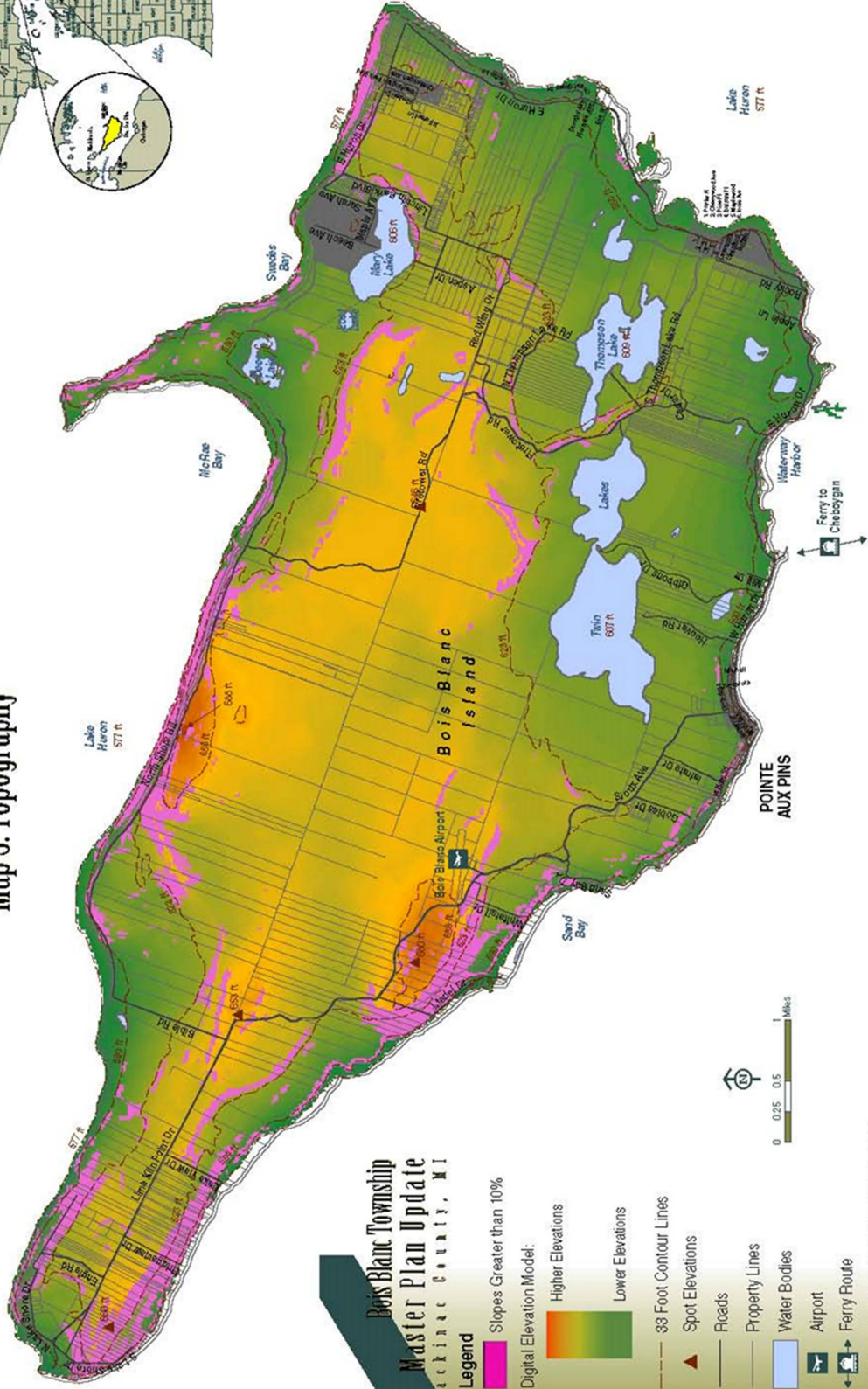
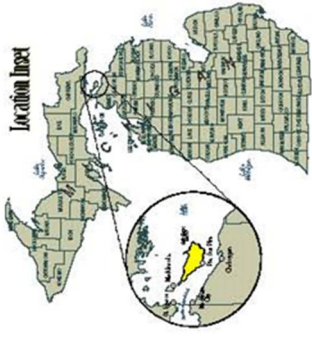
Water Resources

One of the most valuable natural resources of Bois Blanc Township is water. Both groundwater and surface water are vital resources within the Township. Because there is no central water distribution system, residents must rely upon individual wells for drinking water. As noted in the soils section, the vulnerability of drinking water aquifers to surface contamination is high in the portions of the Township due to the highly permeable soils.

Bois Blanc Township is located within the Lake Huron Watershed. The largest inland lake in the Township is Twin Lakes. Other inland lakes in the Township include Mud Lake, Thompson Lake, Lake Mary, Lost Lake, Deer Lake, and several smaller unnamed bodies of water.

Surface water resources (covering approximately 5.3 percent of the Township) are noted on both Map 3 and Map 4. The combined surface water resources offer scenic and recreational amenities to Township residents and visitors. The quality of these surface waters must be protected from the negative impacts of development, such as pollution and loss of scenic views to open water. Lakes and associated 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.

Map 3: Topography



Bois Blanc Township Master Plan Update Mackinac County, MI

- Legend**
- Slopes Greater than 10%
 - Digital Elevation Model:**
 - Higher Elevations
 - Lower Elevations
 - 33 Foot Contour Lines
 - Spot Elevations
 - Roads
 - Property Lines
 - Water Bodies
 - Airport
 - Ferry Route



0 0.25 0.5 Miles

Parcel Source: Mackinac County Equalization Department
Topography Source: Michigan Geographic Data Library

Ward/Town
277 West Main Street
Charlevoix, MI 49720
(231) 552-4444

While the current quality of surface waters in Bois Blanc Township is good, the threat of potential water pollution from point and non-point sources is always a major concern. Proper land use management can help control water quality conditions. Some methods to maintain and improve water quality include: minimizing fertilizer/pesticide application near surface water, implementation and enforcement of septic system regulations, soil erosion and sedimentation regulations, greater setback from the water, and lake/stream greenbelt regulations.

Wetlands and Woodlands

A wetland is land where water is found, either on the surface or near the surface, at any time during the year. Poorly drained soils and water-loving vegetation also may be present. Wetlands are often referred to as marshes, swamps, fens, or bogs, depending on their characteristics. Residents of Michigan are becoming increasingly aware of the value of wetlands. Beyond their aesthetic value, wetlands protect the water quality of lakes and streams by filtering polluting nutrients, organic chemicals, and toxic heavy metals. Wetlands are closely related to high groundwater tables and serve to discharge or recharge aquifers. Additionally, wetlands support wildlife, and wetland vegetation protects shorelines from erosion. Where wetlands are regulated by EGLE (Environment, Great Lakes, and Energy), a permit for development is required.

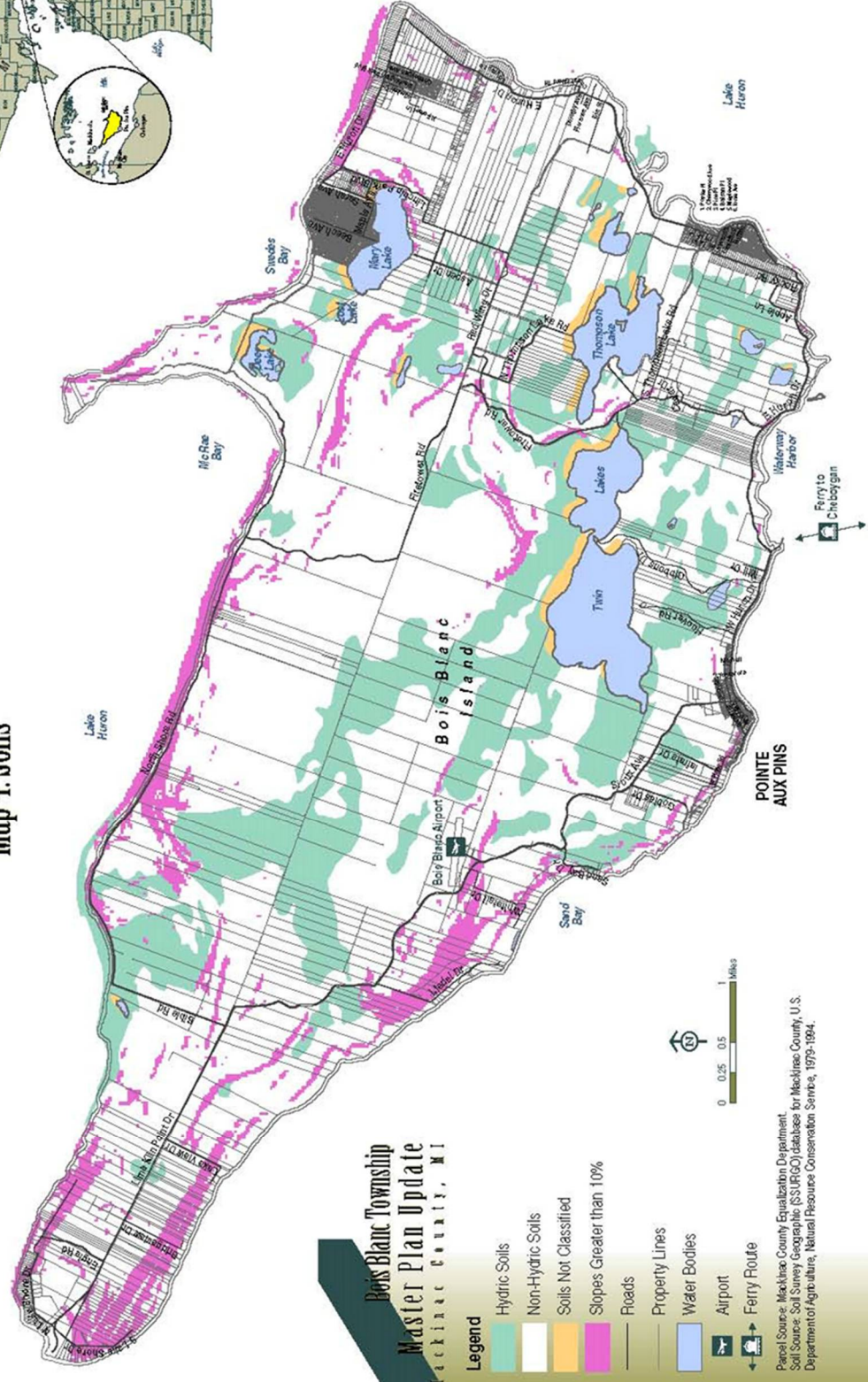
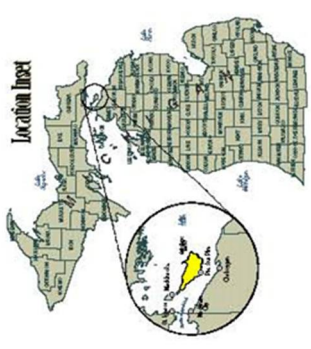
Wetland areas in Bois Blanc Township are noted generally near bodies of water. For reference purposes, wetland areas are mapped on the Existing Land Use/Land Cover Map in Chapter 5 and amount to less than two percent of the Island.

In addition to scenic characteristics, woodlands provide habitat for wildlife and protect the soil from erosion. Forested areas are shown on the Existing Land Use/Land Cover Map in Chapter 5 and cover approximately 85 percent of the Island.

The dominant forest associations in the Township are birch/aspen, pine, northern hardwoods, and central hardwoods in the upland areas. Wetland forest species include lowland hardwoods such as black ash, slippery elm, and red maple and lowland conifers such as northern white cedar, black spruce, and eastern tamarack.

Forests provide the raw materials for many industries, such as pulpwood, fuel chips, saw logs, firewood, fence posts, cabin logs, Christmas boughs, and sap for maple syrup. But, most importantly they provide resources for recreational activities such as hunting, hiking, wildlife viewing, and camping.

Map 4: Soils



Bois Blanc Township Master Plan Update MacKinac County, MI

- Hydric Soils
- Non-Hydric Soils
- Soils Not Classified
- Slopes Greater than 10%
- Roads
- Property Lines
- Water Bodies
- Airport
- Ferry Route



Panel Source: MacKinac County Equalization Department.
 Soil Source: Soil Survey Geographic (SSURGO) database for MacKinac County, U.S.
 Department of Agriculture, Natural Resource Conservation Service, 1979-1994.

Fish and Wildlife

The Michigan DNR supports a state-wide fish stocking program and has recorded fish plants in Lake Huron waters, just off Bois Blanc Lighthouse Point. According to the website for the fisheries programs of the DNR, lake trout plants have occurred annually at this location since 2002 sponsored by the U.S. Fish and Wildlife.

Wildlife species typically found on Bois Blanc Island include large mammals such as whitetail deer, bobcat, and coyote, and small animals such as squirrel, rabbit, chipmunk, raccoon, mink, otter, beaver, muskrat, and fox. A variety of bird species are found on the Island, both seasonal and year-round, and include songbirds, shore and water birds, raptors, and game birds.

Threatened or Endangered Species

According to the Michigan Natural Features Inventory website, plants or animals listed on the federal threatened or endangered list for Mackinac County are Hart's tongue fern, piping plover, Pitcher's thistle, lynx, bald eagle, eastern massasauga, lakeside daisy, dwarf lake iris, Michigan monkey-flower, Houghton's goldenrod, and Hine's emerald dragonfly.

Using the book, *Guide to Great Lakes Coastal Plants* written by a local botanist, Ellen Elliott Weatherbee, as a reference, it is noted that Pitcher's thistle, dwarf lake iris, and Lake Huron tansy are threatened or endangered coastal plants found on Bois Blanc Island. Care should be taken to assure their continued survival on the Island.

It is also important to note that non-native or invasive species, such as purple loosestrife and Eurasian water milfoil are not found on the Island.

Natural Areas on Bois Blanc Island

Areas that have retained the best examples of Michigan's native landscapes, ecosystems, natural communities, or scenic qualities are recognized throughout Michigan as natural areas. Features used to identify natural areas include size, uniqueness, pristine nature, aesthetic or scenic qualities, and outstanding opportunities for solitude or a primitive and unconfined type of recreation. To be legally dedicated, natural areas must also contain ecological, geological, or other features of scientific, scenic, or natural history value. Many areas also have populations of endangered and threatened species.

Public Act. 451 Part 355

Recognition:

Legally Dedicated Natural Areas (3)

The Michigan Nature Association (1)

Mixed Forest - 968 acres

Northshore - 817 acres

Snake Island/Mud Lake - 244 acres

Location: Northeast and southeast shores of Bois Blanc Island, in the Straits of Mackinac

Management: Mackinaw State Forest

Activities: Hiking, wildlife viewing, cross-country skiing, photography, hunting, non-motorized fishing, bird watching, wildflower viewing

Importance: The Mixed Forest and Northshore areas consist largely of upland hardwood forest with moderate-size white birch and sugar maple, which will develop into an excellent mature forest stand, given time. They provide habitat for several species of special concern, including the dwarf lake iris, bald eagle, and a population of Douglas's hawthorn that is disjunct from populations in the western U.S. The Northshore Natural Area also contains some fine areas of large, old-growth hemlock and white pine and has a beautiful natural strip of Great Lakes shoreline, with a variety of shoreline types.

The Snake Island/Mud Lake area contains a portion of the pristine Lake Huron shoreline, including cobble beaches. The inland dune and swale topography reflects historic lake levels and results in swamps, marshes, and ponds separated by gravelly, forested ridges. Dwarf lake iris, a federal and state-threatened plant, can be viewed in the area. A colony of herring gulls inhabits Snake Island, osprey feed at Mud Lake, and the area also has extensive and quite old beaver workings.

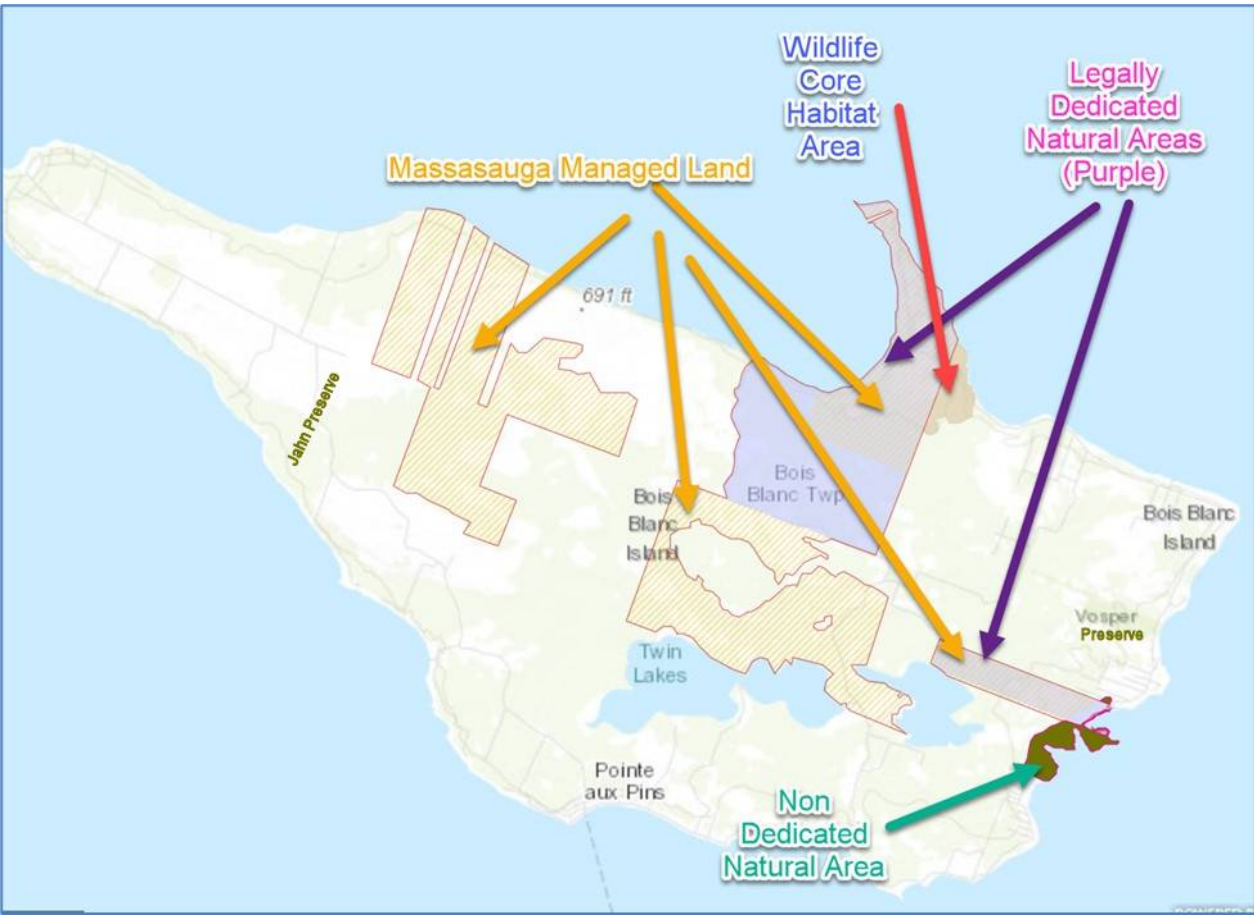
There are two nature preserves under the management of the Little Traverse Conservancy. The Martin and Reinhardt Jahn Family Nature Preserve is 165 acres, with 1,350 feet of frontage on Lake Huron; 2,400 feet on either side of Lime Kiln Point Road. The Vosper Nature Preserve, donated by Jim and Betty Vosper, is 114 acres, with 630 feet of frontage on Lake Huron.

Northshore Natural Area, lake area



Northshore Natural Area, forest area





Map 4-2 Important Natural Areas on Bois Blanc Island.

CHAPTER 4: COMMUNITY SERVICES AND FACILITIES

One of the primary contributors to the quality of life of a community is the type and variety of services available to both residents and visitors to the area. In many cases, a smaller community does not have the financial resources to provide all or even most of the services normally considered essential in an urban area. The more populated the community, the greater the variety of public, semi-public, and private services made available to residents.

This chapter of the master plan will identify the types and extent of services now available to residents and businesses in Bois Blanc Township. Even though these services may be sufficient for the needs of the current population, future development may increase the demand to upgrade or expand the services and facilities the Township needs to maintain a satisfactory living environment in the future.

Township Hall

Bois Blanc Township Hall, located in the Pointe Aux Pins community, houses township offices and a meeting room. The building is barrier-free and fully accessible, including the restroom. The “Wagner Room” in the Fire Hall has a full-service kitchen and barrier-free restrooms. It is made available for residents for community events.

Water and Sewage Disposal

Bois Blanc Township does not currently provide a public water system. Residents and business owners must rely on on-site private wells for domestic drinking water. Residents of the Township rely on on-site septic systems for wastewater treatment. The Luce-Mackinac-Alger-Schoolcraft District Health Department regulates and maintains a permitting system for private wells and septic systems. Two important determinants for siting a septic system are soil suitability and depth to bedrock. Chapter 3 - Natural Resources discusses the geology and soils of the Township and the aquifer's vulnerability to contamination.

Solid Waste

Bois Blanc Township does not presently offer solid waste curbside pick-up service for its residents. Rather, the Township operates a transfer station near the public dock.

The transfer station hours and days of operation fluctuate by season to accommodate population levels. During July and August, the facility is open 7 days a week. During May, June, September, October, and November the facility is open Sunday, Monday, and Thursday. During the winter the transfer station is open on Sundays. The township sells special trash bags or users can pay for disposal at the facility. The transfer station takes a wide range of household trash including small appliances, furniture, and large appliances for additional fees.

At the present, the transfer station does not take household hazardous waste, tires, batteries, paint, and used oil. All waste is then hauled off the Island by ferry service and transferred to the mainland for disposal in an approved landfill.

Solid waste management planning is done on the Regional level in the Eastern Upper Peninsula with EUP Regional Planning and Development Commission having the responsibility of preparing and amending the plans, which are developed approximately at five-year intervals. The current *Regional Solid Waste Management Plan* identifies eligible disposal facilities for Mackinac County and sets goals for waste management including recycling and composting.

Utility and Communication Services

Presque Isle Electric & Gas Cooperative, headquartered in Onaway, provides electricity for Bois Blanc Island. The first armored sub-marine cable was laid in 1968. In 2000, two additional feeder cables were added. PIE&G projects that the new cables are capable of handling a growth rate of two percent per year until 2050.

Natural gas is not available. Residents may purchase liquid propane gas or fuel oil from several suppliers throughout the area, while some residents elect to heat with wood. Fuel costs are generally more expensive than on the mainland due to the added cost of transporting it to the Island.

The primary local landline telephone service is provided by TDS Telecom, while residents and commercial users have the option of choosing long-distance service from several providers. TDS Telecom completed the construction of fiber optic infrastructure laying more than 20 miles of fiber optic cabling and several special protection cabinets throughout the island telephone company's network. The new system allows residents to have high-speed internet access. Residents can also use cell phones and satellites for internet service.

Cable television service is not available on the Island. Residents may subscribe to satellite system providers for television programming.

Police, Fire, and Rescue Services

Law enforcement protection for Bois Blanc Township is the responsibility of the Mackinac County Sheriff's Department. The Sheriff's Department posts a deputy on the Island for nine months of the year, and they are on-call during the winter months. The Sheriff's Department office on the Island is located at the Fire Department. They maintain a patrol vehicle and marine patrol boat. The Mackinac County Jail in St. Ignace provides lock-up facilities for use by all law enforcement agencies in the County. The rate of serious crime in Mackinac County is generally low, as reported by the Michigan State Police website.

The all-volunteer Bois Blanc Township Fire Department serves the Island. Currently, there are 6 certified Level 1&2 Firefighters & EMRs. Fire-fighting equipment includes two water tankers, two brush trucks, one pumper fire truck, one ATV, one squad truck, and one rescue vehicle.

Equipment is stored in the Township Fire Hall, constructed in 1998. Dedicated wells at the Township dock parking lot, Coast Guard chapel, and airport.

Rescue transportation to the airport or ferry dock is provided by the Fire Department where they will be met by Mackinac Marine Rescue, if by water, or North Flight Aero Med by air.

The Island participates in the countywide 911 emergency service.

Transportation

Because of its isolation, Bois Blanc Island is accessible only by water or air.

Ferry Service

Plaunt Transportation, based in Cheboygan, provides commercial ferry service transporting vehicles and passengers from May through December. The ferry schedule varies throughout the season depending on demand. This ferry service provides a vital link for bringing goods, services, and people to and from the Island.

Bois Blanc Township Harbor and Public Dock

To accommodate residents and visitors who use private boats for access to the Island, Bois Blanc Township operates a marina and public dock located at 241 Ferry Dock Road. The marina is comprised of paved parking areas, drives and unloading areas, breakwaters, a ferry landing, cement piers, finger piers, rock barricades, a shed, a flagpole, lawn areas, and other public marina facilities and structures. The marina has two slips for commercial use, 18 slips that are leased on an annual basis, and nominal footage for transient boats. Two primitive restrooms are located at the harbor.

Airport

The Bois Blanc Island Airport (6Y1) is owned and operated by the Township and features a 3,500' by 75' asphalt runway. Ongoing airport improvement projects are staged through a rolling 5-year plan coordinated with the Michigan Department of Transportation (MDOT). A new terminal building was constructed in 2008, followed by the construction of a Snow Removal Equipment Building in 2019. Runways and taxiways were crack-sealed and painted in 2022. There are nine privately owned hangars at the airport. See Map 5.

With these improved assets, the airport is open year-round and serves as the Island's lifeline to the mainland, especially during the winter months when the ferry does not run. Financial support for the airport is a combination of federal, state, and local funding. Locally, residents approved a 3-mill tax levy until the year 2026.

Local air service is provided by Fresh Air Aviation, based at the Emmet County Municipal Airport, and emergency air service is provided by North Flight Aero Med based in Traverse City. This service is available year-round, but is especially important to Island residents during the winter months and in case of emergency.

Regional air service is available at Pellston Regional Airport in Emmet County, Cherry Capital Airport in Traverse City, and Chippewa County Airport in Kinross. Air freight service at Traverse City includes Federal Express, Airborne Express, and United Parcel Service.

The development of property near the airport requires careful consideration. The continuance of accepted, incompatible land uses adjacent to airport lands, irrespective of their relationship to the operational needs of the airport, may result in the loss, or significantly impede, some of the airports within the state aviation system. This loss would endanger the state's mission to preserve a system of essential public facilities that provides access for all regions of the state to the nation's air transportation system.

The Michigan Zoning Enabling Act, Public Act 110 of 2006, includes language that required the incorporation of an airport approach plan when an airport is located in the community. The following excerpt was taken from the text of the Michigan Zoning Enabling Act:

“Sec. 203. (1) The zoning ordinance shall be based upon 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 insure 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 on 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 uses of land, resources, and properties. The zoning ordinance shall be made with reasonable consideration to the character of each district, its peculiar suitability for particular uses, the conservation of property values and natural resources, and the general and appropriate trend and character of land, building, and population development.

(2) If a local unit of government adopts or revises a plan required under subsection (1) after an airport layout plan or airport approach plan has been filed with the local unit of government, the local unit of government shall incorporate the airport layout plan or airport approach plan into the plan adopted under subsection (1).

(3) In addition to the requirements of subsection (1), a zoning ordinance adopted after March 28, 2001 shall be adopted after reasonable consideration of both of the following:

(a) The environs of any airport within a district.

(b) Comments received at or before a public hearing under section 306 or transmitted under section 308 from the airport manager of any airport.

(4) If a zoning ordinance was adopted before March 28, 2001, the zoning ordinance is not required to be consistent with any airport zoning regulations, airport layout plan, or airport approach plan. A zoning ordinance amendment adopted or variance granted after March 28, 2001, shall not increase any inconsistency that may exist between the zoning ordinance or structures or uses and any airport zoning regulations, airport layout plan, or airport approach plan. This section does not limit the right to petition for submission of a zoning ordinance amendment to the electors under section 402 or the right to file a protest petition under section 403."

The Aeronautic Code of the State of Michigan provides that the Michigan Aeronautics Commission may adopt an approach plan for each licensed airport that describes the airport protection area. The Michigan Zoning Enabling Act, Public Act 110 of 2006 requires that local zoning officials use the determination of this protected area as a guide in adopting standards for its local zoning ordinances. According to the Act, The Commission has adopted an approach protection plan for the majority of the licensed airports.

Approach protection plans are intended to provide airport sponsors with standards that are reasonable and enforceable under local zoning ordinances. These plans should also provide airport sponsors with sufficient airspace protection according to local needs and conditions. The standards utilized for each approach protection plan include airspace protection in accordance with FAR Part 77 standards. The land use standards utilized for the establishment of these plans (developed by the University of California-Berkeley using NTSB accident data) have been endorsed by the FAA. Additionally, the approach protection plan also includes protection for the FAA's VOR sighting criteria. The approach protection plans approved by the Commission were based on the current airport layout plan for the airport. When airport layout plans are updated, it is also necessary to update approach protection plans. The Commission has approved the use of a standard approach protection plan to be applied to an approved airport layout plan without being presented to the Commission if the airport has had a previously approved approach protection plan. For reference, the Bois Blanc Island Airport Layout Plan is attached as the last page of this chapter.

Roads

There are approximately 40 miles of roads on Bois Blanc Island, all of which are gravel surface. Road maintenance is the responsibility of the Mackinac County Road Commission, with funding shared by the Road Commission and the Township. The Road Commission contracts out road maintenance and snow removal to a local excavation business owner.

School, Cemetery and Churches

The Bois Blanc School is part of the Eastern Upper Peninsula Intermediate School District. Children in grades K-8 are taught in the Island's one-room schoolhouse, while high school students may attend Cheboygan High School, or utilize online resources, through a cooperative agreement between the two schools. The school building dates back to the 1920s, albeit with different uses. For the 2021-22 school year, the student count was 3 elementary students and

no secondary students. The school receives little state funding; the majority of the school funding is provided through a voter-approved millage.

Nearby post-high school facilities are Lake Superior State University at Sault Ste. Marie, Northern Michigan University at Marquette, and two-year institutions at Alpena and Petoskey.

The Township-owned Woodland Glade Cemetery, the Island's only active cemetery, is located near the Township Hall. Established in the 1970s, the cemetery is unique because it maintains the natural characteristics of the land. There is room for expansion if needed. Other private and historic family cemeteries exist on the Island.

Church services on the Island are held during the summer months (July and August) at the Church of the Transfiguration (Episcopal), in the Pines, or the Coast Guard Chapel (non-denominational) has services year-round.

Museum and Cultural Sites

The Bois Blanc Island Historical Society operates a museum during the summer months. The museum is open Tuesday, Thursday, and Saturday from 10 am to 2 pm and offers a story hour on Wednesdays at 10:30 am.

In recent years, there has been renewed interest in archeological and historic sites on the Island. Representatives from Native American tribes, federal and state agencies and interested organizations have begun efforts to identify and eventually protect significant sites on Bois Blanc Island. The potential for archeological sites dating back thousands of years exists on the Island.

Postal Service

The Island has two forms of postal service: a post office and rural mail route (Highway Contract Route, HCR). The current post office was built in 1994 and is owned and operated by the United States Postal Service (USPS). It is a full-service post office with one employee operating 12 hours per week with service six days per week from May through November. For December through April, the post office provides service five days per week with mail deliveries two days per week. The post office has a P.O. Box capacity of 122. The USPS subcontracts the HCR rural route mail delivery to Plaunt Transportation. Plaunt also transports packages to the Island from Federal Express, UPS, and similar shippers.

Medical Facilities

Mackinac Straits Health Systems (MSHS), located in St. Ignace, is the main healthcare provider in Mackinac County. MSHS operates the Mackinac Straits Hospital, ER/Fast Clinic, and St. Ignace Medical Clinic. The Bois Blanc Medical Clinic was established on September 3, 2001, through the efforts of the Bois Blanc Island Community and Mackinac Straits Hospital in conjunction with a grant from the Michigan Center for Rural Health. The clinic is located in Pointe Aux Pins (at the Wagner Room) and operates Wednesdays, from 10:30 a.m. – 2:30 p.m. during the summer. Off-season hours vary and would be posted.

Residents also seek medical services in larger regional medical centers such as Marquette, Sault Ste. Marie, Cheboygan, Alpena, and Petoskey. St. Ignace and Newberry offices of the LMAS Health Department cover Mackinac County. Hiawatha Behavioral Health's St. Ignace office tends to the mental health needs of county residents.

Recreational Facilities

The Township Dock provides a boat launch and safe haven for transient boats as well as dockage for local boats. Vault toilet restrooms and an information/inclement weather building are provided as well as picnic tables for boaters. The dock itself is barrier-free. A boat launch is also available at the Pines Association Beach Park & Dock. The Pines District School has a playground area for use by all children on the island.

There are six inland lakes on Bois Blanc Island. Four of those have one or more access points. Lake Mary has a boat launch and a public fishing dock at Lake Mary Park. Lake Thompson has a floating dock for fishing next to the boat launch area. Echo Lake and Duncan Lake, commonly referred to as "Twin Lakes" are connected by a channel known as "the narrows". There is a shallow boat launch access on the east end of the lake best for canoes and kayaks.

The Hoover Building, owned and operated by the Episcopal Church is used for meetings and community gatherings. The Township Building is host to meetings, parties, summer square dancing, exercise, etc. in the Wagner Room. This room is also available for rent for receptions, memorials, and family gatherings.

There are a few designated roadside parks and nature trails available on the island. Gibson Park, a small area adjacent to and owned by The Pines School District is utilized for nature walks. The Michigan Nature Association Trail at Snake Island and the Michigan Nature Association Trail at Erie St. provide hiking opportunities. North Shore Drive (Rogers Corner to Bible Rd) is partly designated as a scenic highway but is better accessed by bicycle, ATV, or on foot rather than by a vehicle. A picnic table with handicap accessibility has been added to the West side of the Marina where access to Lake Huron is acceptable for viewing and swimming. Swimming is NOT allowed within the marina. There are picnic tables at the Lake Mary dock as well as the new Lake Thompson dock and the airport.

Bois Blanc Island has several camping areas. Lake Mary has two primitive sites, picnic tables, garbage receptacles, fire rings, a hand pump, and a vault toilet. Thompson and Twin Lakes boat launches have dispersed camping at both sites. There are fire pit areas but no facilities. The North Shore (Bible Road) has dispersed camping only, with no facilities. The Airport has one primitive site with picnic tables, a fire ring, a hand pump, and a vault toilet available. State Forest Lands offer dispersed camping with pack-in/pack-out policies.

Hunting and fishing are recreational activities that are enjoyed by residents and non-residents on a year-round basis. Bois Blanc Island currently works with the DNR in a fish stocking program. Bass, Perch, Pike, Walleye, and pan fish are enjoyed. Deer hunting is an annual event

by many as well as small game hunting. ATVs in the summer and snowmobiles in the winter are popular recreational activities. No purposely developed trails are maintained on the island. However, many randomly developed, unmarked, and non-approved trails on State ground exist.

There are two Little Traverse Conservancy Preserves on BBI. Martin and Reinhardt Jahn Family Preserve was dedicated in 2016 and include 165 acres, 1,350 feet of frontage on Lake Huron; 2,400 feet on either side of Lime Kiln Point Road. Vosper Preserve was dedicated in 2003/2007 and includes 114 acres and 630 feet of frontage on Lake Huron.

CHAPTER 5: EXISTING LAND COVER/USE

Land Use Character

Bois Blanc Township covers approximately 36 square miles in total area (34 square miles of land and two square miles of water). The Township's political jurisdiction covers portions of six geographic townships. At the time of the 2010 U.S. Census, the population density was 2.5 persons per square mile, up from 2.0 persons per square mile in 2000 and 1.7 persons per square mile in 1990. Because a large portion of the Township (approximately 85 percent) is forest land, the residential population is concentrated in areas near the Lake Huron shoreline (See reference map 5).

The Island has 13 platted subdivisions, one of which (Sand Bay) was vacated in the 1930s. Of the others, four are more than one-half owned by the State of Michigan. The older subdivisions were patterned after city blocks and have very small lots (some as small as 35' x 100'). Many of these small lots have been claimed by the State for back taxes. More recent subdivisions have been concentrated on the east and south lakeshore areas with larger lots; most often they have 100' water frontage.

Land Use Statistics

The Existing Land Cover/Use Map for the 2022 Master Plan was developed by using 2018 color and color infrared digital aerial photos and parcel data. Updated information was computerized to produce the existing land cover/use map and statistics. Ancillary digital map data including parcels, ownership information, USDA soils, Google Maps, and the National Wetlands Inventory were used to refine the update. The Michigan Resource Information Systems (MIRIS) land cover/use classification system was used to map the following categories: Residential, Commercial, Industrial/Utility, Community Services, Non-Forested Uplands, Upland Forests, Lowland Forests, Non-Forested Wetlands, and Beaches.

A more detailed approach was used to identify and map natural resources on larger tracts of land. Therefore, larger parcels will show urban built-up areas and undeveloped forests, wetlands, or upland openings. The Land Cover/Use Map is displayed as Map 7. Table 5-1 presents the existing land cover/use breakdown for the Bois Blanc Township.

Residential Development

Residential uses account for 1,245 acres or 5.3 percent of the total land area. The heaviest concentration of residential development occurs mainly in and near the community of Pointe Aux Pins, along the Island's southern Lake Huron shoreline, and the northwest shoreline. This development pattern is consistent with the land division patterns discussed earlier. Scattered residential development can also be seen along inland roads where the property is held in private ownership.

Table 5-1 2021 Existing Land Use/Land Cover		
Category	Acres	Percent
Residential	1,245	5.3%
Commercial	43	0.2%
Community Services	25	0.1%
Transportation/Industrial	248	1.1%
Upland Openings	85	0.4%
Upland Forests	14,563	61.9%
Lowland Forests	5,519	23.5%
Non-forested Wetlands	517	2.2%
Beaches	55	0.2%
Water	1,211	5.2%
Total	23,511	100%
Source: 2021 LCLU Update, Richard Deuell		

Commercial Development

Bois Blanc Township has limited commercial development with 43 acres. Many of the commercial enterprises include are located along the south side of the Island near the ferry dock. Residents rely on commercial providers generally in Cheboygan for everyday goods and services.

Community Services

This land use category, which makes up 25 acres consists of the Township Hall and Fire Department, school, post office, church, cemetery, boat launch, and museum.

Transportation and Industrial Development

The combined land use category includes the municipal airport and surrounding properties along with a gravel pit and sawmill operation that covers 248 acres or 1.1 percent of the Township. The area delineated as the airport includes buildings and buffer zones around the runway.

Upland Openings

The non-forested uplands category accounts for 85 acres (0.4% of the Township). Limited historic land clearing for farming, combined with the pre-logging forest types (northern hardwoods, and spruce-fir-northern white cedar forests), large open fields with herbaceous plants, grasses, and shrubs are not common.

Forests

In addition to the scenic characteristics of woodlands, forested areas provide habitats for wildlife, protect the soil from erosion and act as buffers from noise. As can be noted in Table 5-1, 85% of the Township's land area is made up of forested land cover. This category includes

both upland and lowland forest types. About one-half of the forested land cover in the Township is owned by the State of Michigan as part of the Mackinac State Forest. The federal government owns 696 acres at Deer Lake and Lighthouse Point. For reference, Map 6 is provided showing public forest land in the Township. Public land in the Township amounts to approximately 8,590 acres or a little more than 13 square miles. Land cover is a term used to describe areas that have no development and are in a natural state.

Upland Forests

The upland forest category accounts for 61.9% of the land cover (14,563 acres) and includes a number of common forest types. Northern hardwood forest type includes species such as sugar maple, red maple, American beech, basswood, and yellow birch. Big-toothed aspen, quaking aspen, white birch, red maple, and balsam fir are the primary tree species found in the aspen-birch type. A mixed upland conifer forest type, influenced by the shallow limestone soils, has northern white cedar, balsam fir, aspen, white pine, and red maple tree species. White pine, red pine, balsam fir, and eastern hemlock are common species in the pine forest category.

Lowland Forests

Poorly drained, lowland areas support northern white cedar, tamarack, balsam fir, black spruce, eastern hemlock, white pine, balsam poplar, trembling aspen, paper birch, black ash, speckled alder, and shrub willows. The lowland forests are associated with streams, inland lakes, and Lake Huron shorelines. There are large areas of lowland forests in the interior and eastern parts of the Island. According to the land cover analysis, approximately 5,519 acres were mapped as lowland forests. Lowland forests, located adjacent to water features, will function as riparian forests and water quality buffers. The network of lowland forests also acts as wildlife corridors and is the backbone of large ecological corridors.

Non-Forested Wetlands

Non-forested wetlands, which include marshes, fens, and bogs, were mapped on approximately 517 acres or 2.2% of the Township. Predominant wetland areas are found in locations adjacent to the Township's lakes and along the Lake Huron shoreline. It is important to note that existing land cover statistics used in this report are based on Michigan Resource Information System (MIRIS) data. Wetland information contained in the MIRIS data was not verified by field inspection when the data was compiled. Thus, the areas shown as wetlands on the MIRIS system may not meet State and Federal criteria for legally regulated wetlands. However, the information is still valuable for general land use planning decisions.

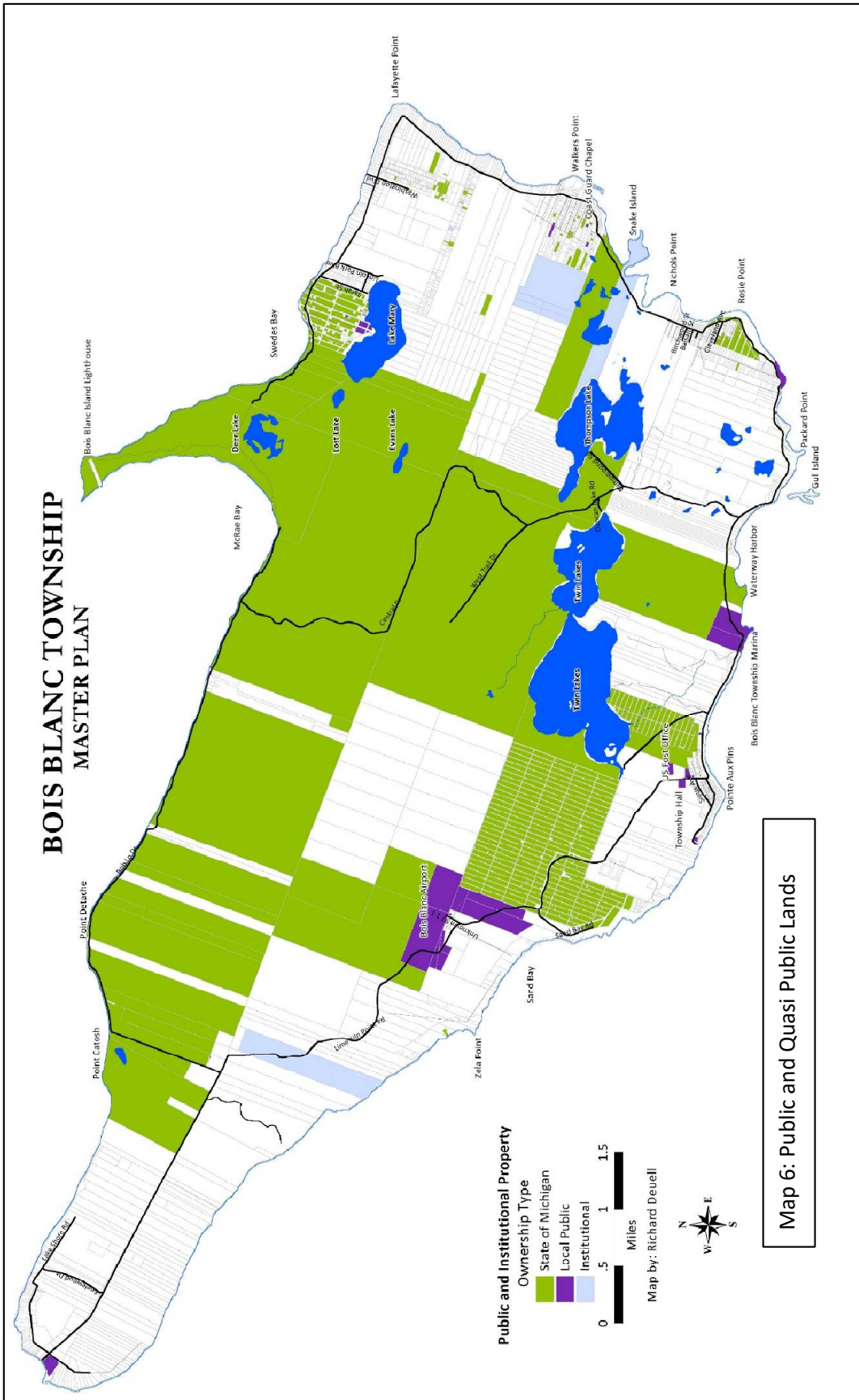
Beaches

Beaches along Lake Huron are delineated on the land cover use map. The width and therefore acreage of beaches can vary greatly from decade to decade and is dependent upon the rise and fall of Lake Huron. There is a range of beach types, which include sand, cobblestones, and bedrock.

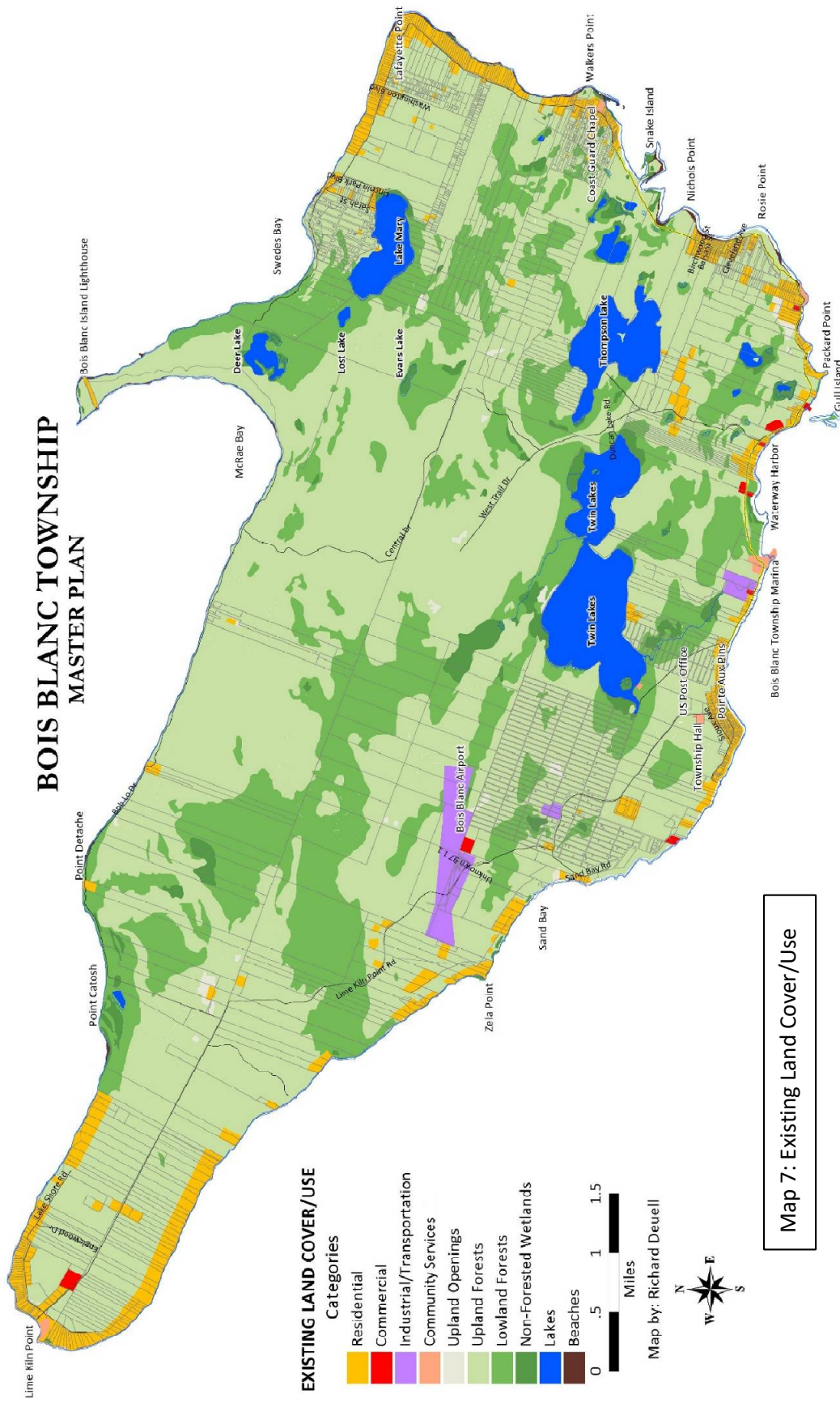
Water

This category includes all inland lakes and several unnamed water features.

BOIS BLANC TOWNSHIP MASTER PLAN



BOIS BLANC TOWNSHIP MASTER PLAN



CHAPTER 6: GOALS AND OBJECTIVES

Before a community can actively plan for its future growth and development, it must first set certain goals and objectives that define the boundaries of its needs and desires. This establishes a basis for future land use plan formulation. These goals and objectives must reflect the type of community that is desired and the kind of lifestyle its citizens wish to follow, given realistic economic and social constraints. In developing goals and objectives, the Planning Commission reviewed the preceding five chapters describing the community and incorporated input from the community survey.

Public Input

With a high percentage of landowners being seasonal or absentee landowners combined with the COVID-19 pandemic, the Planning Commission chose to use a web survey to gather input from the citizens of Bois Blanc Township. The survey was developed by the Township Planning Commission with the assistance of Richard Deuell, Planning Consultant. The survey was posted on the Survey Monkey website and printed copies were made available at the Township Hall. A notice was inserted in the winter tax bill with a total of 993 landowners being contacted. There were 245 surveys completed.

The following is a summary of the Community Survey. A copy of the Community Survey Report is available from Bois Blanc Township.

When asked how satisfied citizens are with Bois Blanc Township as a place to live or own property, 39% selected very satisfied and 51% satisfied. The survey inquired about the importance of protecting resources such as surface and groundwater, fish and wildlife, waterfront lands, woodlands, coastal resources, cultural and historic, wetlands, and air quality. If the “very important” and “important” selections are combined for each resource type, all scored 90% or more, while 86% said it is very important for the Township to protect natural resources on the island.

The survey asked how important different aspects of community character were to people deciding to live or own property in Bois Blanc Township. Living near the water, living in the woods, having clean air, rural/remote living, isolation and solitude, and friendly neighbors all had combined percentages of “very important” and “important” above 80%.

A question designed to evaluate citizens’ preferences towards planning and future development found a clear majority (62%) support a policy of planned and limited growth. Forty-nine percent felt the Township should promote community services such as food systems, grocery, fuels, & transportation. As new retail/services develop 61% of the respondents prefer stand-alone businesses at major intersections. Whether the Township should promote tourism/recreation, 47% selected “no” and 25% chose “don’t know/neutral.”

The survey asked respondents to evaluate how much of a problem are several issues in Bois Blanc Township. Items with 50% or more combined “major issue” and “moderate issue” are changing Island culture/increase population, access to medical and emergency services, and the ferry service. Other issues with a higher percentage of responses are substandard septic systems, the use of travel trailers for seasonal housing, and lack of recreation management on DNR and Park Service lands.

The survey found people are generally satisfied with road maintenance and road conditions in the Township, 63% are satisfied with 22% having concerns. Services with satisfaction percentages of 50% and higher are fire protection, road maintenance, Bois Blanc Township Airport, and ferry service. Services with somewhat higher percentages of dissatisfaction are zoning enforcement, high-speed internet, and cell phone service.

Year-round resident homeowners accounted for 14% and seasonal residents 53% of the survey responses while 24% selected "vacation or visit less than one month" and 9% "non-resident." Peak months for seasonal residency are June, July, August, and September, with May and October also having higher usage. Over 33% of the survey respondents have owned property in the Township for more than 20 years, and 19% have owned property their entire lives. 3% of the respondents do not live in the Township.

Over 50% of those who responded own waterfront property in the Township. The next highest category is a cabin in the woods at 21%. When asked if the property is leased or rented, 8% of those surveyed rent on a weekly or by-the-day basis. Most of the respondents own five acres or less with 38% owning 1 to 5 acres and 25% owning less than one acre.

The largest group at 51% was the 40 to 64 years age group. 40% of the survey respondents were 65 years and older. A majority of the respondents (51%) live in two-person households. Only 23% of the households have children 17 years and younger. 44% are retired. A mix of employment groups found 7% work on the Island and 43% work off the Island, while 5% live on the Island and work remotely.

The survey provided several opportunities to comment. A list of roads or road segments that should be improved is provided in the appendix. For the question about listing the three most important assets that should be preserved in Bois Blanc Township, there were 518 items listed. When asked to list three issues or concerns that should be addressed in Bois Blanc Township, there were 446 items. Finally, the survey provided an opportunity to submit any concerns that were not addressed in the survey. There were a total of 67 comments.

Goals and Objectives

Bois Blanc Township adopts the following general goals to guide future development and enhance the quality of life for Township residents:

General Goals
<ul style="list-style-type: none"> • <i>Maintain a sustainable quality of life for both present and future Township residents.</i>
<ul style="list-style-type: none"> • <i>Preserve the physical, social, and environmental characteristics of the Township.</i>
<ul style="list-style-type: none"> • <i>Guide new development in a manner that conserves natural features, protects environmentally sensitive areas, protects archaeological and cultural sites, and meets the long-term needs of the community.</i>
<ul style="list-style-type: none"> • <i>Balance the rate of land development with the available public and private facilities and services. Encourage development where infrastructure currently exists.</i>

The following tables contain timelines and responsible parties for implementing the strategies for the objectives found in the five focus areas listed. It is important to note that while responsible parties are listed, the township will make every effort to collaborate with partner organizations, other local units of government, and members of the public to ensure the correct mix of stakeholders are involved in each item.

Timeframes

SHORT: Low cost, easy implementation, directly addressing top priorities, or critical to the advancement of other strategies, and to be implemented within the next 1-5 years.

MEDIUM: Important actions that have some level of significant cost and can be implemented within the next 5-10 years.

LONG: Actions that often require significant amounts of funding that must be planned for over time or require other strategies to be completed prior to their implementation.

ONGOING: Actions that have no beginning and end period but are continuously ongoing in the township.

Board = Township Board

PC = Planning Commission

HC = Harbor Commission

P&RC = Parks and Recreation Committee

Staff = Township Staff

ZO = Zoning Officer

RC = Road Commission

ZBA = Zoning Board of Appeals

Community Character

A community's character is an intangible item that identifies the attributes which make it unique. While a community's character will continually change over time, attempting to preserve it can be a very important part of maintaining its cultural heritage and traditions

GOAL: Maintain and enhance the appearance and character of Bois Blanc Township.

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Use the master plan to guide development and manage growth to retain the remote island life community character. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Through zoning regulations and consistent enforcement, preserve the integrity of existing residential neighborhoods by protecting them from the intrusion of incompatible uses. 	Ongoing	Board, PC, ZO
<ul style="list-style-type: none"> Review development proposals to ensure future development will be compatible with the community's character, master plan, and surrounding land uses. 	Ongoing	Board, PC, ZO
<ul style="list-style-type: none"> Maintain a friendly, safe, and rural atmosphere. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Update the blight ordinance to clean up and prevent unwanted "junk" and abandoned unsafe buildings on private property. Utilize the "Civil Infraction" method to enforce the ordinance. 	Short	Board, PC
<ul style="list-style-type: none"> Protect the scenic shorelines and natural habitats by maintaining natural greenbelts and deep setbacks. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Continue the Township's annual free 10 bags per parcel disposal at the transfer station. 	Ongoing	Board
<ul style="list-style-type: none"> Support efforts to identify and protect archaeological and historic resources. 	Ongoing	Board, PC

Housing

Residents and visitors need to have access to safe and affordable housing. The community needs to encourage the maintenance of existing housing stock and have development standards to support the construction of new housing that is compatible with existing neighborhoods.

Goal: Allow suitable housing opportunities for all income levels, age groups, household types, and resident types (year-round and seasonal).

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Protect the neighborhood character of residential areas. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Require buffers or transition areas between residential and non-residential uses to maintain property values and aesthetics. 	Short	Board, PC, ZO
<ul style="list-style-type: none"> Encourage in-fill development on empty lots in established neighborhoods to avoid sprawling into the township's outlying open space. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Match residential densities to the characteristics and available services of proposed sites. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Enforce the development standards in the Zoning Ordinance to protect existing properties. 	Ongoing	Board, ZO

<ul style="list-style-type: none"> Monitor short-term rentals and, if deemed necessary, establish an ordinance to regulate short-term rentals to minimize impacts on residential neighborhoods. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Enforce codes to remove unsanitary or unsafe housing, and blight, including but not limited to junk, debris, and inoperable vehicles. 	Ongoing	Board, ZO
<ul style="list-style-type: none"> Identify and provide information to residents about the available funding sources for residential improvements. 	Medium	PC, ZO
<ul style="list-style-type: none"> Recognize the importance and encourage the establishment of long-term residential rentals to support housing for workers and seasonal residents. 	Ongoing	Board, PC

Commercial and Business Development		
<p>Year-round and seasonal residents, as well as visitors, need access to basic goods and services. A significant fluctuation in population levels results in many months with minimal numbers of customers to sustain businesses. The seasonally restricted customer base combined with the remote location make it difficult for businesses to thrive.</p>		
<p>Goal: Promote a varied business environment and foster cooperation among area businesses to meet the needs of residents and tourists while preserving the natural environment and rural character.</p>		
Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Accommodate commercial development in a manner that does not adversely impact the area's rural and scenic character. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Promote the development of small, commercial centers adjacent to major roads, and within the more populated parts of the Island. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Promote the design of commercial facilities in the township that is consistent with both its residential and recreation identities. 	Ongoing	PC
<ul style="list-style-type: none"> Work with existing businesses and attract new commercial enterprises. 	Ongoing	Board
<ul style="list-style-type: none"> In recognizing the importance of motels and Bed and Breakfast establishments, support businesses that offer overnight accommodations for visitors and workers. 	Ongoing	Board, PC
<ul style="list-style-type: none"> As the area increases in year-round residents, work to attract commercial activities to serve residents' daily needs. 	Short	Board
<ul style="list-style-type: none"> Explore opportunities for creating seasonal businesses such as bike and kayak rentals, ecotourism, campgrounds, and food trucks. 	Ongoing	Board, PC, P&RC, HC
<ul style="list-style-type: none"> Work with county and regional organizations to develop strategies for economic development activities in the community. 	Ongoing	Board
<ul style="list-style-type: none"> Review zoning regulations for commercial development that provide comprehensive, flexible guidelines for signs, parking areas, access, landscaping, screening, lighting, and setbacks. 	Short	Board, PC, ZO
<ul style="list-style-type: none"> Require landscape buffers where commercial uses are adjacent to other land uses. 	Medium	PC, ZO

<ul style="list-style-type: none"> Regulate home occupations and home-based businesses to assure compatibility with existing residential areas. 	Short	Board, PC, ZO
<ul style="list-style-type: none"> Update standards that regulate the placement and size of cellular towers, communication towers, transmission towers, and wind turbine generators. 	Short	Board, PC

Government

All governmental institutions owe their constituents an efficient and open organization by continually seeking ways in which to operate in the most cost-effective manner. Open lines of communication with the public will help to assure constituents that this is being pursued.

GOAL: Cooperate and collaborate among all levels of government and communicate effectively with the public. Expend tax dollars in a wise and efficient manner.

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Ensure a responsible fiscal policy and budget process to finance the Township government. 	Ongoing	Board
<ul style="list-style-type: none"> Generate economies of scale and cost savings through collaboration, cooperation, and coordination among local units of government on issues of mutual concern. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Promote the involvement of volunteers in the government process. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Promote communication between the Bois Blanc Township Planning Commission and the County Planning Commission. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Foster communication with township residents and landowners through the Township's website and newsletter. 	Ongoing	Board, Staff, PC, HC, ZBA,
<ul style="list-style-type: none"> Given the high percentage of seasonal residents and absentee landowners, along with the need for government transparency, the Township will upgrade communications technology. 	Ongoing	Board, Staff, PC, HC, ZBA, P&RC
<ul style="list-style-type: none"> Assist citizens in communicating with state and federal agencies on land use, archeological, historic and environmental issues such as shoreline protection and erosion, wetlands protection, park management, and state forest management practices. 	Ongoing	Board, Staff, PC
<ul style="list-style-type: none"> Focus on cross-jurisdictional issues when reviewing neighboring communities' master plans. 	Ongoing	PC
<ul style="list-style-type: none"> Utilize the proactive master planning process as a check and balance on decision-making. 	Ongoing	Board, PC, ZO
<ul style="list-style-type: none"> Maintain and implement an updated Master Plan that is responsive to public needs. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Review the Master Plan, including the goals and objectives, at five-year intervals per state law. 	Ongoing	Board, PC
<ul style="list-style-type: none"> After completing the master plan update, conduct a zoning ordinance audit review to evaluate if the amendments are necessary to implement the master plan and to bring the ordinance up to current zoning legal standards. 	Short	Board, PC, ZO
<ul style="list-style-type: none"> Submit an annual report to the Township Board summarizing activities and accomplishments as well as progress on implementing the Master Plan. 	Ongoing	PC

<ul style="list-style-type: none"> Investigate opportunities for having a summer jobs program for island youth. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Establish a program to improve and update important community maps such as street maps by working with Mackinac County, Eastern Upper Peninsula Regional Planning & Development Commission, and GIS consultants. 	Medium	PC

Public Infrastructure, Services and Facilities

Facilities and services, such as transportation, fire, police, school, health care, etc. constitute the backbone of a community. Having well-designed and managed infrastructure and services greatly adds to the sustainability of the community. The continued maintenance of these services and facilities is essential and requires constant oversight. The expansion of infrastructure and services is extremely expensive and places additional funding burdens on the public.

GOAL: Continue to provide appropriate public facilities and services to support the residential, commercial, forestry, and recreational activities of residents and visitors.

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Work proactively with the Mackinac County Road Commission on road improvements, road maintenance, dust control, and snow removal, as well as road planning. 	Ongoing	Board, RC
<ul style="list-style-type: none"> Work with the Mackinac County to maintain a system of naming and signing roads, and adopt any ordinance necessary to implement the road policies. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Continue to provide and support public services and facilities such as fire protection, marina, parks, Old Pines Dock, Township Dock, first responders, ambulance, medical, airport, ferry, and school. These services and facilities will need to be improved/expanded to maintain quality and meet the needs of a changing population. 	Ongoing	Board, Staff, P&RC, HC
<ul style="list-style-type: none"> Continue to maintain and as necessary upgrade the airport as it is a vital transportation link to the mainland. 	Ongoing	Board, Staff
<ul style="list-style-type: none"> Identify funding sources and apply for grants for improvements or expansion of these services and facilities as necessary. 	Medium	Board, Staff, HC
<ul style="list-style-type: none"> Continue recruiting and training all volunteer firefighters and first responders. 	Ongoing	Board
<ul style="list-style-type: none"> Support the collaboration and cooperation between Plaunt Transportation, Bois Blanc Island Harbor Commission, and the Township Board to provide needed ferry service and facilities to assure that islanders, vacationers, and tourists will have access to the Island. 	Ongoing	Board, HC, Staff
<ul style="list-style-type: none"> Continue to work developing the Township property on the Cheboygan River for the expansion of the ferry service. 	Short	Board, HC, Staff
<ul style="list-style-type: none"> Explore options for providing timely and consistent permit review and approval for construction, well, and septic permits. 	Medium	Board, PC, ZO
<ul style="list-style-type: none"> Review the transfer station hours of operation annually and adjust to match demand. Promote recycling in conjunction with the transfer station. 	Ongoing	Board, staff

<ul style="list-style-type: none"> Explore the possibility of a “dump station” for recreational vehicles to prevent unregulated and unsanitary dumping in the forested areas of the Island. 	Ongoing	Board, staff
<ul style="list-style-type: none"> Develop an action plan for new opportunities for affordable high-speed Internet service. 	Short	Board, PC
<ul style="list-style-type: none"> Support and encourage private civic groups that provide educational and social programs of importance to Township residents. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Direct development to areas where appropriate public services, roads, and utilities exist, or the developer is willing to install those facilities. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Developers should be required to manage stormwater on-site. 	Ongoing	PC, ZO

Historical, Cultural and Archaeological Heritage		
<p>Bois Blanc Island has experienced human habitation for thousands of years. Numerous archaeological sites have been found and many more sites are expected to exist. While changes have occurred over the past century, urban built-up development has been minimal and therefore sites have not been destroyed. There is an opportunity for the community, tribal groups, and state and federal agencies to work cooperatively to conserve and protect important sacred sites on Bois Blanc Island.</p>		
<p>GOAL: <i>Historical, cultural, and archaeological resources are protected and integrated into the Island's Master Plan.</i></p>		
Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Support the museum and community events that celebrate the cultural and historic features of Bois Blanc Island. 	Ongoing	Board, PC, HC, P&RC, Staff
<ul style="list-style-type: none"> Encourage communication with appropriate Native American tribes with ancestral territories within the Township in order to ensure better identification, protection, and preservation of cultural resources. 	Short	Board, PC
<ul style="list-style-type: none"> Consider zoning and development standards to protect the historical, archaeological, and cultural heritage of the Island. 	Medium	Board, PC
<ul style="list-style-type: none"> Preserve and protect archaeological and historic resources and cultural sites, places, structures, landforms, objects, native burial sites, traditional cultural landscapes, and other features, consistent with state law and any regulations or policies that may be adopted by the Township to implement this goal and associated policies. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Support local schools, organizations, Native American tribes, and other agencies to educate the public about the rich archaeological, historic, and cultural resources found on Bois Blanc Island. 	Medium	Board, PC
<ul style="list-style-type: none"> Develop clear policies regarding preservation through consultation with the appropriate Native American tribes whose ancestral territories are within the township. 	Ongoing	Board, PC

Natural Resources and Environment

The protection of a community's natural environment and sustainable use of renewable resources is imperative in maintaining the quality of life for residents and ensuring that future generations live in healthy productive surroundings. Economic development and environmental protection are both necessary for a healthy community.

GOAL: Conserve, protect, maintain, and promote the wise use of the natural resources of Bois Blanc Township, such as groundwater, surface water, forests, wetlands, clean air, fish and wildlife, scenic vistas, and sub-surface non-renewable resources for the enjoyment of residents, visitors, and future generations.

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Preserve scenic views and open space, especially along roadways, beaches, and shorelines. 	Ongoing	Board, PC, ZO
<ul style="list-style-type: none"> Regulate the density and type of development adjacent to inland lakes, Lake Huron, ponds, streams, and wetlands. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Develop zoning ordinance language to protect greenbelts, shorelines, wetlands, forestlands, high-risk erosion areas, groundwater, and surface water. 	Short	Board, PC, ZO
<ul style="list-style-type: none"> Encourage the health department to conduct septic system inspections and educational programs regarding the maintenance and management of systems. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Develop and post signs at inland lake access sites to provide information on resource protection, fisheries, and boat usage. 	Medium	Board, PR&C
<ul style="list-style-type: none"> Support natural resource education and technical programs (such as Natural Resource Conservation Service, MSU Extension, and Regional Planning) that assist land owners, forestry and agriculture operators, businesses, and communities. 	Ongoing	Board, PC
<ul style="list-style-type: none"> Support studies that identify ways to protect critical habitats, water resources, scenic vistas, forestland, and other important ecological resources. 	Ongoing	Board, PC

Recreation

Bois Blanc Township is blessed with abundant natural resources and numerous recreational opportunities. Developing, maintaining, and improving recreational opportunities are vital for present and future generations.

GOAL: Encourage the preservation of recreation resources, historical and cultural opportunities, and programs and facilities at a level that will meet the needs of permanent and seasonal residents, visitors, and future generations.

Objectives	Time Frame	Responsible Party
<ul style="list-style-type: none"> Consider expanding the Township's role in community recreation by adopting and maintaining a 5-year Michigan Department of Natural Resources Recreation Plan. 	Ongoing	Board, P&RC
<ul style="list-style-type: none"> Identify and apply for appropriate state and federal grant funding for recreational development and improvements at the existing Township parks and facilities. 	Ongoing	Board, PR&C
<ul style="list-style-type: none"> Support cooperative recreational planning and development between Bois Blanc Township, schools, non-profit organizations, and private entities. 	Ongoing	Board, PR&C
<ul style="list-style-type: none"> Support development and improvements to non-motorized recreation trails, such as for biking, walking, running, or cross-country skiing. 	Short	Board, PR&C
<ul style="list-style-type: none"> Establish a working relationship with the MDNR, MDEQ, USFS, and US Army Corps of Engineers in the provision of outdoor recreation opportunities. 	Ongoing	Board, P&RC
<ul style="list-style-type: none"> Work with the Michigan DNR to address issues and concerns related to dispersed and unmanaged camping on state lands that have no facilities such as garbage collection, restrooms, and potable water. 	Ongoing	Board, PR&C

CHAPTER 7: FUTURE LAND USE & ZONING PLAN

The Bois Blanc Township Planning Commission developed the future land use recommendations for this Master Plan with assistance from the Township's professional planning consultant. Recommendations are based on an analysis of several factors including existing land use patterns, social and economic characteristics, environmental conditions, available community services, and facilities, existing land division patterns, public opinion, property ownership, existing zoning, and community goals and objectives.

The recommended future land use identifies locations for four different land use classifications: Residential, Community Facilities, Commercial/Business, and Forest Recreation. Map 8, Future Land Use, illustrates the distribution of recommended future land uses by category. Activities anticipated within each of these land use categories are discussed below.

Residential

Residential development, primarily designed to accommodate single-family dwellings on a range of lot sizes, is shown as orange on Map 8. Lot sizes should be large enough to accommodate on-site water and septic systems since public services are not available.

Areas within this land use category are located in residential subdivisions and areas along the Lake Huron shoreline. In areas adjacent to Lake Huron or any inland lake, certain waterfront protection measures should be considered, such as greater waterfront setbacks, greenbelt regulations, and stormwater runoff management procedures.

The Zoning Ordinance currently requires that any newly created lots should be at least one acre if on Lake Huron and at least five acres if on an inland lake due to location in the low-density zoning district.

Home-operated businesses, bed and breakfast establishments, two-family dwellings, and multiple-family dwellings, as well as community uses such as parks, churches, schools, libraries, cemeteries, and child care facilities may also be allowed in these areas provided they are designed to be compatible with the residential setting.

Community Facilities

The Community Facilities areas include the Bois Blanc Airport, Bois Blanc Marina and surrounding properties, and the Community Center along Sioux Avenue. The areas are shown in purple on the Future Land Use Map. For the purpose of future land use recommendations, the community center is intended to provide for a concentration of institutional uses in a small community setting, the Township Hall, US Post Office, and School are located in this area. A variety of social and civic functions occur in a community center, including a government office, fire department, recreation facility, post office, church, cemetery, and school. Where possible, the community center should be developed as pedestrian friendly. Regulations in these areas

should be flexible enough to allow for the re-use of existing structures when vacated. The community center is identified with a blue symbol on Map 8. For zoning purposes, this area is included within a residential zone.

Because of the Island's remote location, access is available only by water or air. Transportation centers such as the dock and airport are necessary land-use features and are included in the Community Facilities category, as shown in purple on the Future Land Use Map. Commercial uses are encouraged to locate near these transportation resources.

Commercial/Business

The community recognizes the need for business enterprises that serve the needs of residents and visitors. Grocery stores, gas stations, construction/maintenance, restaurants, and motels are essential businesses to the quality of life. Many of Bois Blanc Township's existing commercial enterprises are located along Huron Drive. These future land use recommendations intend to centralize these types of development. Any future commercial expansion is encouraged near existing businesses.

In addition, future commercial development is recommended near the western tip of the Island. Many of the lots are long and narrow with frontage on both Lime Kiln Point Drive and Lake Huron. Since these lots are being developed as waterfront residential, there are a limited number of properties available for commercial development.

Appropriate uses recommended in these commercial areas include retail, wholesale, service, office, and light environmentally-friendly industries, as well as residential and community uses.

Forest Recreation

As mentioned in Chapter 5, about 37% of the Island's land area is made up of forested land owned by the State of Michigan. Approximately 900 acres of the public forest land is designated as a State Wilderness Area under the provisions of Part 351 of Public Act 451 of 1994. These public forest lands along with privately held forest lands make up nearly 85% of the Island.

Shown as green on Map 8, areas included in the forest recreation category include publicly owned forest land (shown with hatch marks), as well as privately held forest land. The forest recreation areas include areas used for extensive hunting and recreational pursuits.

Industrial Land Uses

The Future Land Use Map does not identify a location for industrial development, such as manufacturing facilities. While the Planning Commission does not intend to discourage all industrial uses, it recognizes that the Township does not have the infrastructure and transportation system generally necessary to operate large-scale industrial uses.

The future land use recommendations do, however, encourage the continued operation of existing quasi-industrial uses such as forestry industries and excavation of sand and gravel resources for use on the Island.

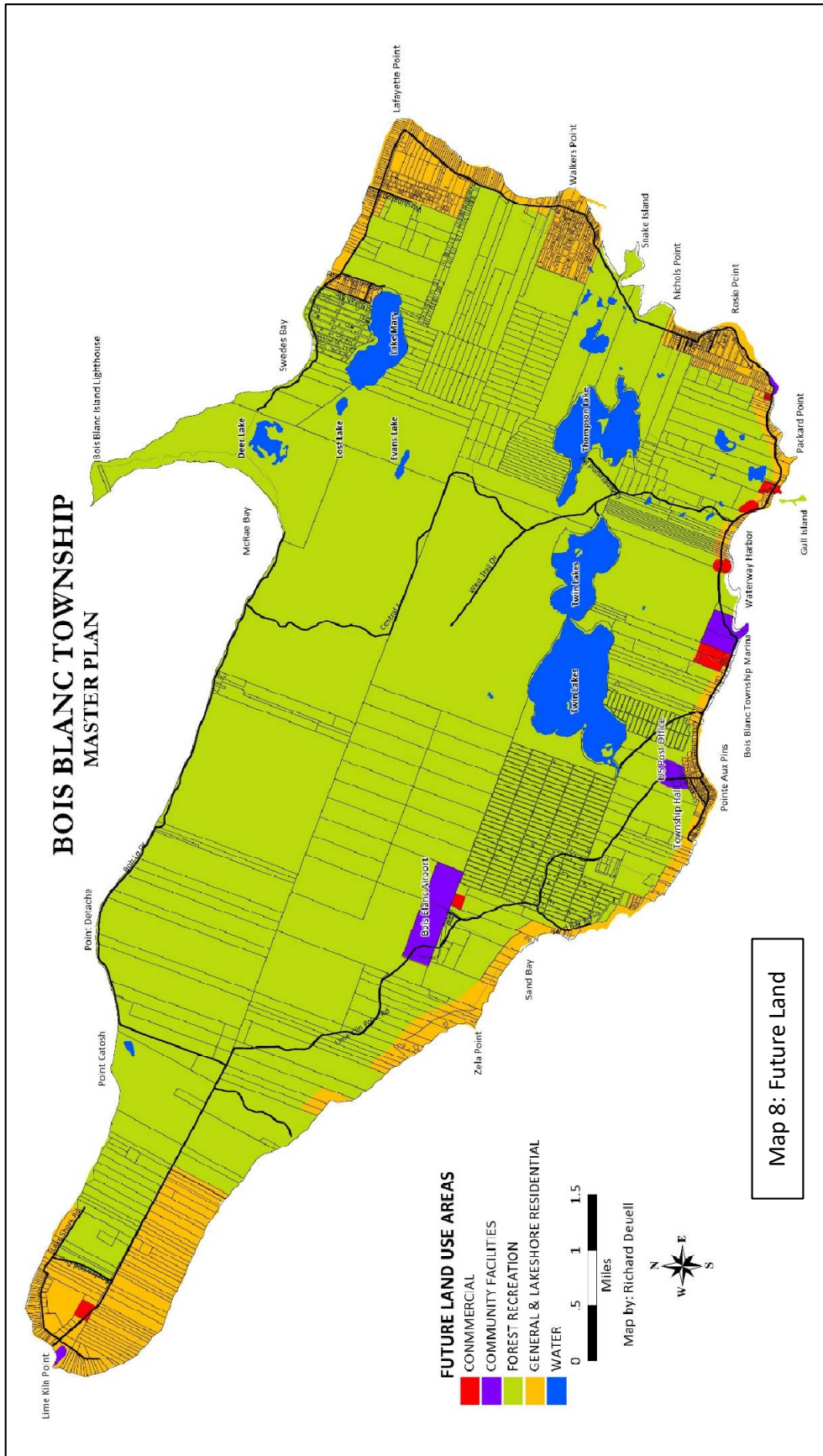
Zoning Plan

The Michigan Planning Enabling Act (PA 33 of 2008) requires the Master Plan contain a zoning plan which includes an explanation about how the future land use categories on the Future Land Use Map relate to the zoning districts. The Township has chosen to utilize future land use categories that correlate to their zoning districts but will consider Zoning Ordinance amendments to allow for growth and development without negatively impacting the Township’s quality of life (Table 7-1).

After the adoption of the Master Plan, the Township should review the Zoning Ordinance for compatibility with the Master Plan’s goals, objectives, and future land uses. The Township should review all current zoning districts to ensure a full range of compatible and desired uses are provided for in each district. The Zoning Ordinance should also be reviewed for specific development standards for each district (including architectural and buffering standards), approval procedures, review standards, and general provisions. At that same time, the zoning ordinance should be reviewed to assure it conforms to current State of Michigan statutes and court rulings. In general, the Zoning Ordinance should provide enough flexibility to allow the desired development pattern to occur

The Future Land Use Map differs from both the Zoning Map and the Existing Land Use Map. The Future Land Use Map depicts the types and intensity of development the township would like to see in the future, while the Existing Land Cover/Use Map depicts the township’s current land use arrangement. Whereas the Zoning Map delineates zoning districts and is used in conjunction with the zoning ordinance to regulate land uses and development activities in the township.

Table 7-1 The Bois Blanc Township Zoning Districts and Future Land Use Categories	
Future Land Use Category	Zoning District
Forest Recreation	Forest Management & Wilderness Overlay
General & Lakeshore Residential	Low Density Residential, Residential & Forest Management
Commercial/Business	Mixed Commercial, General Commercial & Forest Management
Community Facilities	Forest Management & Residential



Special Issue Areas

Parks and Community Recreation

The community survey found residents are interested in maintaining and expanding recreational opportunities and recognize the importance of outdoor recreation to the local economy. Public lands in the Township amount to approximately 8,590 acres, or a little more than 13 square miles. There are roadside parks, public access sites on inland lakes, conservancy lands, hiking trails, picnic spots, and a playground on the Island. Bois Blanc Island has several camping areas with primitive sites and dispersed camping on state lands. The camping sites on State of Michigan lands are not managed or frequently maintained.

As the popularity of Bois Blanc Island increases, more vacationers look to visit and spend a few days. The Township is actively engaged in establishing one new park on the West End and acquiring land for a new park on the Southeast shore. The development of a 5-Year MDNR approved Recreation Plan would enable the community to apply for Natural Resource Trust Fund and Michigan Recreation Passport Recreation grants.

Resource Protection and Management

The community survey conducted for the master plan update, clearly shows water and air quality, woodlands, coastal resources, fish and wildlife, and wetlands are highly valued in the township. Long-term conservation of the Island's natural resource base relies on a three-pronged approach: Voluntary Conservation, Long Term Preservation, and Regulations.

Voluntary Conservation is the foundation of long-term conservation. Education, technical assistance, and cost-sharing programs will target private large tract and waterfront landowners. The goal is to have landowners embrace resource stewardship of their lands. Landowners can get assistance to have resource management plans developed for their properties.

Long Term Preservation of lands can be in the form of fee-simple purchases, conservation easements, public lands, and nature preserves. The community might identify special parcels for preservation and seek grants to purchase the property.

Regulations are the third method. There are state and federal statutes that provide some level of protection. However, under the Michigan Planning Enabling Act and the Michigan Zoning Enabling Act, local units of government have the authority and a responsibility to protect the community's natural base. This is accomplished through local planning such as the Master Plan and with zoning and other ordinances.

With so much of the Island being forested, science-based forest management practices should be followed to maintain healthy forests and ecosystems. In addition, forested areas with old-growth trees (a unique and rare feature) have to be protected from logging and human overuse. Forested and vegetated greenbelts along inland lakes, creeks, and the Great Lakes shoreline need to be preserved to protect water quality, provide critical wildlife habitat and maintain the natural vistas.

Wetlands are important resources in the Township. The protection and preservation of these plant communities are encouraged. Wetlands can be preserved through the use of conservation cluster residential development, conservation easements, or fee simple purchase by local and state government. An adequate natural vegetation buffer should be maintained around all wetlands.

There are several organizations the Township can partner with to support the retention of its critical and irreplaceable resources. Organizations with interests and support for resource protection and management include the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Michigan Coastal Management Program, Michigan Sea Grant, U.S. Fish, and Wildlife Service, Mackinac Conservation District, Michigan State University Extension, and Eastern Upper Peninsula Regional Planning and Development Commission.

Transportation

There is a network of public roads maintained by the Mackinac County Road Commission. The Township will continue working with the road commission to assure public roads are properly maintained and improvements are made as necessary.

Transportation of people and goods to the Island is critical to the quality of life. The airport provides the only year-round transportation to BBI. Bois Blanc Township is committed to maintaining and upgrading the airport as it is a vital transportation link to the mainland. Ferry service is the primary means of accessing the island during spring, summer, and fall. Bois Blanc Township will continue to support the Bois Blanc Island Harbor Commission and work to provide needed ferry service and facilities to assure that islanders, vacationers, and tourists will have access to the Island. The Township purchased property on the Cheboygan River and will explore the feasibility of developing the Township property for the expansion of ferry services.

History and Cultural Resources

The Master Plan recognizes the importance of protecting the historic and archaeological features on Bois Blanc Island. The community is committed to preserving the history and cultural resources of the Island. Bois Blanc Island Historical Society operates a museum that highlights the post-European settlement of the Island. Given Bois Blanc Island's centralized location relative to the Great Lakes, and the importance of water travel in Prehistoric times, it's safe to surmise the Island has been used for thousands of years. Human occupation of Bois Blanc Island might go back as far as 9,500 years before the present.

Similar to resource conservation, a three-pronged approach is also recommended for the protection and conservation of the historic and cultural resources on Bois Blanc Island.

Voluntary Conservation and Protection - Since 63% of the island is under private ownership and much of the western portion of the island consists of smaller privately owned parcels with seasonal lakeshore cottages, the need for landowners to protect the resources on their own

properties is paramount. The community will work with tribes, and local, state, and federal agencies to provide a public education and outreach program for landowners and visitors. The overall goal will be for residents and visitors to feel a personal responsibility for preserving the cultural and historic resources.

Long-Term Preservation - Historical sites can be preserved by fee simple purchase, use of special easements, cultural preserves, and retention of public ownership.

Regulations - There are state and federal statutes that provide some level of protection.

CHAPTER 8: IMPLEMENTATION AND ADOPTION

Plan Implementation through Zoning

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. According to the Michigan Zoning Enabling Act (P.A. 110 of 2006, as amended), master planning is the legal basis for the development of a zoning ordinance. The zoning ordinance is the most important tool for implementing the master plan. With this legal basis in mind, it is recommended that Bois Blanc Township review and revise as necessary the zoning ordinance based on the goals, objectives, and future land use recommendations of this master plan. In addition, the zoning ordinance should be reviewed for compliance with current state laws.

Chapter 6 addresses many general and specific goals and objectives that will be achieved through zoning updates. Zoning is the authority to regulate the private use of land by creating land use zones and applying development standards in the various zoning districts. The zoning ordinance defines zoning districts and specifies the boundaries of these districts on a zoning map. The zoning districts should be closely related to the land use categories and densities identified in Chapter 7, Future Land Use Recommendations/Zoning Plan of this master plan. Areas that differ significantly between the zoning district and the proposed future land use need to be examined in the review of the zoning ordinance.

Grants and Capital Improvements Investments

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 building expansions, infrastructure improvements, major equipment purchases, park improvements, etc.). A Capital Improvements Program (CIP) is one tool that is often used to establish a prioritized schedule for all anticipated capital improvement projects in the community. A CIP includes cost estimates and sources for financing for each project. Therefore, it can serve as both a budgetary and policy document to aid in the implementation of a community's goals defined in the master plan.

Recreation Planning

A recreation plan is one way to implement important recreation-related goals defined in the master plan. By developing a recreation plan consistent with Michigan Department of Natural Resources requirements, a community is eligible for certain MDNR recreation grants. Because Bois Blanc Township owns and operates recreation properties, it is recommended the community develop a recreation plan and keep it updated at five-year intervals, as required.

Draft Plan Review

As required by the Michigan Planning Enabling Act (P.A. 33 of 2008, as amended) the draft plan was distributed to neighboring communities and Mackinac County on _____. The draft plan was also sent to utility providers who requested the draft document. By law, entities receiving the draft plan are allowed up to 63 days to respond. A list of entities receiving the draft plan is attached at the end of this chapter.

Public Hearing

A public hearing on the proposed Master Plan for Bois Blanc Township as required by the Michigan Planning Enabling Act was held on _____. Section 43 of the Act required that notice of the hearing be published at least 15 days before the hearing. Notice of the hearing was published in the Cheboygan Daily Tribune on _____. The hearing notice as published is noted below.

The purpose of the public hearing was to present the proposed master plan and to accept comments from the public. In addition to the Planning Commission members, four members of the Township Board and eight citizens were present.

Plan Adoption and Legal Transmittals

At the close of the public hearing, the Planning Commission formally adopted the plan by resolution and moved to revise the plan to include corrections noted by the Township Board. A copy of the Resolution of Adoption is attached at the end of this chapter.

Michigan planning law requires that the adopted master plan be transmitted to the same entities receiving the draft plan. A list of entities receiving the final adopted plan is attached at the end of this chapter.

Documentation to be inserted