

Bois Blanc Township

Master Plan 2009



Photos by: Sue Van Voorhees



Photos by: Pollyanna

BOIS BLANC TOWNSHIP MASTER PLAN

Bois Blanc Township
Mackinac County
Michigan

prepared by:

Bois Blanc Township Planning Commission
Jack Bruce, Chair

Members
Cheryl St. Germaine, Vice Chair
Anne Kennedy, Secretary
James Hutchinson
Sandra Younge

with special thanks to Bois Blanc Township Board
Loren Gibbons, Supervisor
Joan Schroka, Clerk
Cheryl Gahn, Treasurer
Shelby Newhouse, Trustee
Anne Kennedy, Trustee and Planning Commissioner
and
Paul St. Germaine, Zoning Administrator

cover photographs courtesy of:
Sue Van Voorhees: front cover
Pollyanna: inside cover

with technical assistance from:

Wade Trim, Inc.
271 West McCoy Road
Gaylord, Michigan 49735

Adopted: October 20, 2009

TABLE OF CONTENTS

Chapter 1—Introduction	1-1
Purpose of the Master Plan	1-1
Planning Commission and Its Role.....	1-1
Status of Planning and Zoning in Bois Blanc Township.....	1-1
Location and Transportation Links	1-2
Historical Perspective.....	1-2
Chapter 2—Social and Economic Characteristics	2-1
Population	2-1
Age Distribution and Special Populations.....	2-2
Households.....	2-3
Income	2-3
Education	2-4
Employment	2-4
Housing Stock.....	2-5
Chapter 3—Natural Resources	3-1
Introduction	3-1
Climate.....	3-1
Geology	3-2
Topography.....	3-2
Soils.....	3-4
Water Resources	3-4
Wetlands and Woodlands	3-6
Fish and Wildlife.....	3-6
Threatened or Endangered Species.....	3-6
Chapter 4—Community Services and Facilities.....	4-1
Township Hall.....	4-1
Water and Sewage Disposal	4-1
Solid Waste	4-1
Utility and Communication Services	4-2
Police, Fire, and Ambulance Services	4-2
Transportation	4-2
Ferry Service	4-2
Airport.....	4-3
Roads.....	4-4
School, Cemetery, and Churches.....	4-4
Postal Service	4-5
Medical Facilities.....	4-5
Recreational Facilities	4-5

Chapter 5—Existing Land Use/Land Cover	5-1
Land Use Character	5-1
Land Use Statistics.....	5-1
Residential Development.....	5-1
Commercial Development	5-1
Institutional Development	5-2
Industrial/Utilities/Transportation/Extractive Development	5-2
Open Space and Rights-of-Way	5-2
Forested Land Cover.....	5-2
Wetlands	5-2
Chapter 6—Goals and Objectives.....	6-1
Public Input	6-1
Goals and Objectives	6-1
Natural Resources.....	6-2
Recreation.....	6-3
Public Infrastructure, Services, and Facilities.....	6-4
Community Character.....	6-5
Government.....	6-6
Chapter 7—Future Land Use Recommendations and Zoning Plan	7-1
Residential	7-1
Community Center	7-1
Commercial	7-1
Transportation Center	7-2
Forest Recreation.....	7-2
Industrial Land Uses.....	7-2
Chapter 8—Plan Implementation and Adoption.....	8-1
Plan Implementation through Zoning.....	8-1
Grants and Capital Improvements Investments	8-1
Recreation Planning	8-1
Draft Plan Review	8-1
Public Hearing.....	8-2
Plan Adoption and Legal Transmittals	8-2
Draft Plan Transmittal List	8-3
Resolution of Adoption	8-4
Adopted Plan Transmittal List.....	8-5

List of Figures

Map 1, Regional Location	1-3
Map 2, Base and Transportation	1-4
Map 3, Topography	3-3
Map 4, Soils	3-5
Airport Layout Plan	4-5
Map 5, Existing Land Use/Land Cover	5-3
Map 6, Public Forest Land	5-4
Map 7, Future Land Use	7-3

List of Tables

Table 2-1, Mackinac County Population by Municipality, 1990-2000	2-1
Table 2-2, Bois Blanc Township Historic Population, 1970-2000	2-2
Table 2-3, Population by Age, Township, County, State, 2000	2-2
Table 2-4, Average Household Size, Township, County, State, 1990-2000	2-3
Table 2-5, Household by Type, Township, County, State, 1990-2000	2-3
Table 2-6, Income Statistics, Township, County, State, 1999	2-4
Table 2-7, Labor Market Statistics, Michigan and Mackinac County, 1990-2008	2-4
Table 2-8, Housing Units in Structure, Township and County, 2000	2-5
Table 3-1, Climate Summary Statistics, Bois Blanc Township Area, 1973-2000	3-2
Table 5-1, Existing Land Use/Land Cover, Bois Blanc Township, June 2009	5-1

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 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 preparing the *Bois Blanc Township Master Plan*, Bois Blanc Township has retained professional consulting services from the firm of Wade Trim, Inc.

Status of Planning and Zoning in Bois Blanc Township

The original *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 to 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. On the other hand, the recreation and resort facilities of northern Michigan are available to local residents and draw people to the area.

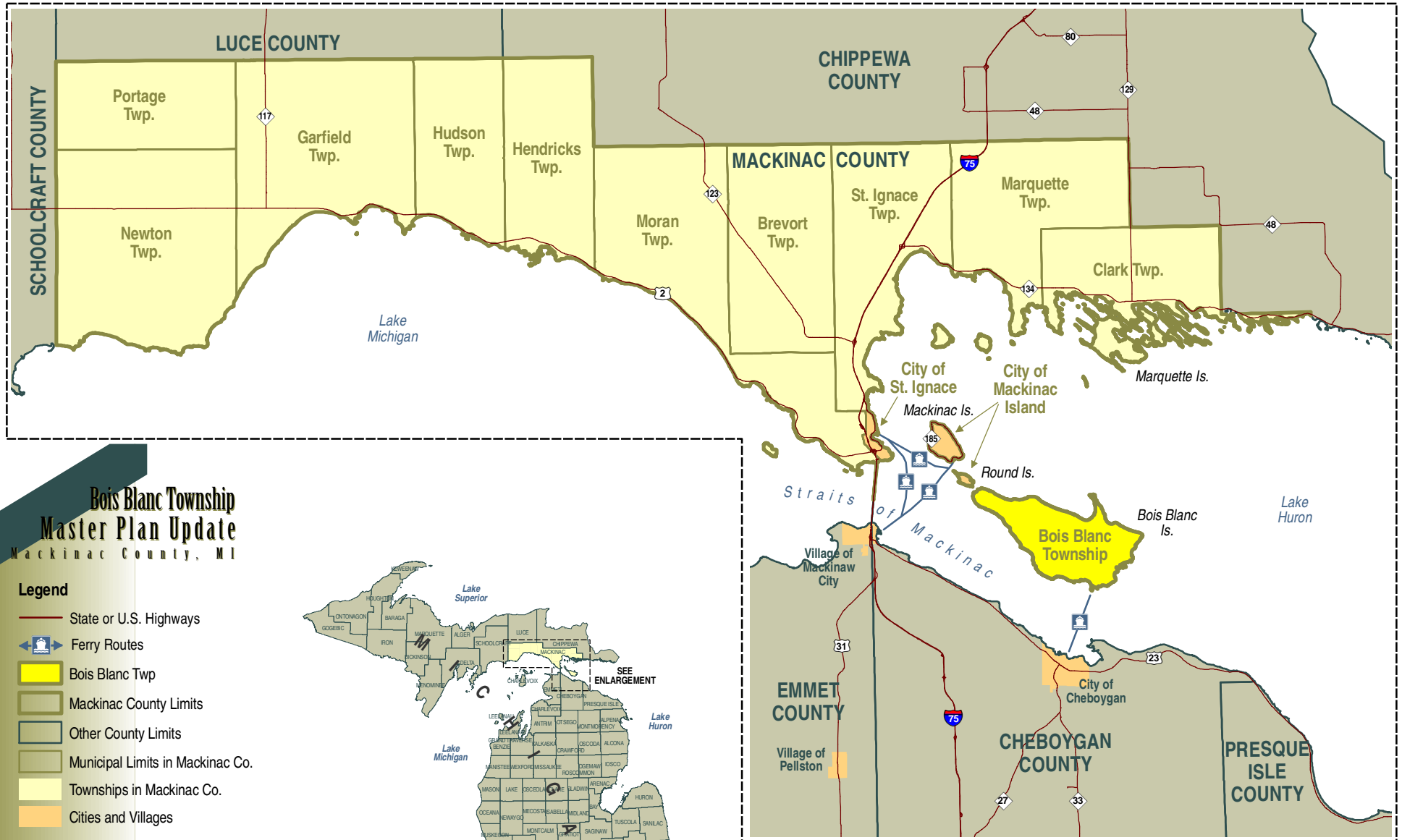
Historical Perspective

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

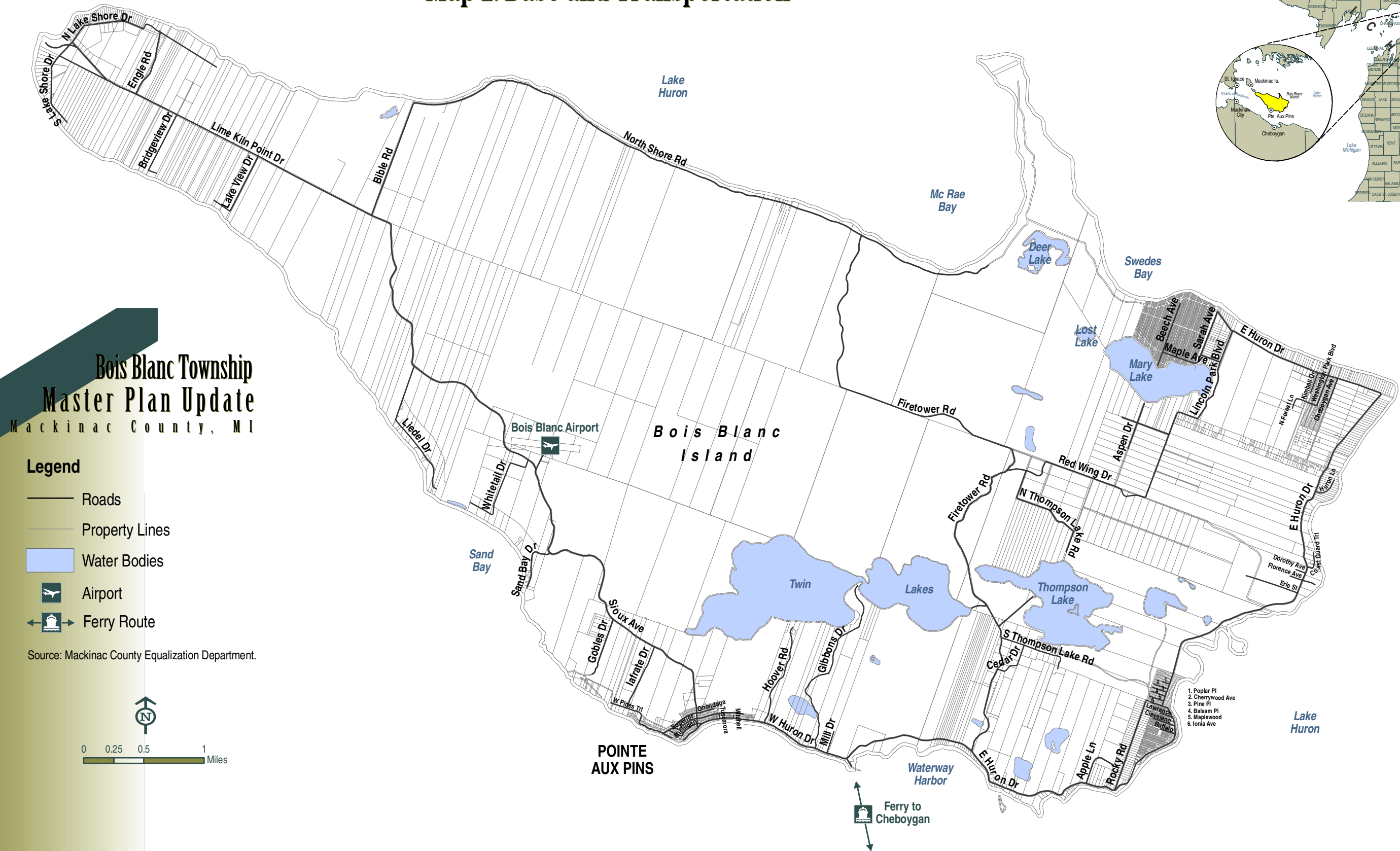
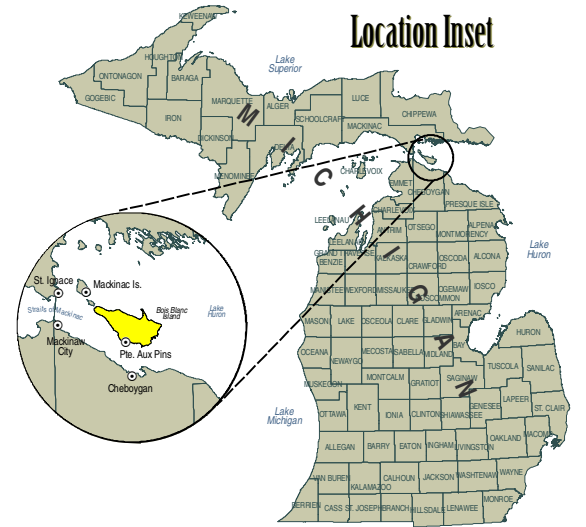
Bois Blanc Island, known as “Bob-lo” to area residents, is twelve miles long, six miles wide and has six lakes. In 1827, the United States government platted the island. The U.S. Coast Guard established a life-station at Walker’s Point in 1890. The following year the Pointe Aux Pins Association was formed. 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 murdered 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.

Map 1: Regional Setting



Map 2: Base and Transportation



CHAPTER 2 SOCIAL AND ECONOMIC CHARACTERISTICS

Population

In 2000, the U.S. Census Bureau tabulated a population of 71 persons (36 male and 35 female) for Bois Blanc Township, an increase of 12 persons or 20.3 percent from the 1990 population of 59 persons. The gain may be attributed to retirees moving to the area. The population density is two persons per square mile. During the same period Mackinac County experienced an 11.9 percent gain in population. Table 2-1 shows population trends for all municipalities and Mackinac County for 1990 and 2000. As the table shows, Brevort Township experienced the largest growth rate of any municipality in the County. Table 2-2 on the following page demonstrates historic population for Bois Blanc Township over the last four decades.

In discussing the population for Bois Blanc Township, it is important to note that the figure presented by the 2000 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.

In reviewing the social and economic statistics derived from the 2000 Census, the figures presented for housing characteristics for Bois Blanc Township show that 88.1 percent of the total housing units are listed as seasonal, recreational, or occasional use homes. With this in mind, it can be assumed that the Township's resident population increases to approximately 2,000 persons during peak seasons. For Mackinac County, 41.9 percent of the total housing units are seasonal.

Table 2-1 Mackinac County Population by Municipality, 1990-2000			
Municipality	1990	2000	% Change
Bois Blanc Township	59	71	20.3%
Brevort Township	484	649	34.1%
Clark Township	2,012	2,200	9.3%
Garfield Township	1,156	1,251	8.2%
Hendricks Township	161	183	13.7%
Hudson Township	197	214	8.6%
City of Mackinac Island	469	523	11.5%
Marquette Township	550	659	19.8%
Moran Township	838	1,080	28.9%
Newton Township	358	356	-0.6%
Portage Township	890	1,055	18.5%
City of St. Ignace	2,568	2,678	4.3%
St. Ignace Township	932	1,024	9.9%
Mackinac County Total	10,674	11,943	11.9%
Source: U.S. Census Bureau, 1990 and 2000.			

Table 2-2 Bois Blanc Township Historic Population, 1970-2000			
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%
Source: U.S. Census Bureau, 1970-2000.			

Age Distribution and Special Populations

Table 2-3 compares age distributions for Bois Blanc Township, Mackinac County, and the State of Michigan at the time of the 2000 Census. Overall, Bois Blanc Township has a median age considerably older than Mackinac County and the State of Michigan. A higher percentage of elderly persons (age 65 and older) live in the Township (22.5 percent) than in Mackinac

County (18.3 percent) and the State of Michigan (12.3 percent). The 2000 Census counted no persons living in non-institutionalized group quarters (adult foster care homes) in Bois Blanc Township and 59 in the County as a whole. The County statistics also show 138 institutionalized persons.

Table 2-3 Population by Age Bois Blanc Township, Mackinac County, and State of Michigan, 2000						
Age Group	Bois Blanc Township		Mackinac County		State of Michigan	
	Number	Percent	Number	Percent	Number	Percent
Under 5	1	1.4%	561	4.7%	672,005	6.8%
5-9 years	1	1.4%	740	6.2%	745,181	7.5%
10-14 years	2	2.8%	863	7.2%	747,012	7.5%
15-19 years	2	2.8%	743	6.2%	719,867	7.2%
20-24 years	1	1.4%	466	3.9%	643,839	6.5%
25-34 years	2	2.8%	1,221	10.2%	1,362,171	13.7%
35-44 years	6	8.5%	1,778	14.9%	1,598,373	16.1%
45-54 years	17	23.9%	1,823	15.3%	1,367,939	13.8%
55-59 years	14	19.7%	793	6.6%	485,895	4.9%
60-64 years	9	12.7%	777	6.5%	377,144	3.8%
65-74 years	10	14.1%	1,249	10.5%	642,880	6.5%
75-84 years	5	7.0%	701	5.9%	433,678	4.4%
85 yrs. and over	1	1.4%	228	1.9%	142,460	1.4%
Totals	71	99.9%	11,943	100.0%	9,938,444	100.1%
Median Age	57.1 years		42.8 years		35.5 years	
Source: Table DP-1. Profile of General Demographic Characteristics. 2000. U.S. Census Bureau. Note: Due to rounding, percentage totals may not equal 100 percent.						

Households

Census data from 2000 show Bois Blanc Township has an average household size of 1.69 persons per household, as compared to 2.32 persons per household in Mackinac County and 2.56 persons per household for the State. 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 decrease in household size, and Table 2-5 compares household types for both the Township and the County for the past two decades. As the table shows, household size in Bois Blanc Township decreased only slightly.

Table 2-4 Average Household Size (Persons per Household) Bois Blanc Township, Mackinac County, and State of Michigan, 1990-2000					
Bois Blanc Township		Mackinac County		State of Michigan	
1990	2000	1990	2000	1990	2000
1.79	1.69	2.49	2.32	2.66	2.56
Source: Table 5. Summary Population and Housing Characteristics. 1990. U.S. Census Bureau. Table DP-1, Profile of General Demographic Characteristics. 2000. U.S. Census Bureau.					

Table 2-5 Households by Type Bois Blanc Township and Mackinac County, 1990-2000				
Household Type	Bois Blanc Township		Mackinac County	
	1990	2000	1990	2000
Total Households	33	42	4,240	5,067
Married Couple Family	17	15	2,506	2,817
Female Householder, No Husband Present	0	1	351	411
Non-family Households	15	25	1,235	1,659
Householders Living Alone	11	20	1,067	1,420
Source: Table 5. Summary Population and Housing Characteristics. 1990. U.S. Census Bureau. Table DP-1. Profile of General Demographic Characteristics. 2000. U.S. Census Bureau.				

Income

Income statistics for the 2000 Census reflect information from the 1999 calendar year, because the Census was taken in April of 2000. Generally speaking, income levels for the Eastern Upper Peninsula of Michigan fall below those found in the State as a whole. However, Bois Blanc Township is an exception, with income levels comparable to the State. Table 2-6 compares income statistics for Bois Blanc Township, Mackinac County, and the State. It is important to note that income figures shown in the table reflect wage or salary

income. They do not include all so-called "transfer payments" from social security, pensions, or savings plans which form an important part of senior citizen income. In an area like Bois Blanc Township, where senior citizens are heavily represented, wage-based income figures may be an underestimate of actual financial status. According to the 2000 U.S. Census, 3.8 percent of Bois Blanc Township individuals fell below the poverty level, as compared to 10.5 percent for Mackinac County and 10.5 percent for the State.

Table 2-6 Income Statistics Bois Blanc Township, Mackinac County, and State of Michigan, 1999		
Jurisdiction	Median Household Income	Per Capita Income
Bois Blanc Township	\$40,833	\$27,131
Mackinac County	\$33,356	\$17,777
State of Michigan	\$44,667	\$22,168
Source: Table DP-3. Profile of Selected Economic Characteristics. 2000. U.S. Census Bureau.		

Education

Education is an important factor in analyzing the capabilities of the local work force. Statistics from the 2000 Census indicate that 86.2 percent of Bois Blanc Township residents over the age of 25 are high school graduates or higher, as compared to 82.5 percent in Mackinac County and 83.4 percent for the State as a whole. Township residents with a bachelor's degree or higher amount to 27.6 percent of the population, while the County and State have 14.9 and 21.8 percent college graduates, respectively.

Employment

The Michigan Department of Labor and Economic Growth, Office of Labor Market Information, regularly publishes employment data. Employment data on the civilian labor force is presented in Table 2-7, comparing Mackinac County and State at five year intervals from 1990 to 2005 and year 2008. The unemployment rate for Mackinac County has traditionally been higher than that of the State as noted in the table. Labor Market Information indicates the unemployment picture is currently not good for Mackinac County, although not as bleak as 1990.

Table 2-7 Labor Market Statistics, Michigan and Mackinac County, 1990-2008					
State of MI	1990	1995	2000	2005	2008
Labor force	4,620,000	4,835,000	5,144,000	5,097,000	4,963,000
Employed	4,262,000	4,577,000	4,953,000	4,754,000	4,545,000
Unemployed	358,000	285,000	190,000	344,000	418,000
Jobless rate	7.7%	5.3%	3.7%	6.7%	8.4%
Mackinac Co	1990	1995	2000	2005	2008
Labor force	6,236	7,274	6,881	6,590	6,436
Employed	5,343	6,411	6,368	5,938	5,665
Unemployed	893	863	513	652	772
Jobless rate	14.3%	11.9%	7.5%	9.9%	12.0%
Source: MI Department of Labor and Economic Growth Website					

Housing Stock

In 2000, the U.S. Census Bureau counted a total of 430 housing units, up from 302 units in 1990. Of the total units, 42 were occupied, and 370 were listed as seasonal, recreational, or occasional use. Of the occupied units, 40 were owner-occupied, and two were renter-occupied. As Table 2-8 below shows, most of the total units are single-family dwellings, or roughly 90 percent of the total for the Township and 82 percent for the County.

Since the 2000 U.S. Census, the Township Zoning Administrator's office has issued 44 permits for new home construction, increasing the total number of housing units to 474 in June of 2009.

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.

Table 2-8 Housing Units in Structure Bois Blanc Township and Mackinac County, 2000		
Type	Number of Units	
	Bois Blanc Township	Mackinac County
1 unit, detached	385	7,738
1 unit, attached	0	140
2 units	3	218
3 or 4 units	0	146
5 or more units	0	279
Mobile home	24	839
Boat, RV, van, etc.	18	53
Total Housing Units	430	9,413
Source: Table DP-4. Profile of Selected Housing Characteristics. 2000. U.S. Census Bureau.		

According to 2000 U.S. Census data, 21.6 percent of the Township's housing was built prior to 1939 and is more than 70 years old, while 18.4 percent of the housing was built since 1990. Nearly half of the housing stock was built before 1970.

In 2000, 42.1 percent of owner occupied homes were valued at less than \$50,000,

while 21 percent was valued at more than \$150,000. The 2000 median value of a Bois Blanc Township home was \$62,500 (\$38,800 in 1990), compared to \$91,800 for Mackinac County (\$43,900 in 1990) and \$115,600 for the State of Michigan (\$60,600 in 1990).

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 from 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 first freeze in the fall is delayed. The average date of 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 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.

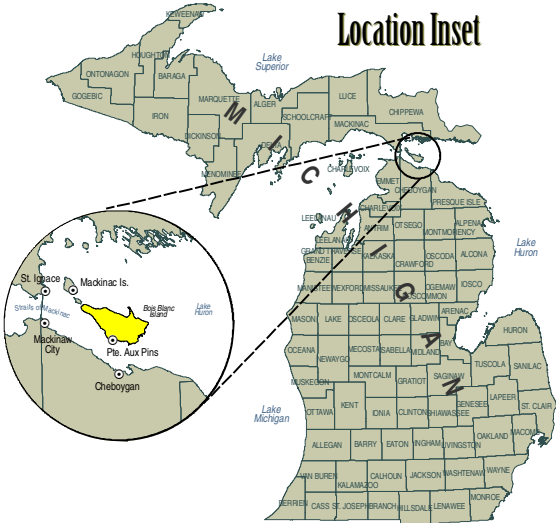
The physical landscape of Bois Blanc Island was shaped and transformed by natural forces. As glacial ice sheets advanced and retreated 10 to 12 thousand years ago, the appearance of the region was altered by the scouring and deposition of glacial drift material. In addition, wind and water erosion, surface 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 for 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.

Map 3: Topography



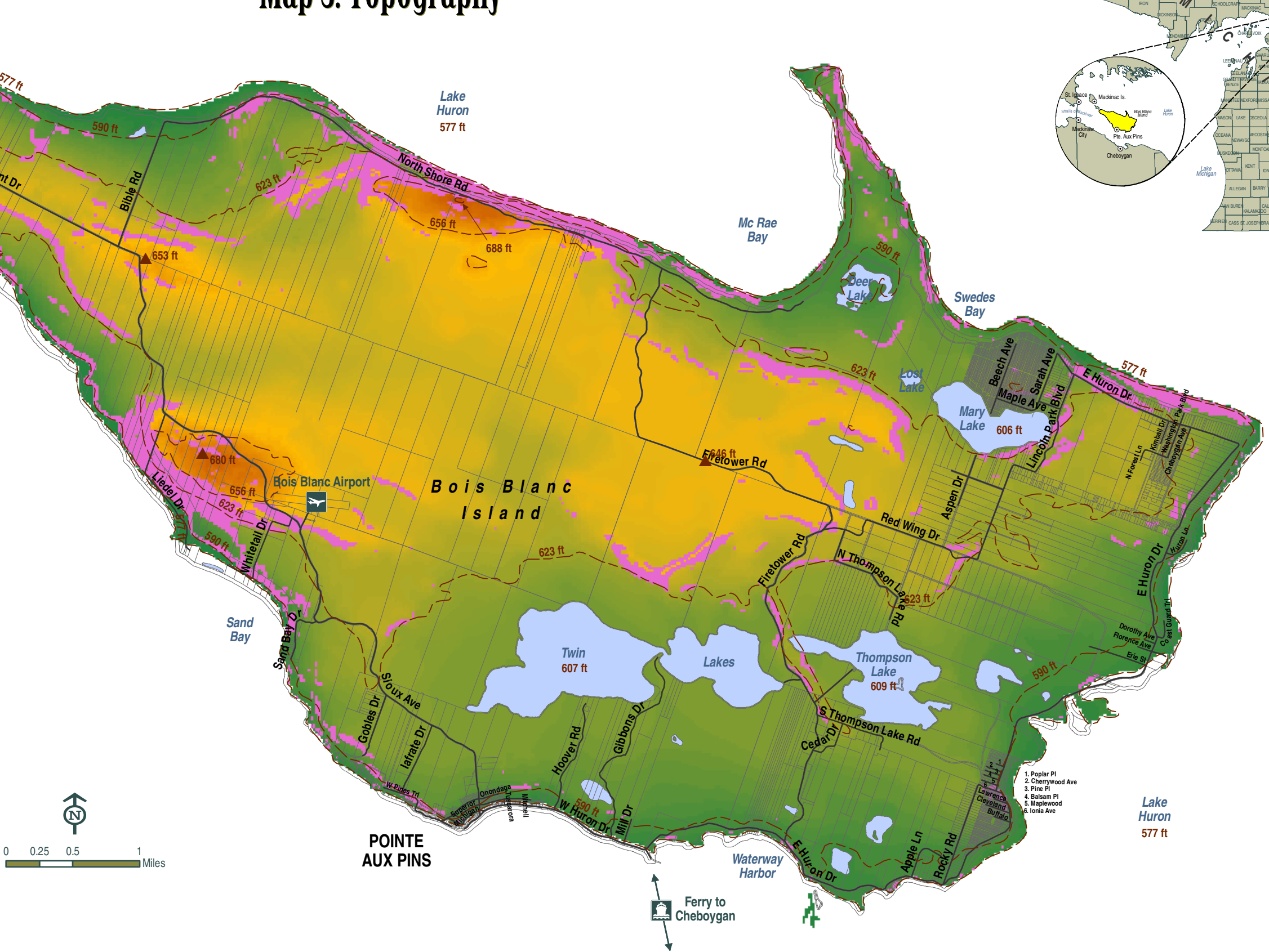
Bois Blanc Township Master Plan Update

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

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



- 1. Poplar Pl
- 2. Cherrywood Ave
- 3. Pine Pl
- 4. Balsam Pl
- 5. Maplewood
- 6. Ionia Ave

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, and soil suitability for each use should be determined before development occurs. Because all development in Bois Blanc Township relies on individual well 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 management of large tracts of undeveloped land, it should not be used for 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,

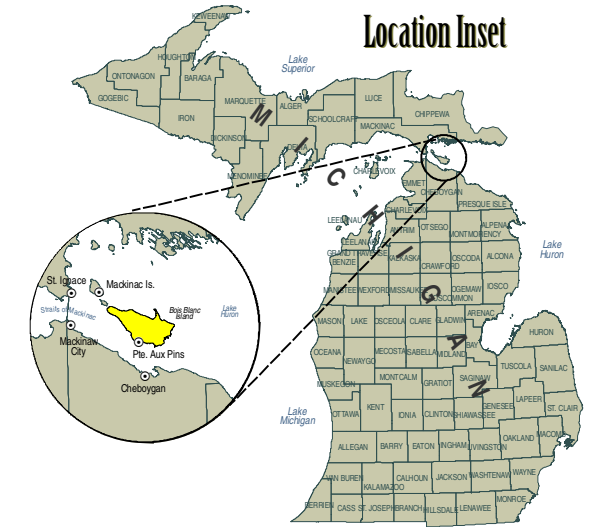
residents must rely upon individual wells for drinking water. As noted in the soils section, the vulnerability of drinking water aquifers to surface contamination is high in the portions of the Township due to the highly permeable soils.

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, Mary Lake, 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. It is extremely important that the quality of these surface waters be protected from the negative impacts of development, such as pollution and loss of scenic views to open water. 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.

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.

Map 4: Soils

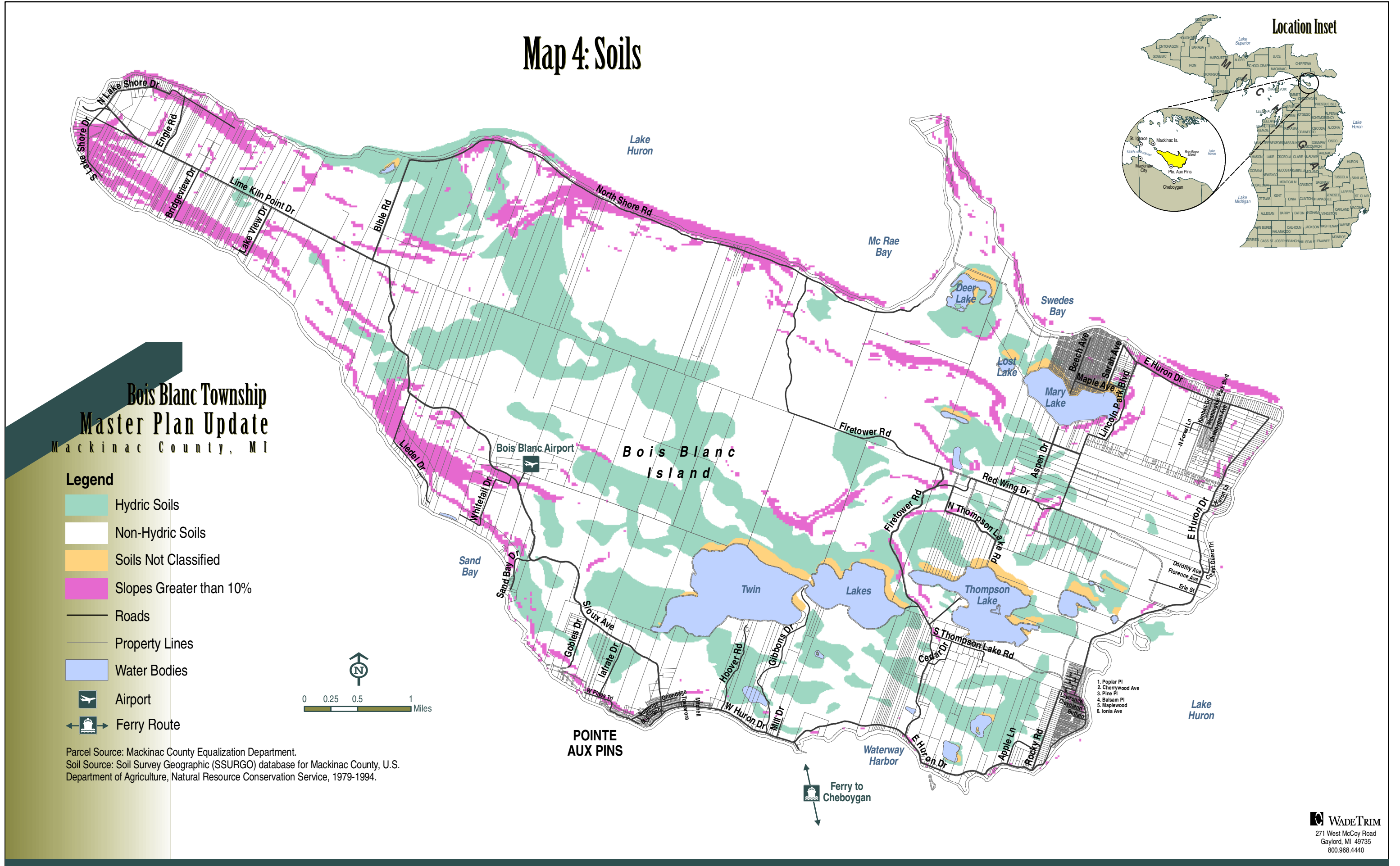
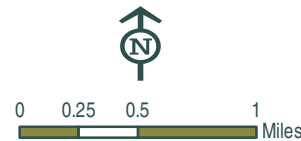


Bois Blanc Township Master Plan Update Mackinac County, MI

Legend

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

Parcel 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.



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 characteristics. Residents of Michigan are becoming increasingly more aware of the value of wetlands. Beyond their aesthetic value, wetlands protect 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 the Michigan Department of Environmental Quality, 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 a number of 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.

Fish and Wildlife

The Michigan DNR supports a state-wide fish stocking program and have recorded fish plants in Lake Huron waters, just off Bois Blanc Lighthouse Point. According to the web site 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 web site, 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 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 of importance to note that non-native or invasive species, such as purple loosestrife and Eurasian water-milfoil are not found on the 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 local 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 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 at no charge 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 vulnerability to contamination.

Solid Waste

Bois Blanc Township does not presently offer solid waste curb-side pick-up service for its residents. Rather, the Township provides a transfer station near the dock, where ten covered dumpsters for household rubbish and one dumpster for construction waste are available. All waste is then hauled off the Island by Plaunt Transportation (ferry service) and transferred to the mainland for disposal in an approved landfill.

Currently, residents support a millage to help offset the costs associated with the transfer station operation, as well as paying a per-bag fee. Transfer station hours of operation vary according to the season; two hours per week December through April; 20 hours per week May, June, September, October, and November; and 36 hours per week during the peak months of July and August. The Township also offers free disposal for one pick-up load of large items (non-garbage) annually for each household.

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* indicates that eligible disposal facilities for Mackinac County are as follows:

- Dafter Sanitary Landfill, Chippewa County
- Wood Island Landfill, Alger County
- Hiawatha Shores Landfill, Schoolcraft County
- Elk Run Landfill, Presque Isle County
- City Environmental Services/Waters Landfill, Crawford County

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 land line telephone service is provided by TDS Telecom, while residents and commercial users have the option of choosing long distance service from several providers. Many residents rely on cell phones, even though there is no cellular tower on the Island. Access to Internet communication is generally sparse throughout the Township; only dial-up or satellite service is available.

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

Police, Fire, and Ambulance Services

Law enforcement protection for Bois Blanc Township is the responsibility of Mackinac County Sheriff Department. The Sheriff Department posts a deputy on the Island for nine months of the year, and they are on-call during the winter months. The Sheriff 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 for Mackinac County is generally low, as reported by the Michigan State Police web site.

The all-volunteer Bois Blanc Township Fire Department serves the Island. Currently there are four certified Level 1 Firefighters. Fire-fighting equipment includes: two water tankers, three brush trucks, two pumper fire trucks, one squad truck, and one rescue vehicle. Equipment is stored in the Township Fire Hall, constructed in 1998. A dry hydrant is located near the Township dock.

Rescue transportation to the airport or ferry dock is provided by the Fire Department. A certified First Responder will accompany the patient to the hospital. Great Lakes Air from St. Ignace will pick up emergency patients at the airport for transport to an awaiting ambulance on the mainland.

The Island does not participate in the countywide enhanced 911 emergency service. Rather, land line calls dialed as "911" are switched to the Fire Department's emergency number. Cell phone and land line users may dial the emergency number directly at 231-634-7222.

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 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.

Residents and visitors may also use private boats for access to the Island. The harbor has two slips for commercial use, 12 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 is owned and operated by the Township and features a 3,500' by 75' asphalt runway. A new terminal building was constructed in 2008. There are nine privately owned hangars at the airport. 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 2010.

The continuance of accepted, incompatible land uses adjacent to airport lands, irrespective of their relationship to the operational needs of airports, may result in the loss, or significantly impede, of 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 which 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 protection 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 which 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.

Local and emergency air service is provided by Great Lakes Air, based at the Mackinac County Airport in St. Ignace. 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, Alpena County Regional Airport in Alpena, and at Chippewa County Airport, located at Kinross. Commercial air service at these facilities is provided by Northwest Airlink offering transportation between northern Michigan and Detroit Metro Airport, with regularly scheduled daily flights. United Parcel Service and Federal Express provide air freight service at these two airports.

The Cherry Capital Airport in Traverse City has commercial passenger service provided by Northwest Airlink to Detroit Metro Airport, and United Express and American Eagle to Chicago O'Hare Airport. Air freight service at Traverse City includes Federal Express, Airborne Express, and United Parcel Service.

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. The Township funds a dust control program.

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 attend Cheboygan High School through a cooperative agreement between the two schools. The school building dates back to the 1920's, albeit with different uses. For the 2008-2009 school year, the student count was five elementary students and no secondary students.

An active pre-school program is planned for the 2009-2010 school year with two students expected. The school receives no state funding; all funding is provided through 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 1970's, 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 June through September at the Church of the Transfiguration (Episcopal) or the Coast Guard Chapel (non-denominational).

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 36 hours per week with service six days per week from May through November. For the months of December through April, the post office provides service five days per week with mail deliveries on Mondays and Thursdays. 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 Hospital and Health Center, located in St. Ignace, is the main health care facility in Mackinac County and includes a clinic on the Island. A licensed medical professional is on the Island one day per week.

Residents also seek medical service in larger regional medical centers such as Marquette, Sault Ste. Marie, Cheboygan, Alpena, and Petoskey. The 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 for county residents.

Recreational Facilities

There are several public primitive campgrounds on the Island, located at the end of Bible Road, Lake Mary, Twin Lakes, and Lake Thompson. The only public dock on the inland lakes is located at Lake Mary; it was recently restored by the Township.

CHAPTER 5 EXISTING LAND USE/LAND COVER

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 2000 U.S. Census, the population density was two persons per square mile, up from 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.

The Island has 13 platted subdivisions, one of which (Sand Bay) was vacated in the 1930's. 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

Existing land use statistics for Bois Blanc Township are shown below as Table 5-1. For reference, Bois Blanc Township's existing land use/land cover map is provided as Map 5 at the end of this chapter. The map evolved from two sources. Michigan Resource Information System (MIRIS) land cover data was compiled by MDNR using 1978 aerial photographs, and the Township Planning Commission conducted an existing land use survey in June of 2009. Each of the land use and land cover categories shown on the table below and on the map at the end of the chapter is discussed in detail.

Table 5-1 Existing Land Use/Land Cover Bois Blanc Township, June 2009		
Land Use/Land Cover Category	Acres	Percent
Woodlands	19,500	84.7%
Wetlands	447	1.9%
Residential	1,409	6.1 %
Commercial	21	0.1%
Industrial/Utilities/ Transportation/Extractiv e	65	0.3%
Institutional	10	<0.1%
Open Space/ROW	339	1.5%
Water	1,228	5.3%
Totals	23,019	100.0%
Source: 1978 MIRIS Aerial Photos, June 2009 Township Planning Commission Survey.		

Residential Development

As can be seen in Table 5-1, 1,409 acres, or 6.1 percent of the total land area, are used for residential purposes. The heaviest concentration of residential development occurs mainly in and near the community of Pointe Aux Pins and along the Lake Huron shoreline. This development pattern is consistent with the land division patterns discussed earlier. Scattered residential development can also be seen along inland roads where property is held in private ownership. Residential land use is shown as yellow on Map 5.

Commercial Development

Bois Blanc Township has limited commercial development (red on Map 5) of only 21 acres. Many of the commercial enterprises 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.

Institutional Development

This land use category, which makes up only ten acres, consists of the Township Hall and Fire Department, school, church, cemetery, and museum. Institutional uses are seen as blue on Map 5.

Industrial/Utilities/Transportation/ Extractive Development

Only 65 acres make up this combined land use category, which are shown as purple on the Existing Land Use/Land Cover Map. In addition to the airport and marina/dock, this category includes gravel pit and sawmill.

Open Space and Rights-of-Way

Open space areas have no buildings or land cover and are grouped with road rights-of-way for mapping purposes. Land in this category covers 339 acres.

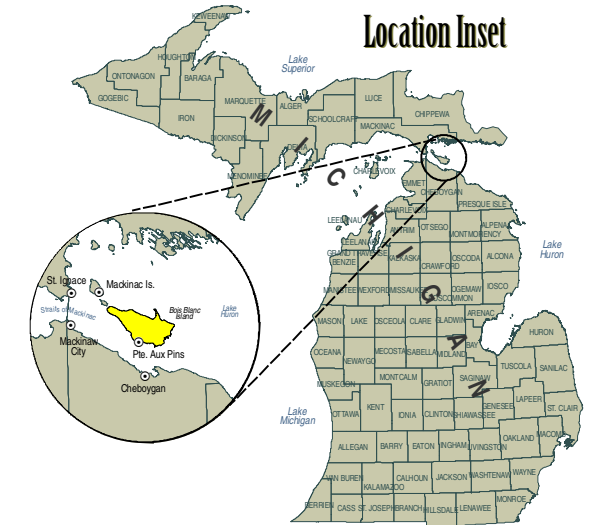
Forested Land Cover

As can be noted on Table 5-1, nearly 85 percent 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.

Wetlands

For mapping purposes, wetland areas include the typical wetland types, such as marshes, fens, and bogs. Predominant wetland areas are found in locations adjacent to the Township's lakes. 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 actually meet State and Federal criteria for legally regulated wetlands. However, the information is still valuable for general land use planning decisions.

Map 5: Existing Land Use/Land Cover



Bois Blanc Township Master Plan Update Mackinac County, MI

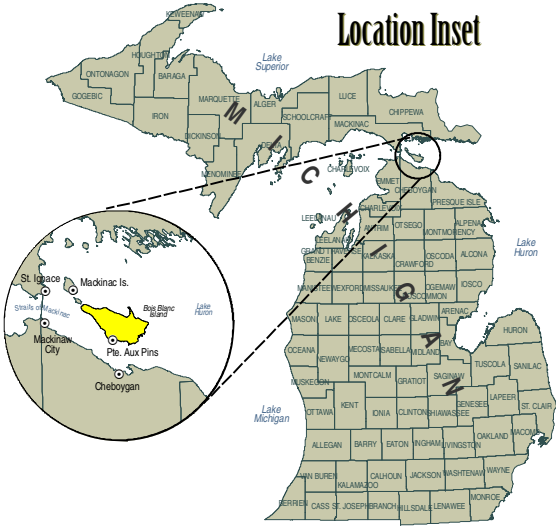
Legend

- Residential
- Commercial
- Industrial/Utilities/
Transportation/Extractive
- Institutional
- Wetlands
- Woodlands
- Open Space/Rights-of-Way
- Roads
- Property Lines
- Water Bodies
- ✈ Airport
- ⚓ Ferry Route

Base Source: Mackinac County Equalization Department.

Land Use Source: 1978 Land Use Land Cover, Michigan Department of Natural Resources, and Bois Blanc Township Planning Commission, June 2009.

Map 6: Public Forest Land

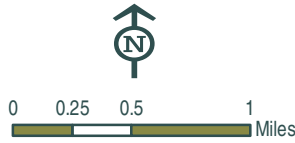


Bois Blanc Township Master Plan Update Mackinac County, MI

Legend

- Public Forest Land
- Roads
- Property Lines
- Water Bodies
- Airport
- Ferry Route

Base Source: Mackinac County Equalization Department.
Public Forest Source: Mackinac County Plat Book.



1. Poplar Pl
2. Cherrywood Ave
3. Pine Pl
4. Balsam Pl
5. Maplewood
6. Ionia Ave

CHAPTER 6 GOALS AND OBJECTIVES

Before a community can actively plan for its future growth and development, it must first set certain goals and objective that define the boundaries of its needs and desires. This establishes a basis for the 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 and opinions from Township residents.

Public Input

At the beginning of the process of updating the Master Plan, the Planning Commission conducted a formal written citizen survey, which was mailed to all taxpayers. In addition, they conducted Focus Group Meetings, a questionnaire on Fun Day, Planning our Island Future meeting, and Economic Development meeting.

A compilation of the public input actions resulted in the following concerns tabulated in rank order as noted below:

Transportation

- a) Ferry Service (expansion of services)
- b) Roads (mainly dust control and road improvements)

Safety

- a) Law Enforcement (additional law enforcement officers during peak months and enforcement of current ordinances)
- b) Fire Protection (improvement and expansion of existing services and enforcement of fire ordinances)
- c) Medical Facility (expansion and improvement of medical facility and availability of service)

Communication

- a) Phone Service off the Island (local calls to Cheboygan)
- b) Dependable Cell Phone Service (cell tower on Island)
- c) Dependable Wi-Fi Service (consistent Internet service on Island)

Transfer Station

- a) Hours of Operation
- b) Recycling

Goals and Objectives

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

1. Maintain a high quality of life for both present and future Township residents.
2. Preserve the physical, social, and environmental characteristics of the Township.
3. Guide new development in a manner that conserves natural features, protects environmentally sensitive areas, and meets the long-term needs of the community.
4. Balance the rate of land development with the available public facilities and services such as roads and utilities. Encourage development where infrastructure currently exists.

The above stated general goals can be achieved if Bois Blanc Township utilizes the following specific goals and related objectives.

NATURAL RESOURCES

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. A clean and attractive environment helps attract new businesses and residents. 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 and visitors and for future generations.

OBJECTIVES:

1. Work cooperatively with nearby communities, agencies, and organizations to develop studies and institute programs that address watershed, woodlands, wildlife, and ecosystem management.
2. Develop zoning ordinance language to protect greenbelts, shorelines, wetlands, forestlands, groundwater, and surface water and control storm water runoff.
3. Preserve scenic views and open space, especially along roadways and shorelines.
4. Encourage the health department to conduct septic system inspections and educational programs regarding maintenance and management of systems.
5. Support natural resource education and technical programs (such as Soil Conservation District, MSU Extension, and Regional Planning) that assist land owners, forestry and agriculture operators, businesses, and communities.
6. Support studies that identify ways to protect critical habitats, water resources, scenic vistas, forestland, and other important ecological resources.
7. Through zoning controls, coordinate the intensity of development with the environmental integrity and limitations of the land.
8. Inventory areas in the Township where non-renewable resources such as sand and gravel exist and acknowledge the economic importance in extracting these resources.
9. Consider establishing convenient year-round recycling.

RECREATION

Bois Blanc Township is blessed with many natural resources and recreational opportunities. This helps add to the quality of life and make the community a more enjoyable place in which to live and work. The Township's recreational facilities and opportunities are also very important to the residents. Developing, maintaining, and improving all recreational facilities and opportunities is vital for present and future generations.

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

OBJECTIVES:

1. Consider expanding the Township's role as a recreation provider by adopting and maintaining a recreation plan with updates at five-year intervals and by relying on citizen volunteer services and support.
2. Support cooperative recreational planning and development between Bois Blanc Township and school, non-profit organizations, and private entities.
3. Identify and apply for appropriate state and federal grant funding for recreational development and improvements at the existing Township facilities.
4. Establish a working relationship with the MDNR, MDEQ, USFS and US Army Corps of Engineers in the provision of outdoor recreation opportunities.
5. Encourage development and improvements to non-motorized recreation trails, such as for biking, walking, running, or cross-country skiing.
6. Support Michigan Tourism Council's promotion of Bois Blanc as a "Hike and Bike Michigan Island".

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 livability 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. Expansions which are not carefully planned can inadvertently add to environmental degradation and undesirable sprawl.

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

OBJECTIVES:

1. Work proactively with the Mackinac County Road Commission on road improvements, road maintenance, dust control, and snow removal, as well as road planning. Encourage the continued efficient use and maintenance of existing roads.
2. Continue providing public services and facilities residents are accustomed to, such as fire protection, ambulance, airport, ferry, and school and improve/expand these services as needed. Continue recruiting and training for all volunteer firefighters and first responders.
3. Identify funding sources and apply for grants for improvements or expansion of these services as necessary.
4. Direct development to areas where appropriate public services, roads, and utilities exist, or the developer is willing to install those facilities.
5. Encourage utility construction or improvements to coincide with development. Encourage the placement of utilities underground.
6. Developers should be required to manage storm water on site. New projects with large impervious surfaces should be reviewed for drainage impacts.
7. Support and encourage private civic groups which provide educational and social programs of importance to Township residents.
8. Explore the feasibility of adding an additional ferry service.
9. Review the transfer station hours of operation annually and adjust to match demand. Consider adding recycling program in conjunction with the transfer station.
10. Explore the possibility of a “dump station” for recreational vehicles to prevent the unregulated and unsanitary dumping in the forested areas of the Island.
11. Develop action plan for new opportunities for affordable high-speed Internet service.

COMMUNITY CHARACTER

A community's character is an intangible item which 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:

1. Through zoning regulations, preserve the integrity of existing residential neighborhoods by protecting them from the intrusion of incompatible uses.
2. Continue the Township's annual free truck-load disposal at the transfer station.
3. Maintain a friendly and safe rural atmosphere.
4. Revise the current blight ordinance to clean up and prevent unwanted "junk" and abandoned unsafe buildings on private property. The ordinance should be written in a manner that is enforceable and can withstand litigation.
5. Protect the scenic shoreline natural habitat through established greenbelts and deep setbacks.
6. Support the museum and community events that celebrate the character and history of the Island.

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:

1. Generate economies of scale and cost savings through collaboration, cooperation, and coordination among local units of government on issues of mutual concern.
2. Ensure a responsible fiscal policy and budget process to finance the Township government.
3. Promote communication between the Bois Blanc Township Planning Commission and the County Planning Commission.
4. Promote the involvement of volunteers in the government process.
5. Utilize the proactive master planning process as a check and balance on decision making.
6. Focus on cross-jurisdictional issues when reviewing neighboring communities' master plans.
7. Assist citizens in communicating with state agencies on land use and environmental issues, including wetlands regulation, park management, and state forest management practices.

CHAPTER 7

FUTURE LAND USE RECOMMENDATIONS AND ZONING PLAN

The Bois Blanc Township Planning Commission developed the future land use recommendations and zoning plan 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 and zoning plan identifies locations for five different land use classifications: Residential, Community Center, Commercial Center, Transportation Center, and Forest Recreation. Map 7, 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 yellow on Map 7. 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 in areas along the Lake Huron shoreline. In areas adjacent to the Lake Huron or any inland lake, certain waterfront protection measures should be considered, such as greater waterfront setback, greenbelt regulations, and storm water 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 if designed to be compatible with the residential setting.

Community Center

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. A variety of social and civic functions occur in a community center, including 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 re-use of existing structures when vacated. The community center is shown in blue on Map 7. For zoning purposes, this area is included within a residential zone.

Commercial

Many of Bois Blanc Township's existing commercial enterprises are located along Huron Drive in the vicinity of the dock. It is the intent of these future land use recommendations to centralize these types of development within roughly ½ mile on each side of the dock. Any future commercial expansion is encouraged near

existing businesses.

In addition, future commercial development is recommended near the western tip of the Island in the vicinity of Lime Kiln Point Drive and Bridgeview Drive.

Appropriate uses recommended in these commercial areas include retail, wholesale, service, office, and light environmentally-friendly industries, as well as residential uses and community uses. The commercial classification is shown in red on Map 7.

Transportation Center

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, as shown in purple on the Future Land Use Map. Commercial uses are encouraged to locate near these transportation resources.

Forest Recreation

As mentioned in Chapter 5, about 37 percent of the Island's land area is made up of forested land owned by the State of Michigan or the U.S. Forest Service. 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 percent of the Island.

Shown as green on the Map 7, 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 timber harvesting, as well as extensive hunting and recreational pursuits.

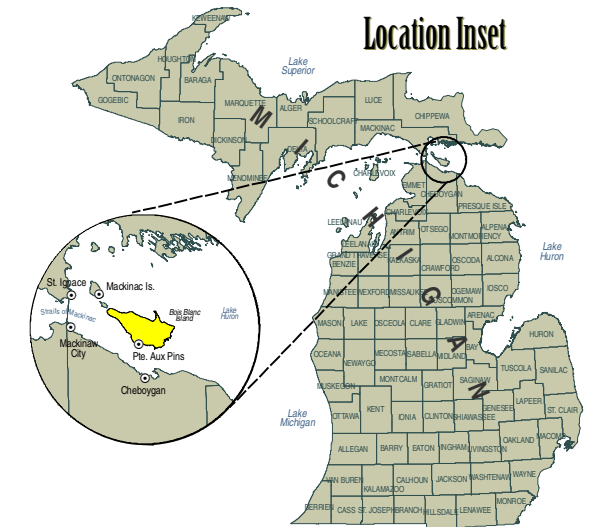
Privately owned lands within this land use category may be used for single-family residences (both year-round and seasonal) on lots at least five acres in size, hunting camps, forest products harvesting, campgrounds, recreational uses, and farming where soil conditions are suitable. The protection of forested land, wetlands, and non-forested open space is critical to preserving the rural character of the Island.

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.

Map 7: Future Land Use



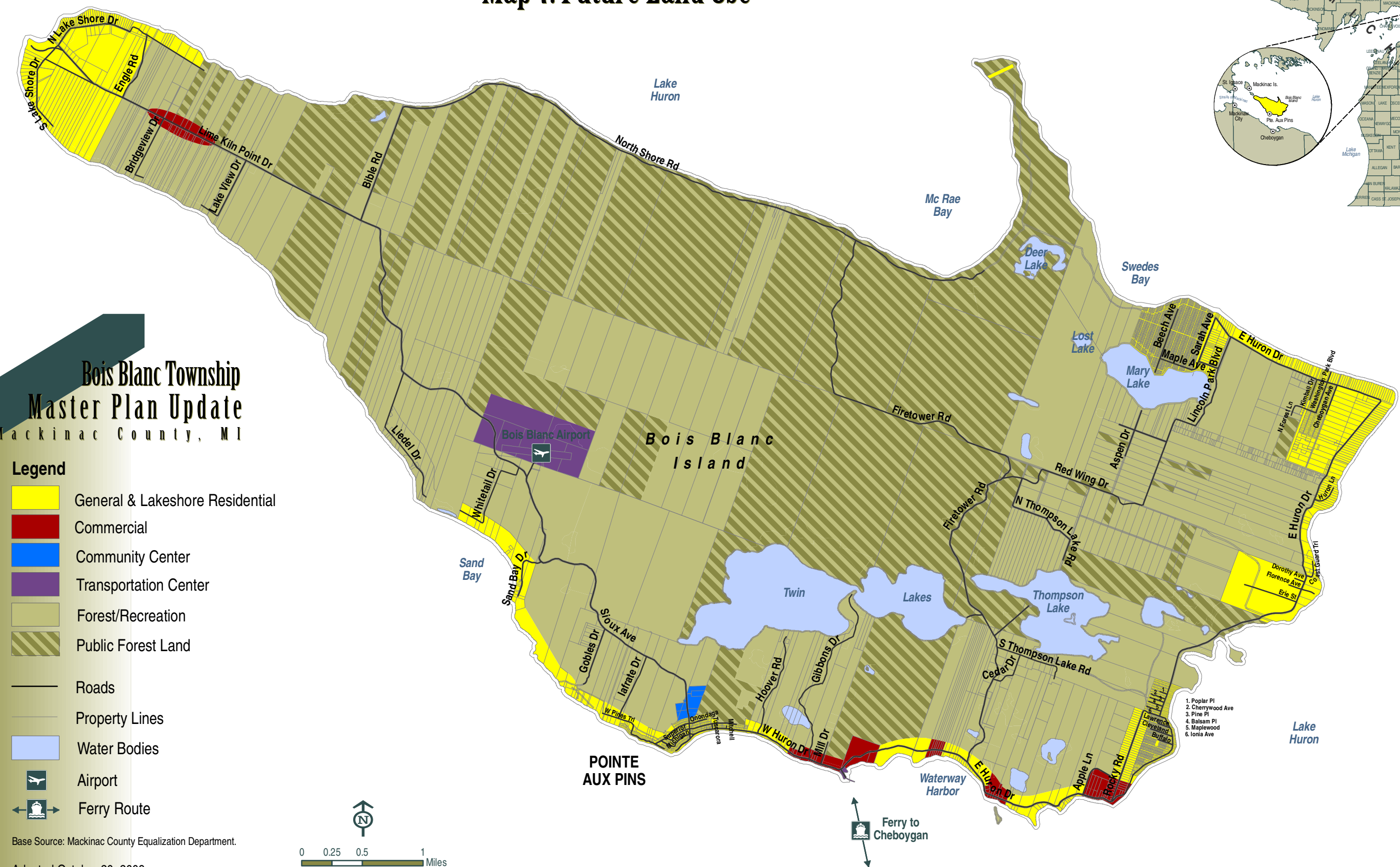
Bois Blanc Township Master Plan Update Mackinac County, MI

Legend

- General & Lakeshore Residential
- Commercial
- Community Center
- Transportation Center
- Forest/Recreation
- Public Forest Land
- Roads
- Property Lines
- Water Bodies
- ✈ Airport
- ⚓ Ferry Route

Base Source: Mackinac County Equalization Department.

Adopted October 20, 2009



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. 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. The zoning ordinance is the most important tool for implementing the master plan.

Zoning is the authority to regulate private use of land by creating land use zones and applying development standards in 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 which 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 improvements projects (such as building expansions, infrastructure improvements, major equipment purchases, park improvements, etc.). A Capital Improvements Program (CIP) is one tool which 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 August 13, 2009. 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 October 20, 2009. 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 October 1, 2009. The hearing notice as published is noted below.

**PUBLIC HEARING NOTICE
BOIS BLANC TOWNSHIP
MASTER PLAN**

The Bois Blanc Township Planning Commission will conduct a public hearing on the proposed Master Plan on October 20, 2009 at 7:00 p.m. at the Bois Blanc Township Hall. All interested persons are invited to attend and comment. The proposed Master Plan is available for public inspection by contacting the Township Clerk's office at 231-634-7275 or by contacting any Planning Commission or Township Board member. Written comments may be sent to: Bois Blanc Township Planning Commission, P.O. Box 898, Pointe Aux Pins, MI 49775-0898.

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.

MR JEFFREY S HAGAN, EX DIR
EUP REGIONAL PLNG & DEV
P O BOX 520
SAULT STE MARIE MI 49783

MS MICHELLE WALK, DIRECTOR
MSU EXTENSION
100 S MARLEY ST
ST IGNACE MI 49781

MR MIKE MILLER, CLERK
CLARK TOWNSHIP
P O BOX 367
CEDARVILLE MI 49719

MR JEFFERY LAWSON, MANAGER
VILLAGE OF MACKINAW CITY
102 S HURON AVE
MACKINAW CITY MI 49701

MR SCOTT McNEIL, CITY MANAGER
CITY OF CHEBOYGAN
403 N HURON ST
CHEBOYGAN MI 49721

MR STEVE SCHNELL, COMM DEV DIR
CHEBOYGAN COUNTY
P O BOX 70, 870 MAIN ST
CHEBOYGAN MI 49721

MR ANDREW BISCHER, DIR OF ENG
PRESQUE ISLE ELECTRIC & GAS
19831 M-68 HWY
ONAWAY MI 49765

PLANNING COMMISSION
CITY OF MACKINAC ISLAND
MARKET STREET, P O BOX 455
MACKINAC ISLAND MI 49757

PLANNING COMMISSION
CITY OF ST IGNACE
396 N STATE ST
ST IGNACE MI 49781

MACKINAW TOWNSHIP BOARD
P O BOX 95
MACKINAW CITY MI 49701

BENTON TOWNSHIP BOARD
5012 ORCHARD BEACH ROAD
CHEBOYGAN MI 49721

BEAUGRAND TOWNSHIP BOARD
14633 INVERNESS TRAIL RD
CHEBOYGAN MI 49721

ST IGNACE TOWNSHIP PLNG COMM
2373 SHORE DR
ST IGNACE MI 49781

MARQUETTE TOWNSHIP PLNG COMM
7338 N M-129
PICKFORD MI 49774

I hereby certify that I have sent the draft Bois
Blanc Township Master Plan to the above
addresses on August 13, 2009.

Fran Brink, Community Planner (Wade Trim, Inc.)

RESOLUTION OF ADOPTION BOIS BLANC TOWNSHIP MASTER PLAN

WHEREAS: Bois Blanc Township, Mackinac County, Michigan established a Township Planning Commission under State of Michigan Public Act 33 of 2008, as amended (Michigan Planning Enabling Act); and

WHEREAS: The Township Planning Commission is required by Section 31 of the Act to make and adopt a basic plan as a guide for the development of unincorporated portions of the Township; and

WHEREAS: Bois Blanc Township retained the services of Wade Trim, Inc. as its consultant to assist the Planning Commission in preparing this plan; and

WHEREAS: Following approval of distribution by the Township Board, the draft plan was transmitted to Mackinac County, neighboring communities, and utilities for the required review period, in accordance with Section 41 of the Act; and

WHEREAS: The plan was presented at the required public hearing on October 20, 2009 before the Planning Commission, with notice of the hearing having been published in the Cheboygan Daily Tribune on October 1, 2009 in accordance with Section 43 of the Act.

NOW THEREFORE BE IT RESOLVED THAT: The contents of this document, together with all maps and graphics attached to and contained herein, are hereby adopted by the Bois Blanc Township Planning Commission as the *Bois Blanc Township Master Plan* on this 20th day of October 2009.

Motion: Hutchinson

Second: Kennedy

Ayes: Hutchinson, Kennedy,
St.Germaine

Nays:

None

Absent: Younge,
Bruce

Certification

I hereby certify that the above is a true and correct copy of the resolution adopted at the October 20, 2009 meeting of the Bois Blanc Township Planning Commission.

Original signed

Original signed

Cheryl St.Germaine, Vice-Chair (Acting Chair)
Bois Blanc Township Planning Commission

Anne Kennedy, Secretary
Bois Blanc Township Planning Commission

**MR JEFFREY S HAGAN, EX DIR
EUP REGIONAL PLNG & DEV
P O BOX 520
SAULT STE MARIE MI 49783**

Blanc Township Master Plan to the above
addresses on November 2, 2009.

Fran Brink, Community Planner (Wade Trim, Inc.)

**MS MICHELLE WALK, DIRECTOR
MSU EXTENSION
100 S MARLEY ST
ST IGNACE MI 49781**

**PLANNING COMMISSION
CITY OF MACKINAC ISLAND
MARKET STREET, P O BOX 455
MACKINAC ISLAND MI 49757**

**MR MIKE MILLER, CLERK
CLARK TOWNSHIP
P O BOX 367
CEDARVILLE MI 49719**

**PLANNING COMMISSION
CITY OF ST IGNACE
396 N STATE ST
ST IGNACE MI 49781**

**MR JEFFERY LAWSON, MANAGER
VILLAGE OF MACKINAW CITY
102 S HURON AVE
MACKINAW CITY MI 49701**

**MACKINAW TOWNSHIP BOARD
P O BOX 95
MACKINAW CITY MI 49701**

**MR SCOTT McNEIL, CITY MANAGER
CITY OF CHEBOYGAN
403 N HURON ST
CHEBOYGAN MI 49721**

**BENTON TOWNSHIP BOARD
5012 ORCHARD BEACH ROAD
CHEBOYGAN MI 49721**

**MR STEVE SCHNELL, COMM DEV DIR
CHEBOYGAN COUNTY
P O BOX 70, 870 MAIN ST
CHEBOYGAN MI 49721**

**BEAUGRAND TOWNSHIP BOARD
14633 INVERNESS TRAIL RD
CHEBOYGAN MI 49721**

**MR ANDREW BISCHER, DIR OF ENG
PRESQUE ISLE ELECTRIC & GAS
19831 M-68 HWY
ONAWAY MI 49765**

**ST IGNACE TOWNSHIP PLNG COMM
2373 SHORE DR
ST IGNACE MI 49781**

**MARQUETTE TOWNSHIP PLNG COMM
7338 N M-129
PICKFORD MI 49774**

I hereby certify that I have sent the adopted Bois