

# SANBORN TOWNSHIP 2014 MASTER PLAN



Adopted March 17, 2014



# **SANBORN TOWNSHIP 2014 MASTER PLAN**

Sanborn Township  
Alpena County  
Michigan

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## CHAPTER 1 INTRODUCTION

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### Purpose and Planning Process

The purpose of the Sanborn Township Master Plan is to provide guidelines for future development within the community, while protecting the natural resources and rural township character. The Michigan Planning Enabling Act, P.A. 33 of 2008, states a Township may adopt, amend, and implement a master plan. The Michigan Planning Enabling Act states: *The general purpose of a master plan is to guide and accomplish, in the planning jurisdiction and its environs, development that satisfies all of the following criteria:*

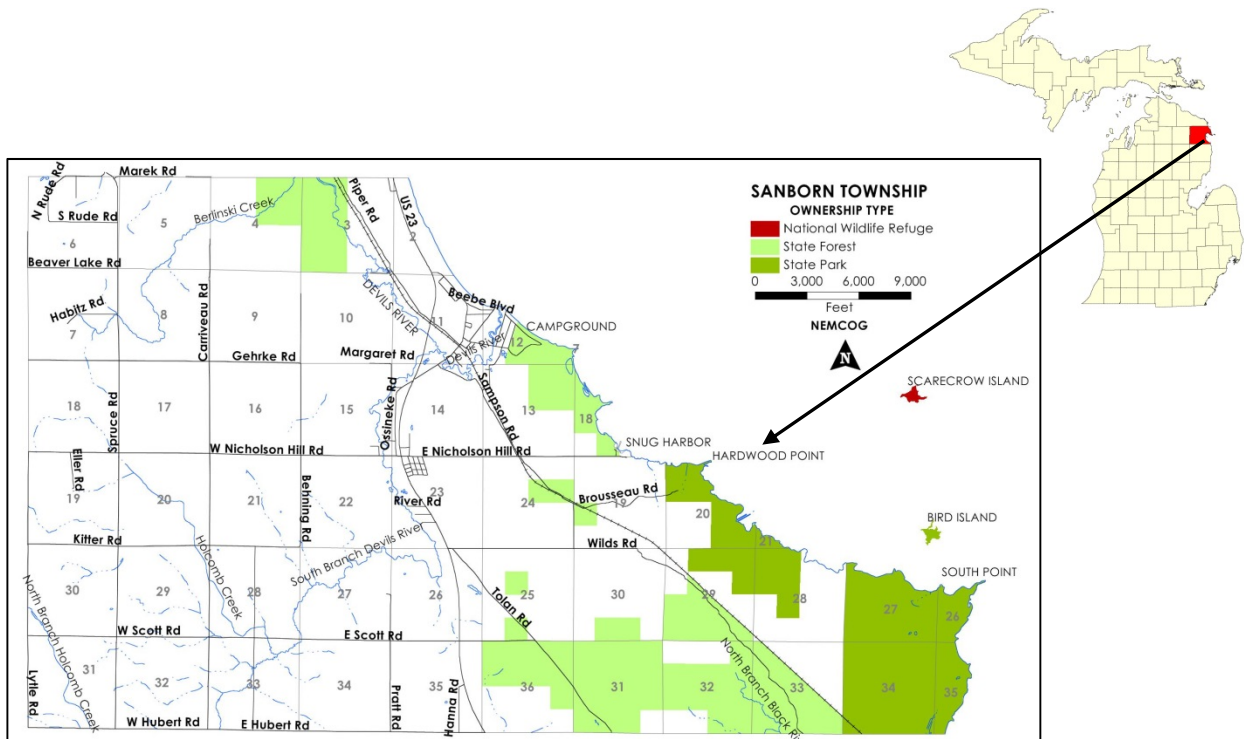
- A. *Is coordinated, adjusted, harmonious, efficient, and economical.*
- B. *Considers the character of the planning jurisdiction and its suitability for particular uses, judged in terms of such factors as trends in land and population development.*
- C. *Will, in accordance with present and future needs, best promote public health, safety, morals, order, convenience, prosperity, and general welfare.*
- D. *Includes, among other things, promotion of or adequate provision for 1 or more of the following:*
  1. *A system of transportation to lessen congestion on streets.*
  2. *Safety from fire and other dangers.*
  3. *Light and air.*
  4. *Healthful and convenient distribution of population.*
  5. *Good civic design and arrangement and wise and efficient expenditure of public funds.*
  6. *Public utilities such as sewage disposal and water supply and other public improvements.*
  7. *Recreation.*
  8. *The use of resources in accordance with their character and adaptability.*

This plan presents background information on social and economic data, natural resources, existing community services and facilities, and existing land uses. The background information is used to identify important characteristics, changes and trends in Sanborn Township. A community survey and special community workshop were used to gather input from residents and landowners. Based on information gathered at this workshop and the background data, the Township Planning Commission developed goals and objectives. These goals and objectives, along with a series of maps including soils, ownership, existing land use, and zoning, provide the basis for the Future Land Use Map. The future land use map recommends locations for various types of future development within the Township.

The Master Plan was developed by the Sanborn Township Planning Commission with the assistance from the Northeast Michigan Council of Governments (NEMCOG). Funding for the plan development was partially provided by the Lake Huron Watershed Community Collaboration program, funded by a grant the Great Lakes Restoration Initiative, US Environmental Protection Agency. This plan looks at a twenty year planning horizon, with required revisits every five years or sooner if needed. A series of planning workshops were held over the two-year period. All workshops were open meetings with public welcomed and encouraged to comment on the plan.

**Location and Regional Setting**

Sanborn Township is located in the south eastern corner of Alpena County, in the northeastern region of Michigan's Lower Peninsula. The Township is eleven miles by six miles and includes two government survey townships for a total of 60 square miles. Water resources are integral to the township's quality of life given its northern boundary is Lake Huron and portions of Grand Lake and Long Lake are located in the township. Residential development is clustered around the two inland lakes with a high percentage being seasonal dwellings. The prevalent land cover is lowland and upland forests. US-23 traverses the eastern part of Sanborn Township and is used by residents to access services in Tawas and Alpena.



## **The Status of Planning and Zoning in Sanborn Township**

Sanborn Township has recognized the importance and need for developing an updated Master Plan in compliance with the Michigan Planning Enabling Act, P.A. 33 of 2008. Two key issues are to provide a legal foundation for the Township Zoning Ordinance and to manage development within the Township. By documenting existing conditions such as environment, socio-economic, community services, transportation, recreation, and land use within a master plan, the Township will be able to formulate appropriate land use goals and policies to guide development and serve as the basis for enforceable zoning. The master plan will in turn be used as a basis for re-examining the Township's zoning districts and land use development controls.



## CHAPTER 2 SOCIO-ECONOMIC PROFILE

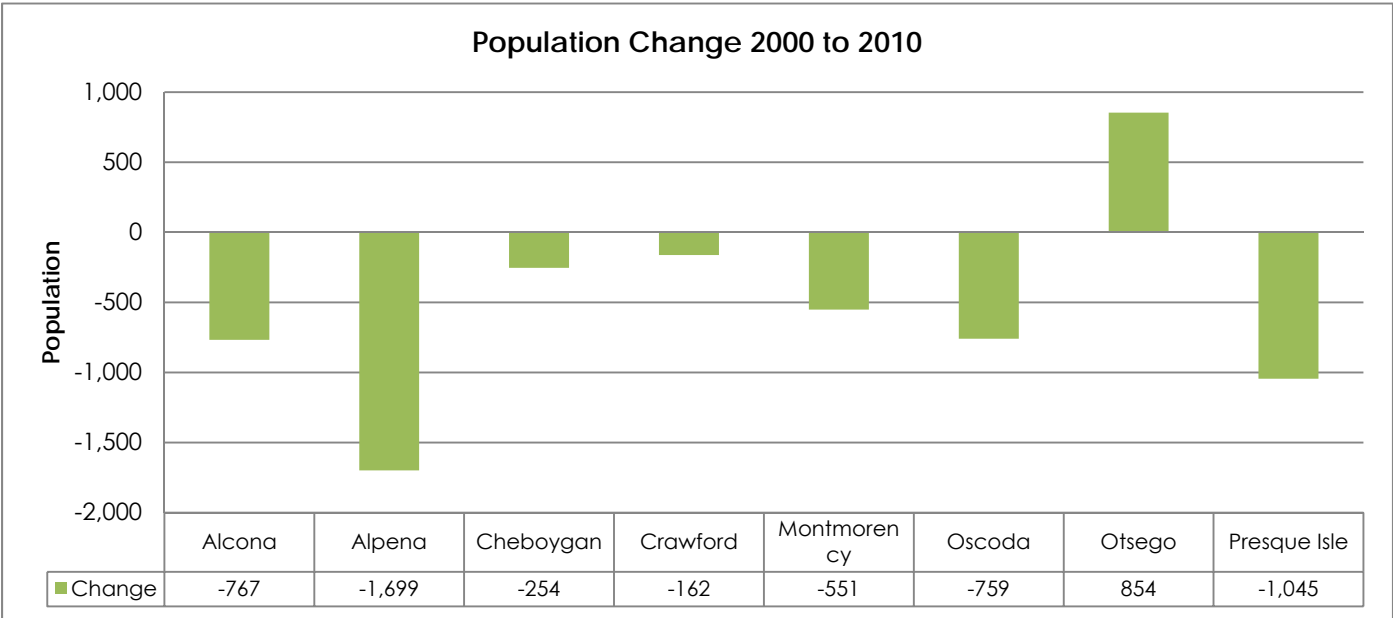
This section of the *Master Plan* provides an analysis of social and economic factors within the Township. The analysis is critical to understanding current and future needs of the community. The differences in education, employment, ethnic customs, and socio-economic factors are examined to help define the “character” of Sanborn Township.

### Population

**Table 2.1** illustrates population trends for all municipalities in Alpena County for census years 1980, 1990, 2000, and 2010. The County as a whole experienced a 5.5 percent population loss between 2000 and 2010. The majority of counties in Northeast Michigan experienced a population decline from 2000 to 2010 (**Figure 2.1**). Alpena County decreased 5.4 percent in population while the City of Alpena experienced the greatest loss of population at 14.2 percent. The 2010 U.S. Census found Sanborn Township’s population at 2,116. This represents a decrease of 1.7 percent from 2000. The Township has experienced minor population losses each decade since 1980; however, the numeric and percentage losses diminished between 2000 and 2010.

Municipality	1980 Pop.	1990 Pop.	% Change '80-'90	2000 Pop.	% Change '90-'00	2010 Pop.	% Change '00 - '10	% Change '80 - '10
Alpena County	32,315	30,605	-5.3%	31,314	2.3%	29,598	-5.5%	-8.4%
City of Alpena	12,214	11,354	-7.0%	11,304	-0.4%	10,483	-7.3%	-14.2%
Alpena Twp.	10,152	9,602	-5.4%	9,788	1.9%	9,060	-7.4%	-10.8%
Green Twp.	1,083	1,095	1.1%	1,205	10.0%	1,228	1.9%	13.4%
Long Rapids Twp.	1,006	1,021	1.5%	1,019	-0.2%	1,010	-0.9%	0.4%
Maple Ridge Twp.	1,572	1,514	-3.7%	1,715	13.3%	1,690	-1.5%	7.5%
Ossineke Twp.	1,607	1,654	2.8%	1,761	6.5%	1,675	-4.9%	4.2%
<b>Sanborn Twp.</b>	<b>2,297</b>	<b>2,196</b>	<b>-4.4%</b>	<b>2,152</b>	<b>-2.0%</b>	<b>2,116</b>	<b>-1.7%</b>	<b>-7.9%</b>
Wellington Twp.	286	269	-5.9%	296	10.0%	307	3.7%	7.3%
Wilson Twp.	2,098	1,902	-9.3%	2,074	9.0%	2,029	-2.2%	-3.3%

Source: U.S. Bureau of the Census 2010



**Age Distribution**

In addition to total population figures, analyzing the age distribution within a community is helpful in planning future programs and activities. The needs of people living in Sanborn Township vary according to the age and sex of each individual; a predominantly younger population has different attitudes and requires different activities than an older population.

The median age of the population of Sanborn Township is 44.7 years, an increase from 40.2 years in 2000. By comparison, the Township's median age is lower than Alpena County (45.6 years), but higher than the State (38.9 years) and the US (37.2 years). **See Table 2.2.** Within the Township, the 5 to 19 year age group has percentages comparable to the State of Michigan. In contrast, the 20 to 44 year old age group represented a somewhat lower percentage of the total population than the state as a whole. The Township has a higher percentage of its population in the 45-64 years and 65 years and older than the State. These trends show the younger working aged adults are being drawn away from the Township for employment, while the older age groups are increasing with an in migration of retirees.

**Racial Distribution**

Sanborn Township's population is relatively similar in racial make-up to that of Alpena County. Based on 2010 Census data, 2,116 persons resided in Sanborn

Township with 97.4 percent white. Hispanic accounted for 1.3 percent while American Indian or Alaska Native accounted for less than one percent of the total population.

**Table 2.2**  
**Age Distribution for Sanborn Township, Alpena County, and the State of Michigan - 2010**

	< 5 Yrs.	%*	5-19 Yrs.	%*	20-24 Yrs.	%*	25-44 Yrs.	%*	45-64 Yrs.	%*	65 Yrs. & >	%*	Median Age
Michigan		6.0		20.8		6.8		24.7		27.9		13.8	38.9
Alpena County	1,508	5.1	5,417	18.4	1,444	4.9	6,149	20.8	9,315	31.5	5,765	19.5	45.6
<b>Sanborn Twp.</b>	<b>111</b>	<b>5.2</b>	<b>432</b>	<b>20.5</b>	<b>102</b>	<b>4.8</b>	<b>422</b>	<b>19.9</b>	<b>686</b>	<b>32.4</b>	<b>363</b>	<b>17.1</b>	<b>44.7</b>

Source: U.S. Bureau of the Census 2010  
 \*Figure shows the percentage each age grouping represents of the local unit's total population.

**Disability Status**

While data relating to disabled status is not currently available on a township level, data relating to disabled status is estimated by the American Community Survey and is based on a sample (**Table 2.3a**). Nearly two-thirds (64.4%) of the population of Alpena County is classified as having some type of disability. A significant number, 2,651 people between the ages of 18-64 have some type of disability with ambulatory disabilities being the most common. Cognitive disabilities are the next most common in this age group. However, cognitive disabilities are the most common in the 5-17 year age group. The data shown in **Table 2.3b** gives an indication of the number of disabled people residing in Northeast Michigan. A person was classified as having a disability if they had a sensory disability, physical disability, mental disability, self-care disability, going outside the home disability or an employment disability. The high percentage of disabilities in Northeast Michigan indicates a demand for disabled services. 38.4 percent of the population of Northeast Michigan over the age of 21 is classified as having a disability. More significantly, over 28 percent of households have a household member with a disability that lives alone.

<b>Table 2.3a Disability Status in Alpena County</b>	
Population under 5 years	52
With a hearing difficulty	39
With a vision difficulty	42
Population 5-17 years	245
With a hearing difficulty	28
With a vision difficulty	65
With a cognitive difficulty	232
With an ambulatory difficulty	77
With a self-care difficulty	97
Population 18-64 years	2651
With a hearing difficulty	461
With a vision difficulty	486
With a cognitive difficulty	1088
With an ambulatory difficulty	1431
With a self-care difficulty	440
With an independent living difficulty	763
Population 65+ years	2284
With a hearing difficulty	1239
With a vision difficulty	521
With a cognitive difficulty	568
With an ambulatory difficulty	1063
With a self-care difficulty	486
With an independent living difficulty	808
Source: American Community Survey 2010	

<b>Table 2.3b Disability Status in 8-county region* 2005-2007</b>	
% of Population with a disability age 21-64	21.0%
% of Population with a disability age 64+	17.4%
% of Population with a disability who are employed (Ages 16-64)	33.1%
% of Households with members with a disability that lives alone	28.8%
Source: American Community Survey (PUMS: Public Use Microdata)	
*Region includes Alcona, Alpena, Cheboygan, Crawford, Montmorency, Oscoda, Otsego, and Presque Isle Counties	

### Households

According to the 2010 Census (**Table 2.4**), of the 845 households in Sanborn Township, 601 were reported as family households. Of those family households, 214 had children under 18. Furthermore, 56 households were identified as single parent households with children under 18. There were 261 households with individuals 65 and older. The average number of persons per household was 2.5.



Category	Households
Total Households	845
Family Households w/own children under 18	214
Husband/Wife w/own children under 18	158
Male single parent w/own children under 18	23
Female single parent w/own children under 18	33
Households with individuals 65 and over	261
Source:U.S. Bureau of the Census, 2010	

### Housing Characteristics

Of the 1,083 housing units reported in Sanborn Township by the 2010 Census, 845 were occupied with 83.4 percent owner occupied and 16.6 percent renter occupied. Of the total housing units, 238 were classified as vacant. The vacant category includes vacant rentals (29), for sale (20), and seasonal, recreational or occasional use (146). Vacancy rates increased between 2000 and 2010, likely attributed to the economic downturn and housing crisis which began in 2007. See **Table 2.5**.

In addition, Census data indicates that the age of the housing stock in the County is increasing. Generally speaking, the older a housing unit is the more it is likely to be in need of rehabilitation. As a rule of thumb, any housing unit that is older than 50 years may be in need of at least some, if not a great deal of renovation. Over 44 percent of the housing in Alpena County was built prior to 1960 with at least 17 percent having been built prior to 1940.

Data from the American Community Survey<sup>1</sup> shows 25.5 percent of the housing stock in Sanborn Township was constructed during the past 30 years. A majority of the housing stock (61.3%) was constructed between 1950 and 1979. The balance of the housing stock, (13.3 %) is 60 years and older. Due to the age of this housing, some of it is no doubt in need of rehabilitation, in particular, upgrades to energy efficient insulation, windows, heating and appliances.

Also, an analysis of the building permits issued in the county can give insight to growth trends in a given area. Recent building permit data from all of the county's local governmental units are found on **Table 2.6**. Overall, the numbers of new residential units being built in the county has remained relatively stagnant over the last five years compared to the late 1990's and early 2000's. Between 2007 and 2011 there were six permits for new residential construction issued in the Township.

<sup>1</sup> "Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, for 2010, the 2010 Census provides the official counts of the population and housing units for the nation, states, counties, cities and towns. For 2006 to 2009, the Population Estimates Program provides intercensal estimates of the population for the nation, states, and counties."

Consistent with other communities in the region, new housing and commercial development were constricted after the economic downturn and housing crisis in the late 2000's. The decrease in the rate at which new homes are being constructed in the region reflects the stagnant economy and the out-migration of population resulting from job losses.

MUNICIPALITY	Total Housing Units	Total Occupied Housing Units	% Owner Occupied	% Renter Occupied	Total Vacant Housing Units	% Seasonal*	Home-owner Vacancy Rate	Renter Vacancy Rate
Alpena County	16,053	12,791	78.8	21.2	3,262	12.2	2.8%	9.6
City of Alpena	5,278	4,734			544			
Alpena Twp.	4,907	3,976	82.5	17.5	931	11.4	2.5	10.1
Green Twp.	922	508	92.3	7.7	414	34.4	3.1	9.1
Long Rapids Twp.	574	418	91.4	8.6	156	18.6	1.8	12.2
Maple Ridge Twp.	904	665	90.1	9.9	239	20.4	2.0	4.2
Ossineke Twp.	1,102	706	91.9	8.1	396	29.2	3.0	12.3
<b>Sanborn Twp.</b>	<b>1,083</b>	<b>845</b>	<b>83.4</b>	<b>16.6</b>	<b>238</b>	<b>13.5</b>	<b>2.8</b>	<b>17.2</b>
Wellington Twp.	247	127	87.4	12.6	120	39.7	3.5	0.0
Wilson Twp.	1,036	812	90.6	9.4	224	15.3	2.5	7.2

Source: U.S. Bureau of the Census, 2010  
 \*Figure shows the seasonal housing units as a percentage of the municipality's total housing units.

The number of new commercial units being built in the township is minimal during the last five years and is not keeping pace with the other communities in Alpena County. During this period, Sanborn Township has seen only two new commercial building in the last five years. Commercial building remains low in the outlying

Permit Type	TOTAL		2007		2008		2009		2010		2011	
	Comm	Res	New Res	New Comm	New Res	New Comm	New Res	New Comm	New Res	New Comm	New Res	New Comm
Alpena City	8	9	3	2	2	2	1	1	0	1	3	2
Alpena Twp.	12	82	21	7	21	0	15	2	14	0	11	3
Green Twp.	1	8	3	1	1	0	0	0	3	0	1	0
Long Rapids Twp.	0	10	4	0	3	0	0	0	3	0	0	0
Maple Ridge Twp.	0	10	4	0	5	0	0	0	1	0	0	0
Ossineke Twp.	1	7	5	0	0	0	0	1	1	0	1	0
<b>Sanborn Twp.</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Wellington Twp.	0	3	2	0	0	0	0	0	0	0	1	0
Wilson Twp.												

Source: Township and City Building Officials

townships. It is no surprise that the majority of new commercial establishments are being built in Alpena City and Township, as this is where infrastructure such as municipal water and sewer services are found.

**Income and Poverty**

A reliable measure of the economic health of families is median household income which is the midpoint of income for all households. While all eight counties have generally exhibited a steady increase in median income over the past several decades, Northeast Michigan still lags behind the state as a whole. The downturn in the economy in 2007 has resulted in a drop in median income for all counties except Oscoda County. **Figure 2.2** and **Table 2.7** present information on the median household income for counties in the NEMCOG region. Counties in Northeast Michigan all have median household incomes that are lower than the State and US. Generally speaking, individuals who have steady, year-round employment will tend to have higher overall incomes than those who are laid-off for part of the year.

Unit of Government	2009
Alcona County	\$32,644
Alpena County	\$35,710
Cheboygan County	\$36,860
Crawford County	\$35,866
Montmorency County	\$32,809
Oscoda County	\$32,928
Otsego County	\$42,831
Presque Isle County	\$36,520
State of Michigan	\$48,700
United States	\$51,425

Source: U.S. Bureau of the Census

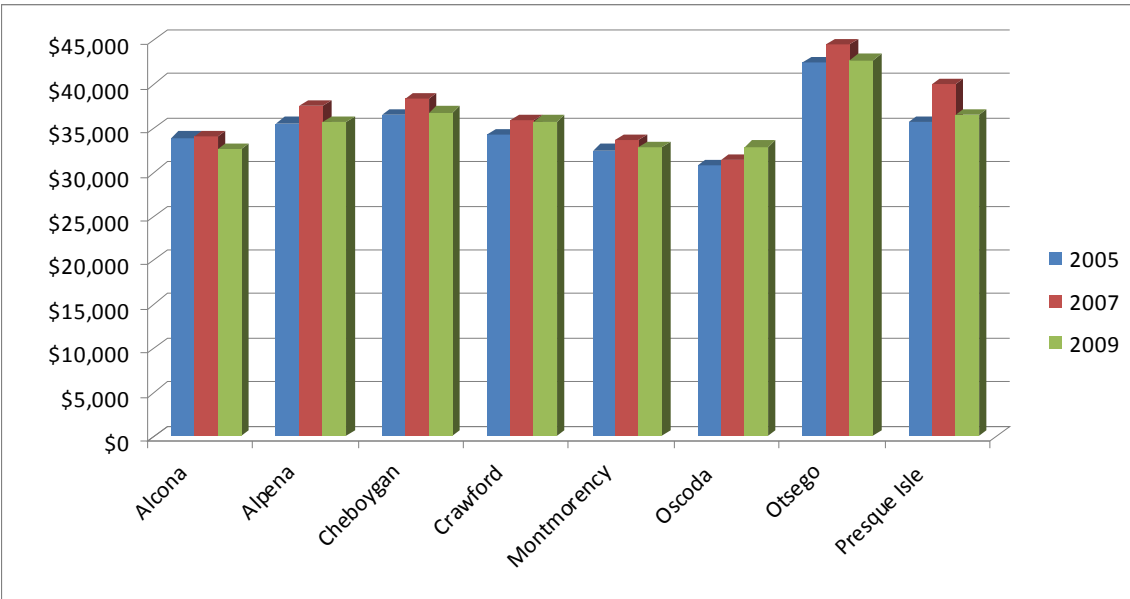


Figure 2.2: Median Household Income for Northeast Michigan

As more retirees move into the region and the local economy becomes more reliant on service and tourism employment sectors, the disparity between northeast counties and the state median household incomes is expected to continue. As

expenses for gas, food and housing continue to increase, moderate to low income families will be challenged to achieve a desirable quality of life. Families are sometimes forced to move to areas that offer higher incomes.

The American Community Survey estimates that median household income in Sanborn Township from 2006-2010 was \$35,357 (Table 2.8). Approximately 60 percent of the households have yearly incomes less than the median incomes of the State and US. Again, this shows the financial challenges to many families living in the community.

Poverty rates continue to be a problem in Sanborn Township and the northeast Michigan region in general. Nearly 19 percent of the families with related children under the age of 18 live at or below the poverty level. This number increases dramatically when a female head of household is present. Fifty percent of the families with a female head of household with children under 18 are below the poverty level. By comparison, persons 65 years and older have lower poverty rates than the other reported groups, which may indicate many retirees have pensions along with other retirement income.

<b>Income and Benefits</b>	<b>2006-2010</b>
Less than \$10,000	5.7%
\$10,000 to \$14,999	11.0%
\$15,000 to \$24,999	17.4%
\$25,000 to \$34,999	15.7%
\$35,000 to \$49,999	14.7%
\$50,000 to \$74,999	19.1%
\$75,000 to \$99,999	5.8%
\$100,000 to \$149,999	4.3%
\$150,000 to \$199,999	3.7%
\$200,000 or more	2.6%
Median Household Income	\$35,357
Source: U.S. Bureau of the Census – American Community Survey estimates	

<b>Category</b>	<b>Percent</b>
Families	12.1%
Families w/related children under 18	18.9%
Families w/related children under 5	41.1%
Families with female head of household w/children under 18	50.0%
Families with female head of household w/children under 5	33.3%
65 years and older	7.3%
Individuals	13.0%
Source: U.S. Bureau of the Census – American Community Survey	

**Employment**

According to the 2006-2010 American Community Survey, 90.4 percent of the civilian labor force in Sanborn Township was employed (Table 2.10). Additionally, the data shows slightly over 42 percent of the population 16 years and older is not in

the labor force. This group includes students, retirees, disabled individuals, and persons no longer seeking employment. Of the civilian labor force, management, professional and related occupations as well as sales and office occupations were the largest occupation work groups (Table 2.11). Table 2.12 shows that nearly 24 percent of the civilian labor force was employed in educational services, health care, and social assistance. Retail trade, manufacturing, and construction all continue to be important factors in employment in Sanborn Township. Table 2.13 shows the private employment sector in Alpena County being dominated by manufacturing, retail trade, and health care/social assistance. However, public

<b>Table 2.10</b>		
<b>Sanborn township, Alpena County, Michigan</b>		
<b>Employment Status</b>	<b>Estimate</b>	<b>Percent*</b>
Population 16 years and over	1,747	
In labor force	1,006	57.6
Civilian labor force	1,000	57.2
Employed	904	51.7
Unemployed	96	5.5
Armed Forces	6	0.3
Not in labor force	741	42.4
Source: U.S. Bureau of the Census – American Community Survey		
* percent of the total population 16 years and older		

sectors jobs dominate overall employment in Alpena County (including employment at Alpena Regional Medical Center). The highest wage earners are employed in the utility sector with mining, manufacturing, and state government also providing high wages.

<b>Table 2.11</b>		
<b>Occupations*: Sanborn Township 2006-2010</b>		
<b>Occupation</b>	<b>Number</b>	<b>Percent</b>
Civilian employed population 16 years and over	904	
Management, business, science, and arts occupations	253	28.0%
Service occupations	84	9.3%
Sales and office occupations	225	24.9%
Natural resources, construction, and maintenance occupations	194	21.5%
Production, transportation, and material moving occupations	148	16.4%
Source: U.S. Bureau of the Census – American Community Survey		
*of the civilian employed population 16 years and older		

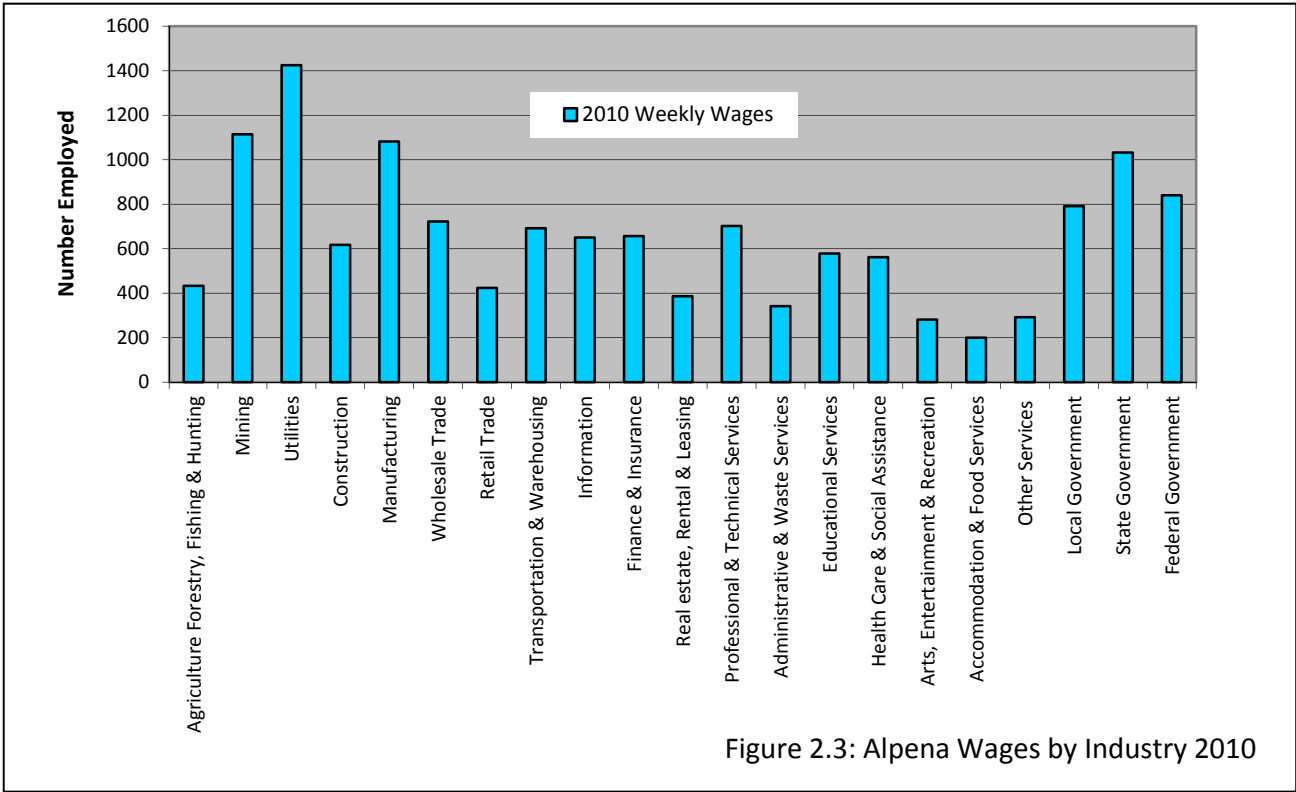
<b>Industry</b>	<b>Number</b>	<b>Percent*</b>
Civilian employed population 16 years and over	904	
Agriculture, forestry, fishing and hunting, and mining	74	8.2%
Construction	60	6.6%
Manufacturing	120	13.3%
Wholesale trade	12	1.3%
Retail trade	128	14.2%
Transportation and warehousing, and utilities	26	2.9%
Information	43	4.8%
Finance and insurance, and real estate and rental and leasing	77	8.5%
Professional, scientific, & management, and administrative & waste management services	78	8.6%
Educational services, health care and social assistance	217	24.0%
Arts, entertainment, recreation, accommodation and food services	24	2.7%
Other services, except public administration	23	2.5%
Public administration	22	2.4%

Source: American Community Survey, civilian employed population 16 years and older

<b>Industry</b>	<b># of establishments</b>		<b>Average employment</b>		<b>Avg weekly wages</b>	
	2009	2010	2009	2010	2009	2010
Agriculture, forestry, fishing & hunting	8	10	23	26	462	433
Mining	5	6	38	57	1,321	1,114
Utilities	4	5	53	56	1,452	1,425
Construction	120	112	443	407	639	617
Manufacturing	51	51	1328	1293	1,049	1,082
Wholesale trade	34	35	415	402	709	722
Retail trade	144	140	1846	1811	414	424
Transportation & warehousing	30	28	232	224	729	692
Information	15	14	192	189	647	650
Finance & insurance	41	40	401	391	680	657
Real Estate, rental & leasing	20	18	113	96	395	386
Professional, scientific & technical services	45	46	185	209	754	702
Management of companies & enterprises	2	2	n/a	n/a	n/a	n/a
Administrative & waste services	35	32	158	160	372	342
Educational services	4	4	16	15	551	578
Health care & social assistance	86	83	1593	1636	585	562
Arts, entertainment, & recreation	23	23	114	101	261	281
Accommodation & food services	66	66	606	612	206	200
Other services (except public administration)	91	92	387	396	313	292
Local Government**	18	17	2,652	2,484	780	791
State Government	10	11	146	151	1,110	1,032
Federal Government	15	16	106	133	897	840

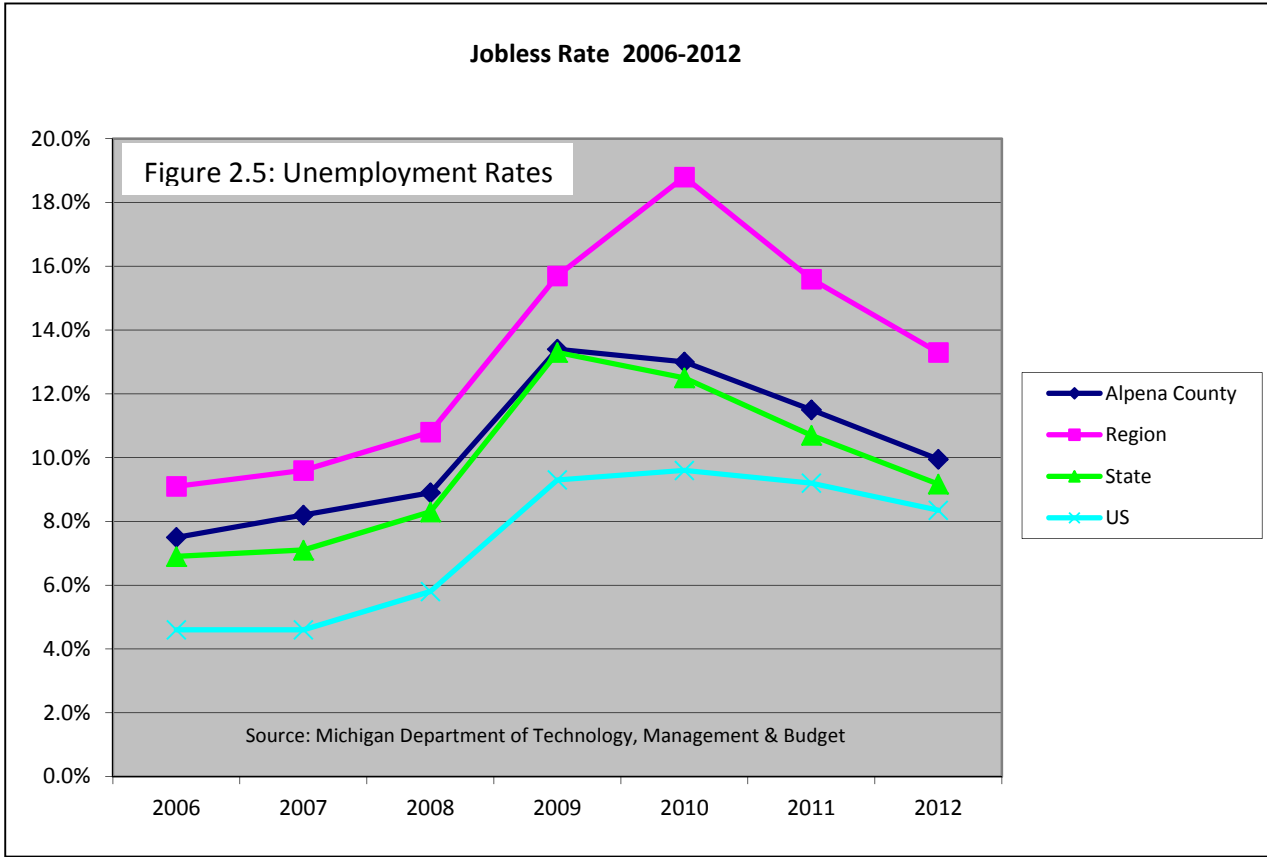
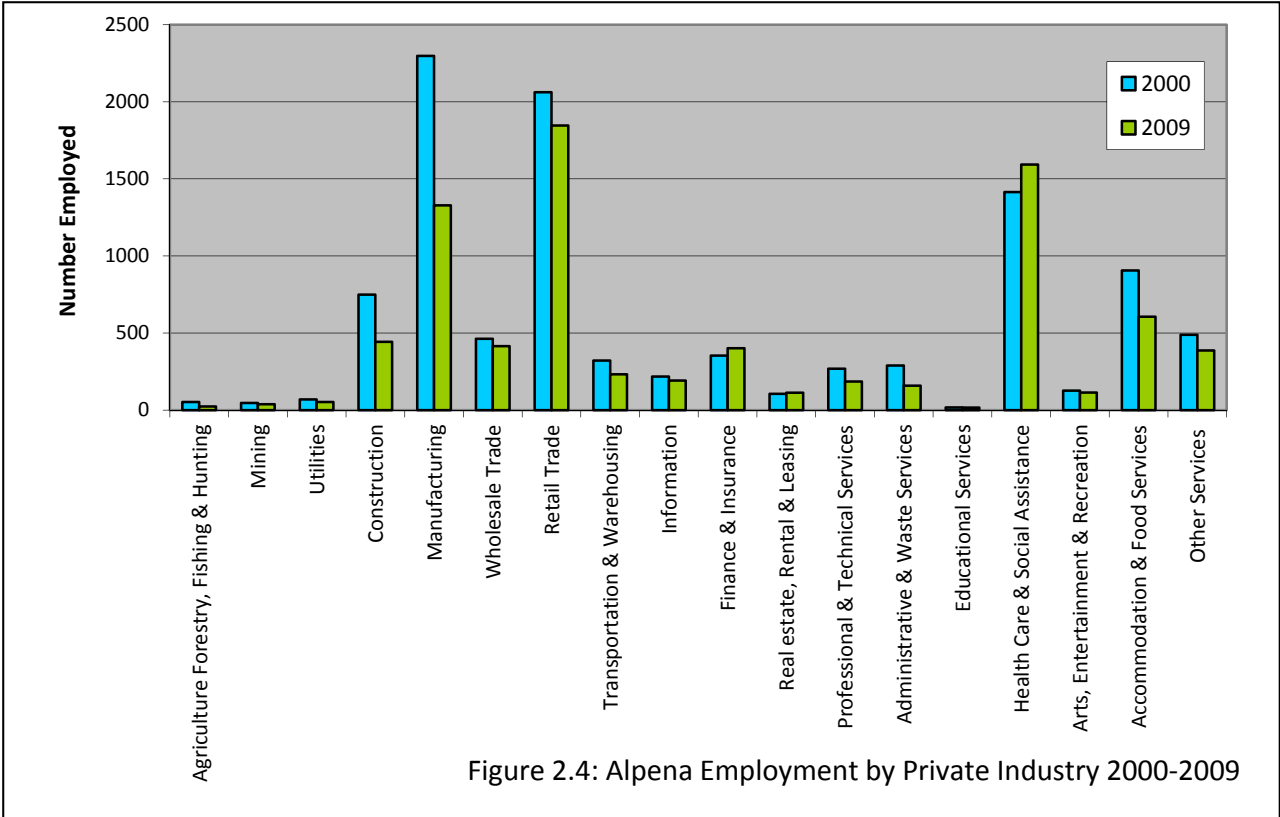
Source: Department of Technology, Management & Budget 2011 (2010 represents average of 1<sup>st</sup> – 3<sup>rd</sup> quarters)

\*Some state and local government workers, such as those who work at state colleges, universities, elementary and secondary schools, are excluded. \*\*Includes Alpena Regional Medical Center.



### Unemployment

The unemployment rates for Alpena County have historically been higher than the State of Michigan and the US (Figure 2.5). Alpena County's economy, like the state of Michigan, was stronger in the late 90's. Since 2001, the annual unemployment rate for Alpena County began to rise until finally reaching over 14% in 2009 nearly equaling the State of Michigan rate. Since 2009, unemployment rates have begun to decline. The regional unemployment rate in Northeast Michigan has remained consistently higher than in Alpena County.





## Agriculture

According to the 2007 Census of Agriculture prepared by the United States Department of Agriculture, the amount of land being farmed in Alpena County has increased from 73,790 acres in 2005 to 85,947 acres in 2007. 46,450 acres of cropland were harvested in 2007. Corn for grain (5,285 acres), corn for silage or greenchop (2,525 acres), wheat (3,695 acres), oats (2,474 acres), sunflower seeds (2,199 acres), and soybeans (for beans) (2,802 acres) are the primary crops in Alpena County. 25,265 acres of land is used for hay and all haylage, grass silage, and greenchop. In 2007, there were 11,336 heads of cattle, 514 hogs and pigs, 277 sheep and lambs, 1,534 chickens (layers), and 740 chickens (broiler/other meat type). The total market value of agricultural crop production in Alpena County totaled \$21,458,000 with crop sales reaching \$6,430,000 and livestock production reaching \$15,028,000. **Tables 2.14 and 2.15** highlight agricultural statistics for Alpena County.

Farms (number)	573
Land in farms (acres)	85,947
Land in farms - Average size of farm (acres)	150
Land in farms - Median size of farm (acres)	79
Estimated market value of land and buildings (average per farm)	\$387,180
Estimated market value of land and buildings (average per acre)	\$2,581
Estimated market value of machinery and equipment (average per farm)	\$66,222
Farms by size - 1 to 9 acres	16
Farms by size - 10 to 49 acres	195
Farms by size - 50 to 179 acres	246
Farms by size - 180 to 499 acres	79
Farms by size - 500 to 999 acres	29
Farms by size - 1,000 acres or more	8
Total cropland (farms)	525
Total cropland (acres)	59,577
Total cropland - Harvested cropland (farms)	420
Total cropland - Harvested cropland (acres)	46,450
Irrigated land (farms)	18
Irrigated land (acres)	34
Market value of agricultural products sold (average per farm)	\$37,449
Total farm production expenses (average per farm)	\$30,420
Net farm income (average per farm)	\$9,251
Farms by value of sales - Less than \$2,500	264
Farms by value of sales - \$2,500 to \$4,999	68
Farms by value of sales - \$5,000 to \$9,999	75
Farms by value of sales - \$10,000 to \$24,999	70
Farms by value of sales - \$25,000 to \$49,999	28
Farms by value of sales - \$50,000 to \$99,999	21

Farms by value of sales - \$100,000 or more	47
Principal operator by primary occupation - Farming	217
Principal operator by primary occupation - Other	356
Cattle (farms)	178
Hogs and pigs (farms)	26
Sheep and lambs (farms)	17
Chickens – meat (farms)	8
Chickens – layers (farms)	55
Corn for grain (farms)	86
Corn for silage or greenchop (farms)	47
Wheat (farms)	40
Oat (farms)	49
Barley (farms)	9
Sorghum (farms)	8
Soybeans (farms)	21
Dry edible beans (farms)	4
Potatoes (farms)	7
Forage (farms) land used for hay and all haylage, grass silage, and greenchop	344
Sunflower seeds (farms)	9
Vegetables (farms)	25
Land in orchards (farms)	24
Hired farm labor (workers)	335
Source: The Census of Agriculture, United States Department of Agriculture, 2007	

Key Products	Production	Revenues
Corn, soy, and wheat	14,307 acres	\$2,554,000
Vegetables	85 acres	\$182,000
Fruit and tree nuts	103 acres	\$175,000
Dairy farms	39 farms	\$12,409,000
All animal operations	281 operations (16,537 animals)	\$15,028,000
Michigan Department of Agriculture – July 2009		

**State Equalized Value**

By analysis of the State Equalized Value (SEV), characteristics of property values can be obtained. Over the past decade the residential portion of the county-assessed value increased steadily. However, agriculture has decreased since 2000. Commercial peaked in 2008, and then began decreasing while industrial property peaked in 2010, then decreased.

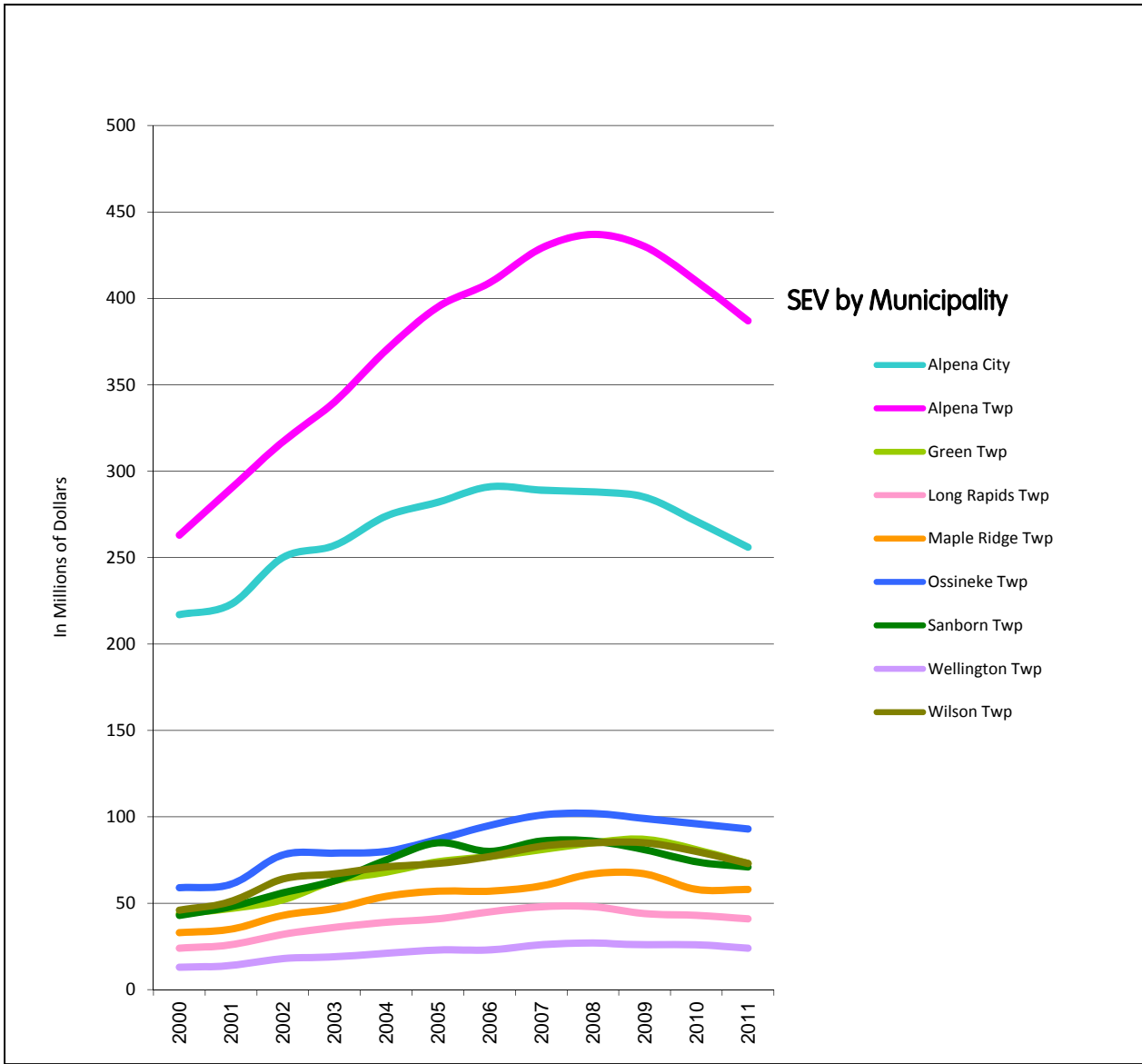
**Figure 2.6** shows the change in the SEV in the Alpena County municipalities over the last decade. Nearly two-thirds of the county's SEV is concentrated in the City of Alpena and Alpena Township. Over the past ten years, the SEV in all the townships was on the increase until 2008 when the values began decreasing. SEV in Sanborn Township peaked in 2008 and has been decreasing each year. It is anticipated real estate values have leveled and will begin increasing.

**Table 2.16  
Sanborn Township Assessed Value**

Year	Agricultural	Timber Cut-Over	Commercial	Industrial	Residential	Real + Personal Property
2012	\$11,562,800	\$1,385,000	\$4,757,600	\$534,400	\$45,592,300	\$66,747,179
2011	\$11,601,000	\$1,469,200	\$4,925,700	\$508,200	\$49,517,500	\$71,223,671
2010	\$13,144,700	\$1,782,700	\$5,300,600	\$532,900	\$50,105,500	\$73,993,994
2007	\$16,343,300	\$2,321,500	\$4,845,200	\$494,300	\$58,674,400	\$85,826,296
2005	\$22,110,600	\$1,741,300	\$4,861,400	\$431,100	\$51,162,354	\$84,622,722
2000	\$8,570,900	\$847,100	\$2,519,300	\$292,200	\$29,135,100	\$43,477,700

Source: Michigan Department of Treasury

Figure 2.6: Change in SEV by Municipality



Revenue

Revenue is generated from tax dollars received from residents and businesses which are generated from the millage rate multiplied by property valuations. Revenue is also generated from other sources such as State and Federal grants, permits, and fees. **Figure 2.7** shows the sources of revenue for Sanborn Township. The two largest revenue sources are State Revenue Sharing and Property Taxes. Figure 2.8 shows the percentage of expenses in the Township, while Figure 2.9 shows the expenses and revenues compared to total cash and investments.

Figure 2.7: Sanborn Township Revenue Breakdown

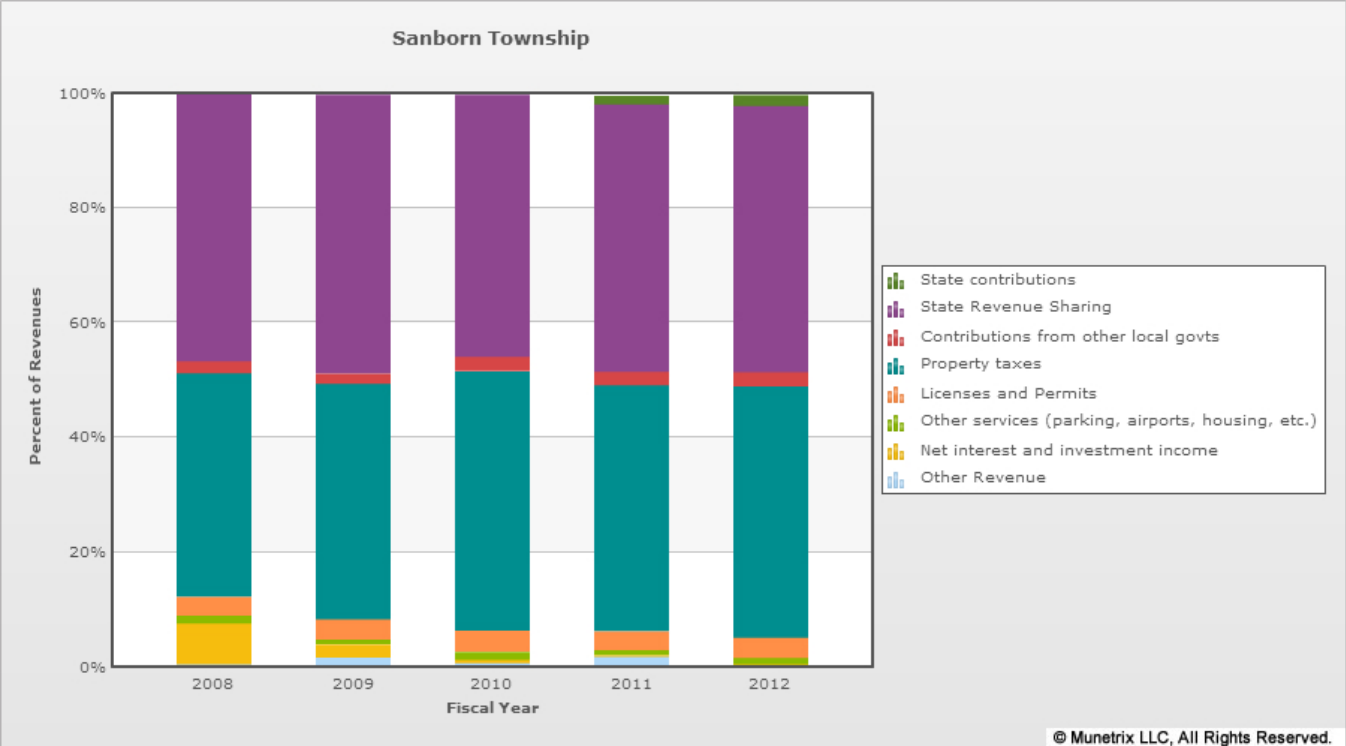


Figure 2.9: Sanborn Township Revenues and Expenses

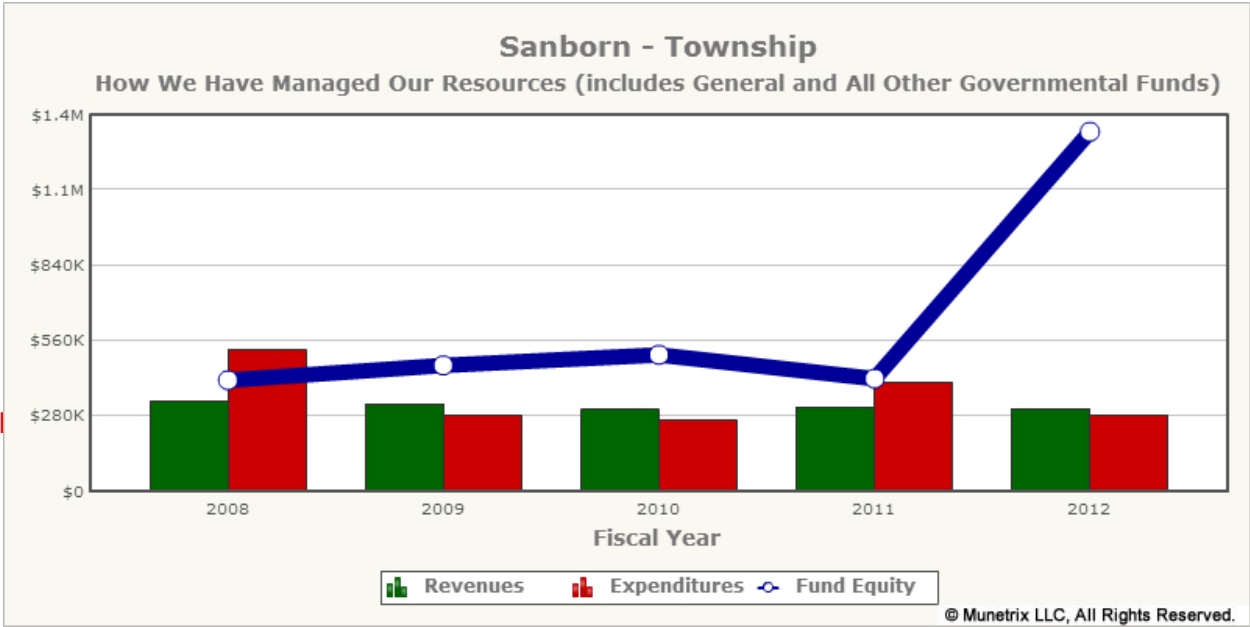
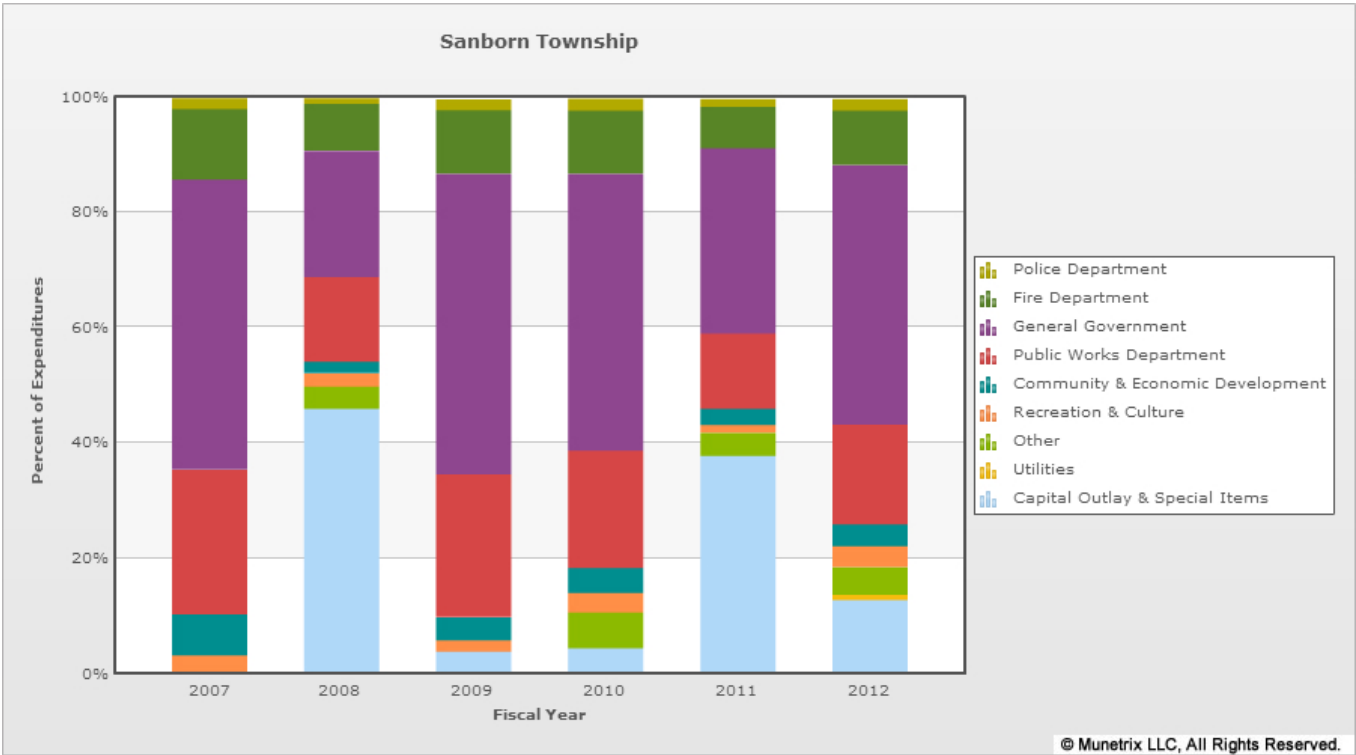


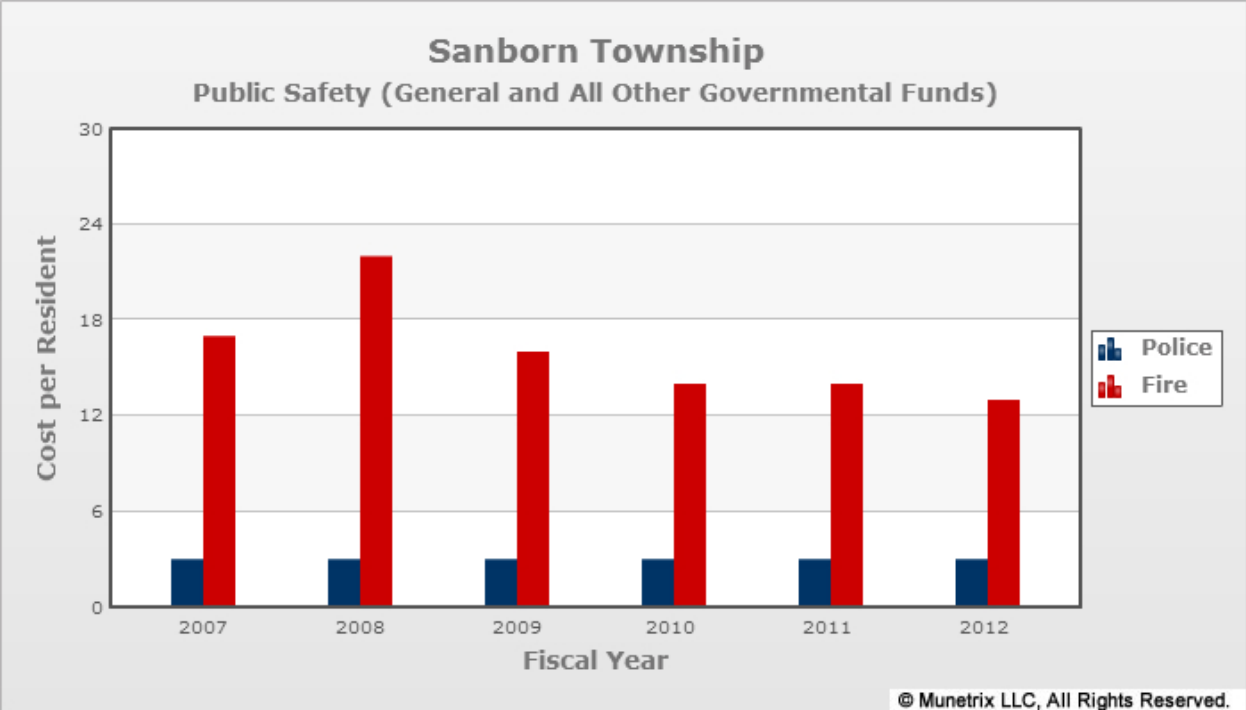
Figure 2.8: Sanborn Township Expenses Breakdown



*Public Safety Cost per Resident*

Figure 2.10 displays the total cost per resident for public safety in Sanborn Township from 2007 to 2012. In 2008, the cost was \$25 per resident and that has decreased to \$16 per resident in 2012.

Figure 2.10: Total Public Safety Cost per Resident



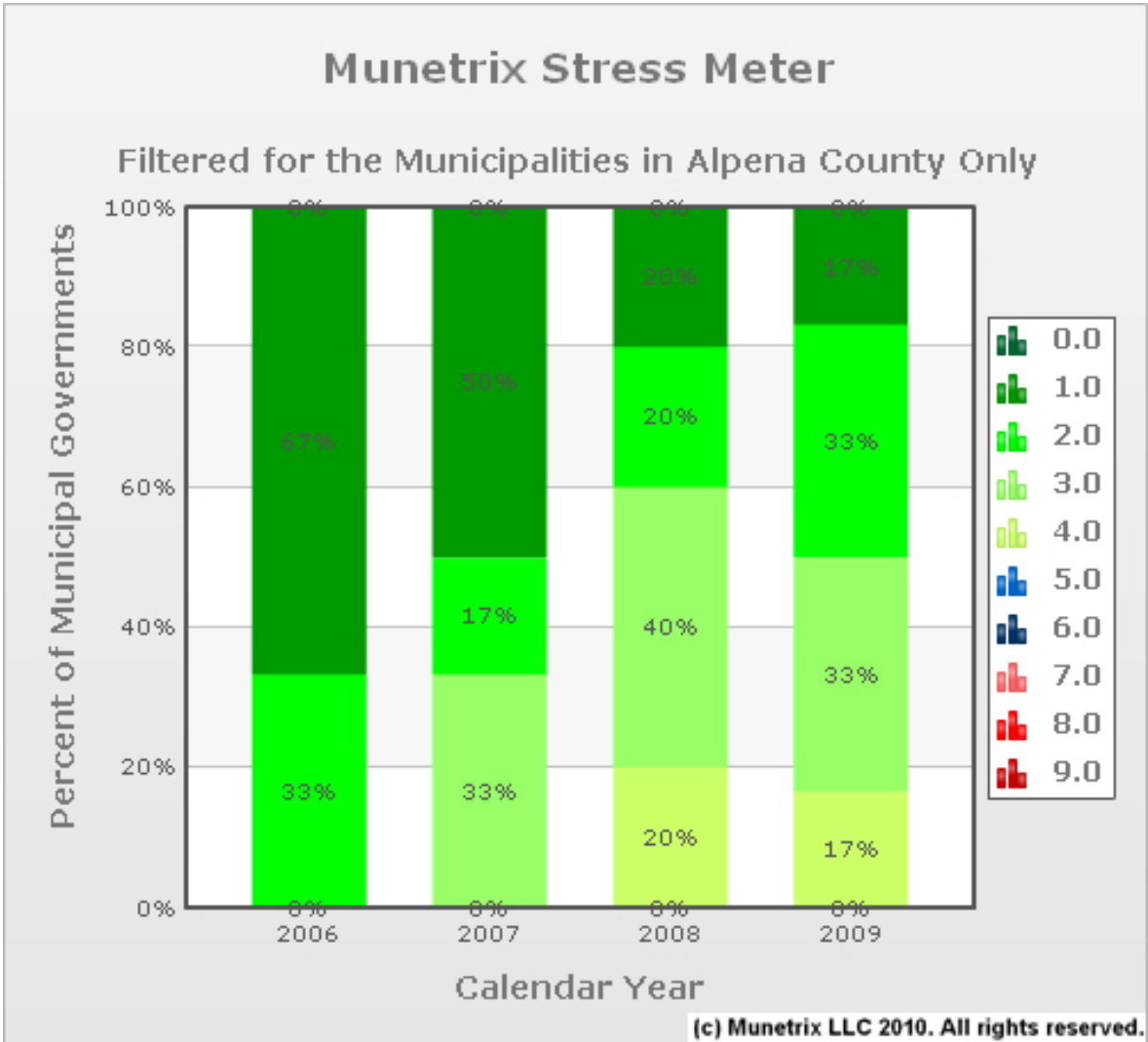
The "Stress Meter" provides an overview of Indicator Scores used by the State of Michigan to calculate the financial stress of a municipality. The Indicator Score gives an overall picture of the soundness of local governments, the trend of stability over time, and allows the identification of local units that are most in need of help. Scores are generated based on the criteria of population growth, real taxable value growth, large real taxable value growth,

Points from Scale	Category	State Action
0-4	Fiscally Neutral	No State action needed
5-7	Fiscal Watch	Unit of local government is notified of its relatively high score and is placed on a watch list for the current and following year.
8-10	Fiscal Stress	Unit of local government is notified of its high score, is placed on a watch list for the current and following year, and receives consideration for review.

Source: Munetrix, 2012

general fund expenditures as a percent of taxable value, general fund operating deficit, prior general fund operating deficit, size of general fund balance, fund deficits in current or previous year, and general long-term debt as a percent of taxable value. The lower the number the more fiscally sound a local unit is determined to be. There are three categories of scores grouped by color; shades of green, blue and red (Table 2.17). The State Department of Treasury uses these indicator scores to determine those communities in Michigan which are under the most extreme financial stress. Figure 2.11 shows the indicator scores for all municipalities in Alpena County. The graph shows a trend of lighter green (more financial stress) since 2006, but all municipalities remain in the Fiscally Neutral category. As can be seen, some communities in the region were included in the Fiscal Watch category beginning in 2006.

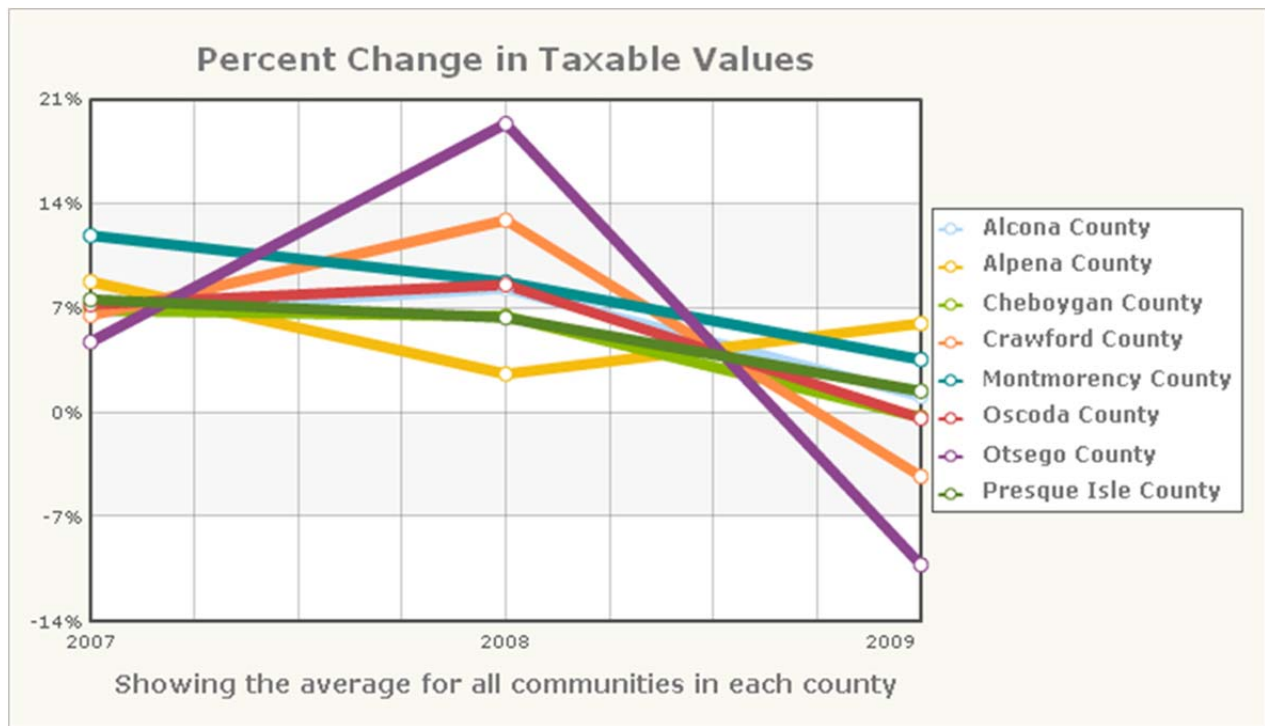
Figure 2.11: Fiscal Stress for Alpena County Municipalities



### Percent Change in Taxable Value

Much as with population growth, there appears to be a relationship between declining taxable value of a unit and its fiscal health. Since many local governments rely heavily upon property taxes, it follows that decreases in taxable value will require major adjustments in expenditures. Two-year growth periods of real taxable value for each unit are computed. Units score a 1 if they demonstrate negative real growth and a 0 if they exhibit positive real growth. To compute real taxable value, the current year taxable value is divided by the adjusted deflator. **Figure 2.13** shows percent change in taxable value for all of Northeast Michigan.

**Figure 2.13: Percent Change in Taxable Values for Northeast Michigan**





## CHAPTER 3

# COMMUNITY SERVICES AND FACILITIES

Key factors that contribute to the quality of life of a community are the type and variety of services available to residents and visitors. Unlike more populated communities, smaller rural communities do not have the financial resources to provide many of the services that would normally be considered essential. In the case of fire and ambulance services, many rural communities work cooperatively with adjacent communities to provide essential services.

This chapter of the Master Plan will identify the types and extent of services available to residents and businesses in Sanborn Township. Although these services may be sufficient for the needs of the current population, future development may increase the demand to upgrade or expand services and facilities to maintain a satisfactory living environment.

### Water Supply & Sewage Disposal

Public drinking water is not available in Sanborn Township. Residents rely upon on-site private wells for domestic drinking water. Private drinking water wells are regulated by the District Health Department under the Public Health Code. Wells for facilities such as schools or motels serving the public fall under regulations of the Federal and State Safe Drinking Water Acts, where isolation distance, minimum yield and water quality testing requirements are more stringent than for a residential well.

According to well log records obtained from the Center for Geographic Information, drinking water wells in Sanborn Township are drilled to a depth of between 20 and 290 feet. **Figure 3.1** shows location of wells, aquifer types and depth of wells). The well database contains 213 water well records and a majority of the wells (161) are drawing from aquifers in glacial drift. Twenty-eight wells were drilled into bedrock and are concentrated in the coastal areas. While a majority of the wells are for household use, some 30 are classified as public and serve commercial and institutional facilities.

Residents of the Township must also rely on private on-site septic systems. Two important determinants for siting a septic system are soil types and steepness of slopes. In areas with clay soils, steep slopes and small lots, siting and maintaining septic systems can pose problems. The same holds true on lakefront properties, where older systems must be upgraded to accommodate increased usage from year round living or building larger homes. In some cases it is not possible to expand septic systems due to small lot sizes, and required isolation distances from water wells and surface water. Chapter 4 - Natural Resources provides color thematic maps depicting soil constraints in Sanborn Township.



## **Solid Waste**

Alpena County is a member of the Montmorency-Oscoda-Alpena Solid Waste Management Authority (MOASWMA) The MOASWMA landfill in Montmorency County is the primary destination for the Township's solid waste.

The Alpena Resource Recovery Program consists of the Resource Recovery Facility located on M-32 in addition to full-time drop off sites located at Long Rapids Township Hall, Maple Ridge Township Hall, Green Township Hall, Alpena Township Hall, Alpena High School, Sanborn Township Hall, Bob-Lo Store, Neiman's Family Market, and the Habitat for Humanity Restore. The Resource Recovery Facility operates six days a week and accepts electronics, household hazardous waste, paper, tin, batteries, aluminum, plastic, cardboard, garbage, construction debris, mattresses, furniture, appliances, and motor oil at variable rates. They also participate in the "Cleansweep" program sponsored by the Michigan Department of Agriculture, which is designed to encourage citizens to turn in hazardous materials. Efforts to promote recycling with the community are having positive impacts as nearly one-third (30.1%) respondents' indicated that they utilize the Resource Recovery Facility.

## **Utilities**

Electrical power is provided by Alpena Power Company, Presque Isle Gas and Electric Coop and Consumers Energy, and natural gas is provided by Presque Isle Gas and Electric Coop and DTE. Frontier and Charter provide regular telephone service while cellular telephone service is provided by various vendors. Residents may purchase liquid propane gas or fuel oil from several suppliers throughout the area, while some residents elect to heat with wood, corn, or pellets.

## **Media**

Newspaper coverage is provided by the Alpena News, the County's only local newspaper. Located in the City of Alpena, it supplies local, regional and national news to County residents and is published six days a week. Other newspapers circulated to area readers include the Alcona Review, Detroit News, Detroit Free Press, Bay City Times, USA Today and various advertising media.

Residents of Alpena County receive full television coverage; both network and cable stations. One station (WBKB-TV) has an office located in the County. Cable television service is available in a portion of Alpena County through Charter Communications. The more rural portions of the county cannot receive cable service. A wide array of radio stations can be received throughout Alpena County. Radio stations located in the County include WATZ-AM/FM, WHSB-FM/Bay 108, and WQLB/WKJZ (B-Rock).

## **Postal Service**

Residents of the Township are served by post offices located in Ossineke and Alpena.

## **Schools**

Sanborn Township is located in the Alpena Public School District. The Alpena Public School District has six elementary schools, one middle school and one high school. Sanborn Elementary School is located at 12170 US-23 South in Ossineke, where over 200 students attend Kindergarten through grade 5. The Thunder Bay Junior High School is located at 4500 South Third Ave. in Alpena Township, while the Alpena Senior High School is located at 3303 South Third St. in the City of Alpena. Students in the Alpena Public Schools may participate in "specialized schools" in order to meet their individual needs.

The Intermediate School District includes Alpena County, Montmorency County, and Alcona County. Known as the Alpena-Montmorency-Alcona Educational Service District, this agency also oversees the operation of the Pied Piper Opportunity Center located at 444 Wilson Street in the City of Alpena. They provide individualized instructional programs in personal care, independent living, language, and physical, vocational, academic and social-emotional education. Pupils are served at the center, at home, in the hospital or wherever needs are best met.

*Northeast Michigan Area Vocational Technical Center:* Housed by the Alpena High School, the Tech-Ed Center provides a wide range of career and technical programs to students from Alpena, Alcona, Hillman, Atlanta, Posen and Rogers City high schools and to those from the ACES Academy (see below). Adults may also participate in programs that range from studies in agri-science to computer specialists.

*ACES Academy (Alternative Choices for Educational Success):* Housed in the former OxBow Elementary School in Alpena, the ACES Academy offers adult and alternative education, as well as community education programs. Its Alternative Education component serves students who have difficulty with the regular program at the Alpena High School. The Adult Education program helps adults earn a high school diploma equivalent (GED).

*Alpena Community College (ACC)* is a two-year institution serving the higher education needs of area residents. Alpena Community College's main campus is located in City of Alpena. ACC offers two-year degrees, one-year certificates, and customized training. The college offers Associate in Arts, Associate in Science, Associate in Applied Science and Associate in General Studies Degrees.

Additionally, the World Center for Concrete Technology has an associate degree concrete technology program and the Blockmakers Workshop program at ACC's campus in Alpena. Alpena Community College is also a member of the Michigan Community College Virtual Learning Collaborative and offers selected courses online to students who have difficulty attending classes on campus. The Madeline Briggs University Center at Alpena Community College houses offices of accredited four-year institutions that are cooperating with ACC to make completion programs for selected bachelors and master's degrees available in Northeast Michigan. These institutions include Spring Arbor University, Central Michigan University, and Northwood University.

### **Libraries and Museums**

Residents of the Township use the George N. Fletcher Library located in downtown Alpena. Established in 1967, it serves Alpena County from a facility that was constructed in 1974 and fully remodeled in 1997. In 2002, the library was expanded into an adjacent building. Library services include books, magazines, newspapers, compact discs, audiotapes, films, videocassettes and an art lending library. Inter-library loan services and computers with Internet access are available for public use. The Thunder Bay National Marine Sanctuary & Underwater Preserve established an agreement with the Library to jointly manage the Thunder Bay Sanctuary Research Collection, one of the premiere collections on Great Lakes history in the world. Residents in the western parts of the Township also access the Hubbard Lake Library.

The Besser Museum for Northeast Michigan is the only museum in Northeast Michigan accredited by the American Association of Museums. Located in the north part of the City of Alpena, it is the regional center for art, history and science in northeast Michigan. The Great Lakes Maritime Heritage Center is a 20,000-square-foot facility that highlights the maritime heritage of the Great Lakes and the shipwrecks of Thunder Bay. The facility features a maritime heritage "discovery center" featuring more than 8,000 square feet of exhibits on the Great Lakes, shipwrecks, archaeology, and maritime history.

The Great Lakes Maritime Heritage Center, which also has interpretive shipwreck displays relating to the Thunder Bay National Marine Sanctuary, has been developed in a refurbished building within the old Fletcher Paper Mill property along the Thunder Bay River. The exhibits feature a life-size hand-built replica of a portion of a 1800s Great Lakes schooner, a recreation of a shipwreck site, artifact lab, and hundreds of interpretive learning opportunities.

### **Medical Facilities**

Residents have access to health services at the Alcona Health Center and Pharmacy in Ossineke, Alpena Regional Medical Center is a 146-bed acute care

facility located in the City of Alpena. Alpena Regional Medical Center is the federally-designated rural Regional Referral Center for northeast Michigan and home to the Northeast Michigan Cancer Center. The hospital has an emergency department equipped to provide services for minor injuries and illness to trauma. Air and ambulance service is available for patients requiring care not available locally. There are two medical/surgical units that can provide care for adult and pediatric patients. Alpena Regional Medical Center and other local medical providers also offer a wide variety of specialized medical services. Examples include kidney dialysis, specialized cancer treatments, behavioral treatment, and treatments for sleep disorders, as well as other services. The hospital has a recompression chamber for hyperbaric oxygen therapy to divers with the bends or caisson disease.

District Health Department #4 service area includes Alpena, Cheboygan, Montmorency and Presque Isle Counties. Services are provided through four major divisions; Personal Health Services; Home Health Services; Environmental Health Services and Health Education. Health Department offices are located in Alpena, Cheboygan, Atlanta and Rogers City.

Northeast Michigan Community Mental Health provides support services to developmentally disabled persons as well as persons needing mental health services. The Northeast Michigan Community Mental Health service area covers Alpena, Alcona, Montmorency, and Presque Isle Counties.

### **Cemeteries**

Sanborn Township Cemetery is township owned and located on Ossineke and Piper Roads. The Hope Lutheran Cemetery, Amish Cemetery and St Catherine Cemetery are also located in the Township.

### **Public Safety**

There are no municipal law enforcement agencies in Sanborn Township. The law is enforced by the Alpena County Sheriff's Department, located in the City of Alpena. The Sheriff's Department is responsible for road, snowmobile, marine safety, and off-road vehicle patrols. The Michigan State Police, Alpena Post, provides supplemental support to the Sheriff's Department. The Alpena County Jail provides lock-up facilities for use by all law enforcement agencies in the County. The countywide enhanced 911 emergency service, operated from the Sheriff's Department in the City of Alpena, is available to all county residents.

Two Department of Natural Resource Conservation Officers are assigned and living in Alpena County. They are certified law enforcement officers primarily responsible for conservation law enforcement.

The Combat Readiness Training Center (CRTC) located at the Alpena Regional

Airport has a full time fire department with complete fire, rescue and HAZMAT (hazardous materials) capabilities. The CRTC also has self-contained facilities large enough to house 3,000 persons, up to a maximum of 6,000 persons under emergency conditions.

All fire departments in Alpena County have mutual aid agreements. The County has an "all encompassing:" mutual aid agreement with the adjoining counties of Iosco, Alcona, and Oscoda that provides for assistance outside the realm of normal emergency services. Sanborn Township Fire Department provides emergency services to the entire Township along with providing contractual coverage to Caledonia Township. The fire protection/hall located at 12011 U.S. 23 South. Voters in the Township approved 1 mill property tax assessment for emergency services. The fire department has a tanker truck, rescue van, Willy's jeep, and two fire trucks. Staff consists of 12 volunteers that include the fire chief, EMT, first responders & fire fighters. For the current fiscal year, the Township budgeted \$35,250 for operating costs.

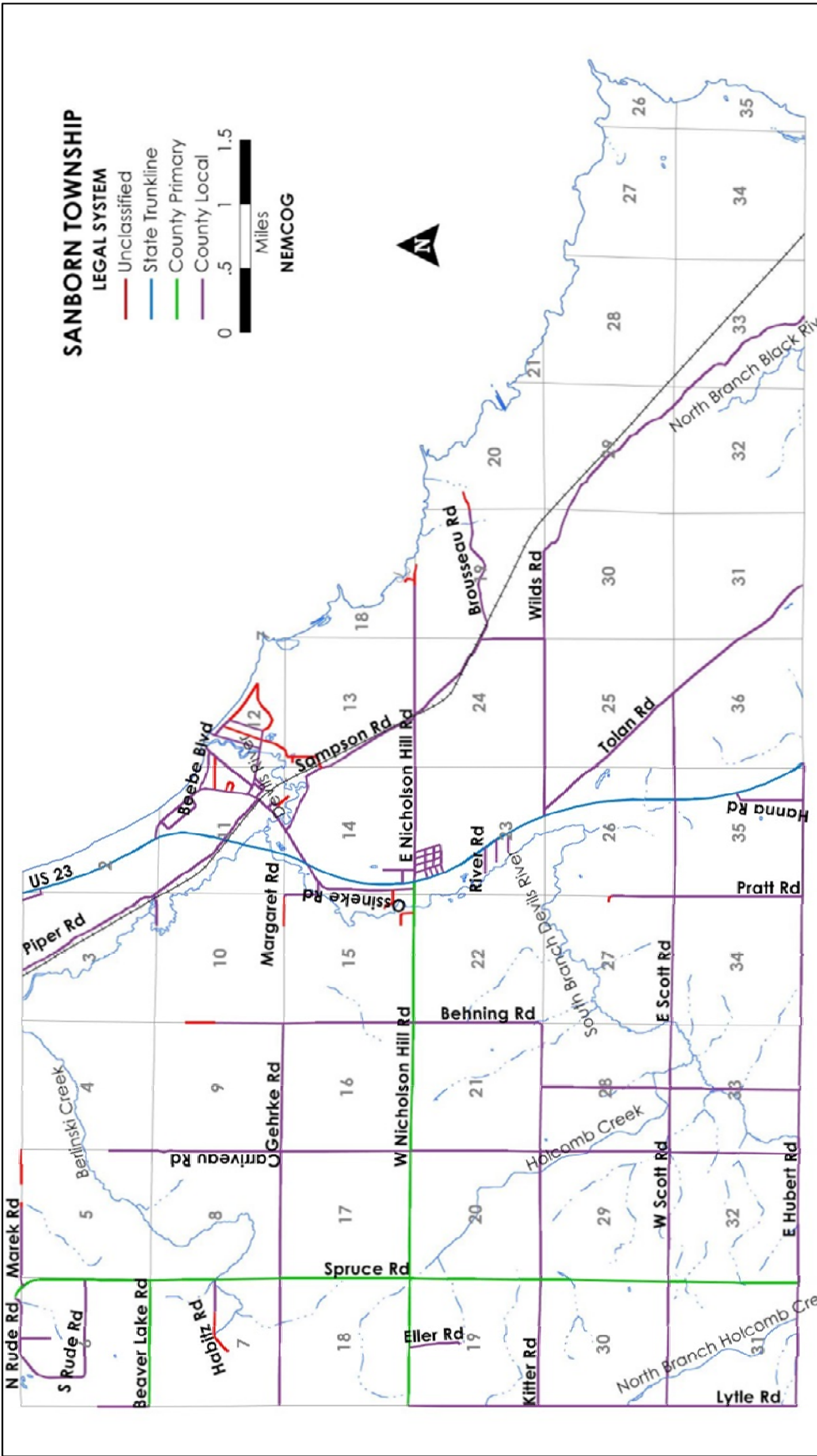
## **Roads**

The county road network in the western part of the Township is the typical one mile grid pattern found in farming communities. The eastern regions are quite a different story. Extensive wetlands and public lands combined with large tracts of forested hunting and recreational land have resulted in minimal road developments. The Michigan Center for Geographic Information maintains the Framework data set that contains up-to-date road information for each county. According to the Framework, in Sanborn Township there are 82 miles of road including over 6.4 miles of state trunkline (US-23), 11.2 miles of county primary roads and over 60 miles of county local roads. There are 4.3 additional miles of unclassified roads in the Township. County primary roads include Beaver Lake Road, Nicholson Hill Road, and Spruce Road (**Figure 3.2**). The Alpena County Road Commission is the agency responsible for maintenance, snow removal and improvements.

## **Transit**

Thunder Bay Transportation Authority was formed by the City of Alpena, Alcona County and Montmorency County in 2006 to deliver the service formally provided by the Thunder Bay Transportation Corporation and City of Alpena Dial-A-Ride system. See **Table 3.1**

Figure 3.2





<b>Table 3.1 Thunder Bay Transportation Authority System Characteristics</b>	
Days/Hours of Operations:	M-F 7:00 a.m. - 7:00 p.m. SAT 8:00 a.m. - 7:00 p.m. SUN 9:00 a.m. - 6:00 p.m.
Total vehicles:	35
Lift-equipped vehicles:	31
Population Served:	51,411 (Alpena, Alcona & Montmorency counties)
Employees:	55
<b>FY 2011 System Data</b>	
Miles:	614,989
Vehicle Hours:	34,867
Passengers:	124,041
Total Eligible Expenses:	\$2,231,925

Indian Trails, Incorporated provides statewide public transportation services on a daily basis. The bus route follows US-23 through Alpena County. Buses operate seven days a week, with a southbound run in the morning and northbound run in the afternoon. The company operates 44-passenger buses on this route. Buses are wheelchair lift equipped and have space set aside to accommodate wheelchairs. The Michigan Department of Transportation (MDOT) subsidizes this transportation service for areas in northern Michigan. This system serves as a daily link between select cities and allows people to travel outside the area to other parts of the state and country.

**Air Service**

Regional air service is available at Alpena County Regional Airport (Phelps Collins), which is located in Wilson Township. The facility includes an 11,500 feet of concrete runway and state of the art communications and radar systems. The airport has the ability to accommodate any type of commercial or military aircraft and is a U.S. Customs Port of Entry. Passenger air service connecting to Detroit, Minneapolis and Flint is offered by Delta Air Lines/SkyWest and CSA Air. The airport is also home to the Combat Readiness Training Center (CRTC) of the Michigan National Guard. Charter, airfreight and medevac services, as well as flight training and aircraft rentals are available from a variety of companies.

**Public Land, Public Facilities, & Recreation**

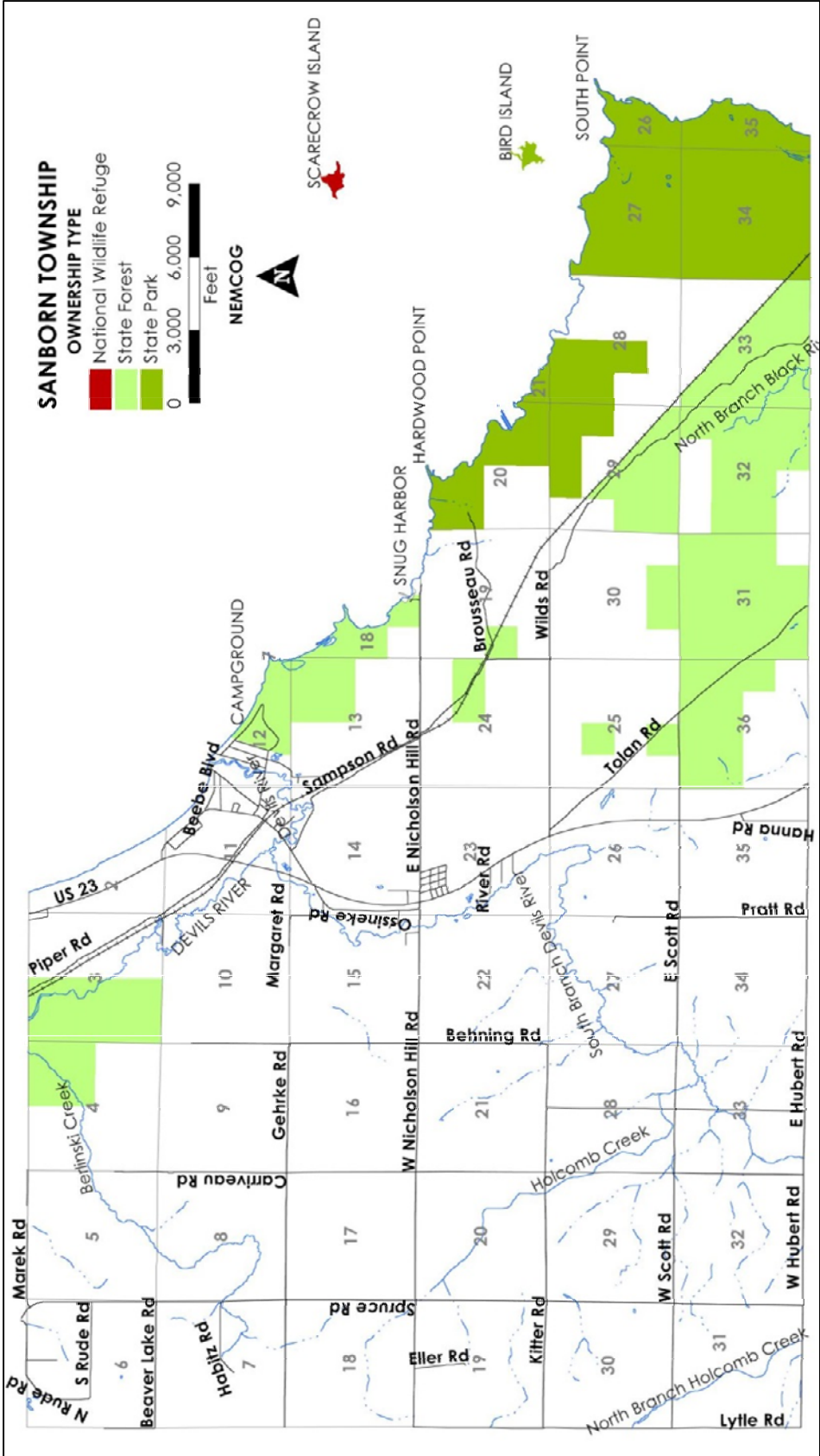
The Mackinaw State Forest accounts for 3,245 acres in the eastern portion of

Sanborn Township (**Figure 3.3**). The lands are used primarily for timber production, hunting, wildlife viewing and wildlands recreation. Located near the outlet of the Devils River, on Lake Huron, the Ossineke State Forest Campground has 42 sites for tent and small trailer use spaced out generously along Lake Huron. Facilities include a day use area with tables and grill, sandy beaches, and a barrier-free boardwalk out to Lake Huron. Rustic campground includes vault toilets, trails and potable water from well hand pump.

The other major public ownership is Negwegon State Park. Negwegon State Park is a rustic, undeveloped area open for hunting and hiking. The entire park covers 3,738 acres (2,045 acres are within Sanborn Township) and straddles the Alcona-Alpena County borders. Negwegon hosts a beautiful undeveloped sandy beach on Lake Huron. There are over 11 miles of hiking trails and four designated back-country camp sites open from April to November.

Other public ownership includes the Sanborn Township Park, a day use facility on Thunder Bay with picnic tables, grills, playground equipment, beach, changing rooms, vaulted toilets, handicapped accessible pavilion, and paved parking lot. Boat launch on the lower Devils River is owned by the Township and operated by the MDNR. The Shingaba Playground was developed by volunteers and the Township. Ball fields are located on Shingaba and Chamber of Commerce property. Sanborn Township has a public beach on Beebe Boulevard. Scarecrow Islands are part of the Michigan Islands National Wildlife Refuge and is under management of the US Fish and Wildlife Service.

Figure 3.3






# Negwegon State Park

### Influential People


**Chief Negwegon**



Negwegon was a famous Chippewa Chief who lived in the Mackinaw area of Michigan's northern lower peninsula in the late 1700s.

Drawing courtesy of Canadian Archives

**Hazlett Kramer**



Hazlett Kramer is credited for encouraging the State of Michigan to change the name of Alpena State Park to Negwegon State Park, in honor of Chief Negwegon. Kramer lived in Alpena and was a life long advocate for Native Americans.

### Things to do

- 

**Hiking**  
The old negwegon trail provides a great surface for hiking. There are 12 miles of marked hiking trails throughout the park.


- 

**Hunting**  
Negwegon State Park is open to hunting. Both large and small game can be hunted, including white-tailed deer, rabbit and grouse. Stop safe and wear orange during hunting season!


- 

**Paddling**  
The Lake Huron shoreline is a popular location for kayaking and canoeing. Negwegon has over nine miles of wild shoreline to explore.


- 

**Swimming**  
Looking for a place to cool off? Or a nice spot to relax? Grab a swimout and towel and head for the beach.


- 

**Wildlife Viewing**  
Michigan State Parks are great places to view wildlife, and Negwegon is no exception. The Lake Huron shoreline features a wildlife beach, which is a nesting requirement for many shorebirds including plovers and terns.


- 

**Backcountry Camping**  
There are four backcountry campsites within the park. Campsites are located near the Lake Huron shoreline and are equipped with a picnic table, bear pole and outflows. Campers are asked to reserve a site by calling Harbottle State Park at (800) 734-9126.





LEGEND			
	<b>BACKCOUNTRY CAMPSITE</b>		<b>GRASSLAND</b>
	<b>BEACH</b>		<b>LOWLAND CONIFER</b>
	<b>CANOE LAUNCH</b>		<b>LOWLAND SHRUB</b>
	<b>PARKING</b>		<b>NORTHERN HARDWOOD</b>
	<b>HIKING TRAIL</b>		<b>WET MEADOW</b>
	<b>DIRT ROAD</b>		
	<b>ASPEN - BIRCH</b>		



## CHAPTER 4 NATURAL RESOURCES

The greatest attraction for residents and visitors of northern Michigan is the area's environment and the rural nature of this portion of the State. Recreational activities such as hunting, fishing, snowmobiling, boating and a multitude of other outdoor activities are enjoyed by residents and visitors alike. Given the abundance of water features, wetlands, forests and farm resources; the community's natural environment is a major part of the economic base and an income generator.

At the same time, the environment places constraints on human activities. Certain critical and sensitive parts of the natural landscape cannot be altered without creating problems that are not easily corrected. Increased flooding and soil erosion due to the indiscriminate filling of wetlands and clearing of land are but two examples. Therefore, it is essential that any future development respect the different characteristics of the natural environment. This is important in preserving the attractiveness of this part of the State, preventing potential hazards related to undue alteration of the land, and maximizing the economic benefits of the tourist and recreation industry.

### *Climate*

Temperature data from the Midwest Regional Climate Center shows the climate along the immediate Lake Huron shore is semi-marine in nature and lacks many of the temperature extremes found only a few miles inland. Although Thunder Bay and the Thunder Bay River are usually free of ice by the first week of April, water temperatures remain low enough to produce cool breezes reducing the maximum daily temperatures during the spring and summer. In a typical year, there will be seven days with temperatures above 90 °F and 17 days with temperatures below 0 °F. On average, January is the coldest month with a mean temperature of 17.8 °F and July is the warmest with a mean temperature of 66.7 °F (**Table 4.1**).

Summer months are usually mild with considerable sunshine. The average annual total precipitation for the township is 28.4 inches. Most of the summer precipitation consists of rain and thunderstorms which normally occur during the months of June, July and August. Winter months are generally cloudy with frequent light snow flurries. Nearly all of the precipitation in winter is in the form of sleet and snow, usually accumulating in sufficient amounts to form a ground cover for summer grasses and winter grains. The 1971-2010 average seasonal snowfall was 85.3 inches. The following snowfall extremes recorded for this area are:

- Greatest observation-day total, 18.2 inches, recorded February 22, 1922.
- Greatest monthly total, 49.4 inches, recorded March 1926

- Greatest seasonal total, 166.3 inches, recorded during 1970-71
- Least seasonal total, 26.9 inches, recorded during 1936-37
- Greatest snow depth, 42 inches, recorded February 22, 1924

**Table 4.1  
Alpena County Average Temperature and Precipitation 1971-2010**

Period	Average Temperature			Average Precipitation	Average Snowfall
	Max	Min	Mean	Mean	Mean
January	27.3	11.5	19.4	1.63	22.6
February	29.8	11.4	20.6	1.31	17.2
March	38.7	19.1	28.9	1.84	12.7
April	52.8	31.0	41.9	2.39	6.3
May	65.0	40.5	52.7	2.66	0.2
June	75.0	49.7	62.4	2.62	0.0
July	79.9	55.3	67.6	3.03	0.0
August	77.5	53.7	65.6	3.23	0.0
September	69.4	46.5	57.9	2.92	0.0
October	56.4	36.4	46.4	2.61	0.3
November	43.5	28.3	35.9	2.09	7.4
December	32.1	18.4	25.3	1.72	18.6
Annual	54.0	33.5	43.7	28.04	85.3

Source: NOAA: National Weather Service Forecast Office – Gaylord, MI

***Geology and Landforms***

The geology of Sanborn Township, as well as the entire northern Lower Peninsula, can be described in terms of the surface geology (glacial landforms created thousands of years ago) and bedrock geology (sedimentary bedrock laid down over 300 million years ago). The hills, valleys, wetlands, forests, lakes and rivers all attribute their presence and location in the township to the surficial and bedrock geology. This section will describe the quaternary geology (glacial and postglacial landforms) and the underlying bedrock geology.

**Bedrock Geology**

The foundation of the Lower Peninsula and parts of the Upper Peninsula, beneath the mantel of glacial deposits, consists of sedimentary bedrock formed in ancient seas between 200 and 500 million years ago. Over the 300 million years, alternating layers of silt, clay, sediments, marine animals, plants, coral, and other calcareous materials were deposited in the shallow marine seas of the Michigan Basin. Subsequently, these layered deposits were compressed and formed shale, sandstone, limestone, and dolomite bedrock. The upper layers of bedrock within the Township are from the

Middle and Late Devonian geological period, formed between 360 and 400 million years before present. Much of the Township is underlain with Antrim Shale that is primarily black shale with secondary deposits of limestone. Antrim shale contains rich deposits of natural gas. In recent years, intensive exploration has resulted in numerous producing wells throughout the region. Bedrock in the very eastern edge of the Township (South Point) is called Traverse Group, which is primarily limestone with minor deposits of shale.

### Glacial Geology

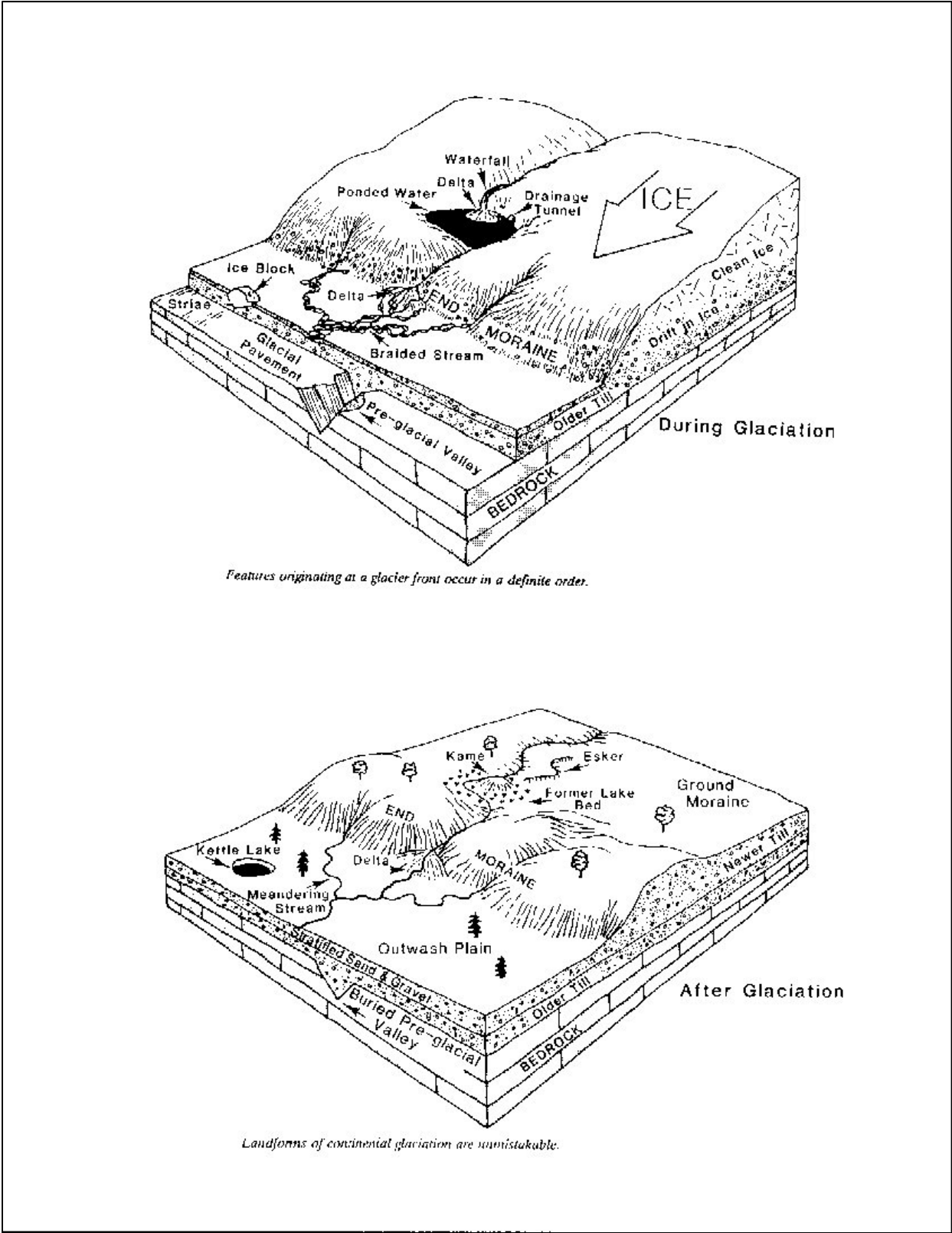
Starting some 2 million years ago, during the Pleistocene Epoch, continental glaciers formed in the Hudson Bay area. Four times, over the two million year period, massive glaciers advanced south across what is today Michigan. The advancing glaciers scraped and broke apart bedrock of the Canadian Shield to the north and sedimentary bedrock of the Michigan Basin. The glacial ice, one to two miles thick, incorporated rocks and soil into the debris laden ice and pushed material in front of it. Each advance and retreat of these continental glaciers took approximately 100,000 years. Time periods between glacial activities, interglacial periods, were much warmer and lasted around 300,000 years.

The last glacial period, called the Wisconsinan Period, created the landscape of hills, valleys, rivers, lakes, swamps we know today. When the debris laden ice melted, boulders, rocks, cobble, sand, gravel, silt, clay and loam were deposited across the landscape. In some areas the material was deposited in unsorted masses called till plains, ground moraines and end moraines. Water flowing from the melting glaciers also sorted materials, creating outwash channels, sand deltas, kames and eskers. Fine materials, captured in the fast moving glacial meltwater, settled to the bottom of expansive glacial lakes creating lacustrine clay and silt plains. **Figure 4.1** shows the formation of glacial landforms.

Two areas of ice contact outwash sand and gravel, deposited by meltwater streams in front of the end moraine or the margins of an active glacier, can be found in the southern parts of the Township. The North Branch of Holcomb Creek flows through one of the ice contact outwash areas and US-23 bisects the other area.

As the continental glaciers melted, water flowed across the landscape creating landforms and pooling into the expansive pro and post glacial lakes. These emerging lake basins were the beginnings of our Great Lakes. During different periods, the glacial great lakes were both much higher and lower than the lake levels we have grown accustomed to in recent times. Subsequent to the glacial ice melting from Sanborn Township, it was inundated by high waters of Lake Algonquin (11,800 to 10,500 years ago, Lake Nipissing (6,000 to 4,000 years ago) and Lake Algoma 3,000 years ago. **Figure 4.2** shows the relative elevations of lacustrine or water borne deposits related to higher lake levels associated with glacial lakes. Landforms and soils in eastern part of the Township were heavily influenced by these different post glacial lake stages.

Figure 4.1: Formation of Glacial Landforms by William R. Farrand





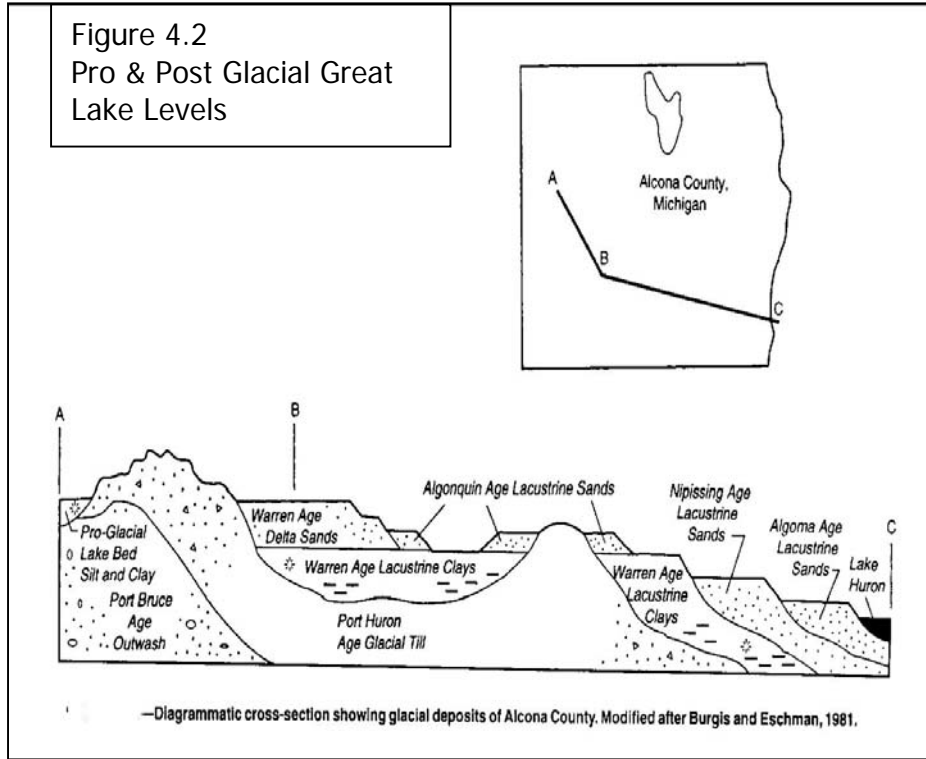
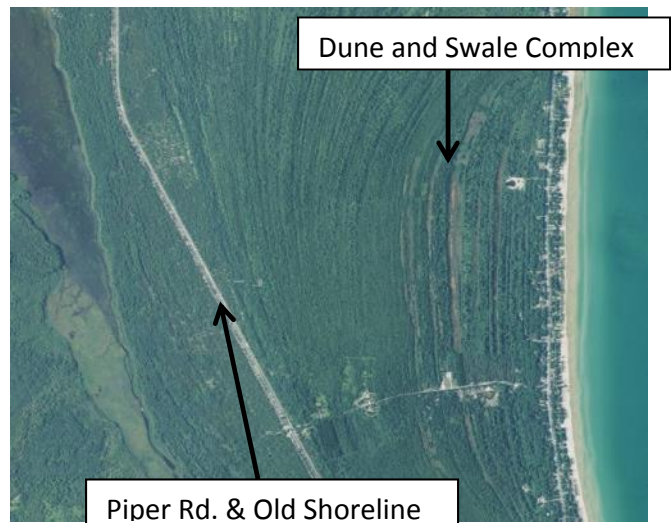


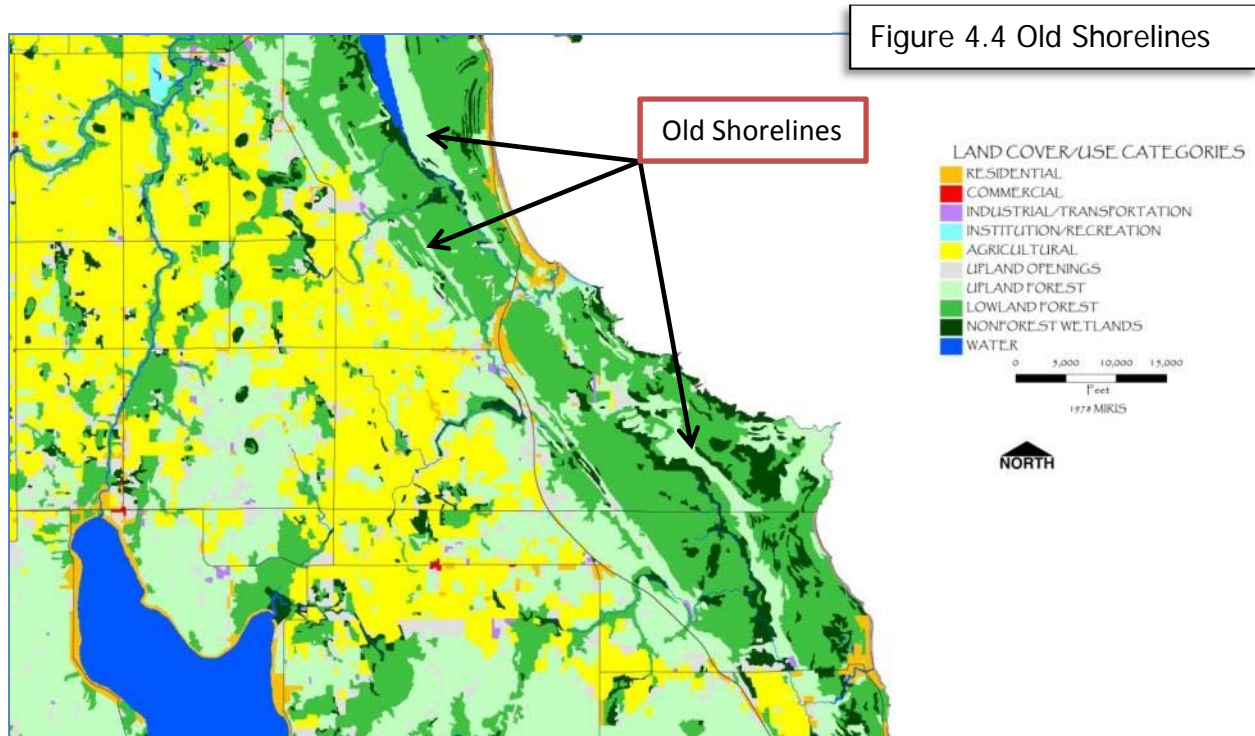
Figure 4.3 Dune and Swale and Devil's Lake

Some of the best examples of ancient glacial great lake shorelines can be found in coastal regions of Alpena and Alcona Counties. Dune and swale complexes are a series of alternating old beach ridges and linear depressions that parallel the Lake Huron shoreline. Near the lake shore the ridges are covered with oak, pine and aspen while lowland conifers and brush can be found growing in the wet depressions. The width of the ridges and associated swales is dependent upon the underlying geology and length of time in which the lake levels receded. The distance between old beach ridges can range from less than 100 feet to a mile or more. A large complex associated with Squaw Bay, extends south into the coastal areas of Sanborn Township. Another excellent example of these unique and rare landforms is located in Negwegon State Park.



A wide sandy ridge, one to two miles inland from the Lake Huron shoreline, runs from the community of Black River in Alcona County, through Negwegon State Park and

Ossineke, continuing north into Alpena Township and City of Alpena. This ancient shoreline was created when the receding lake levels stabilized for a period of time; enabling wind and wave actions to build up the high sandy ridge. Sandhill Road in Alcona County and Piper Road in Alpena County follow this dry sandy ridge.



***Topography***

The topography consists of low hills and a coastal lake plain that slopes gently towards Lake Huron. As a result, elevation variations in the Township are not extreme. The average elevation of Lake Huron is 580 feet above sea level, while the highest land elevations of 850 feet above sea level can be found in section 30 along Lytle Road and along West Scott Road between US-23 and Pratt Road. An abrupt change in elevations occurs along the eastern edge of the Wolf Creek ground moraine which runs in a southeasterly direction from Section 5, through Sections 9, 15, 22, 23 and 26. Driving west on Nicholson Hill Road from US-23, the road climbs up this slope just past Devil's River.

***Soils***

When planning for types and intensity of future land uses, it is important to consider the carrying capacity of the land. Whether resource based activities such as farming, and forestry; residential and commercial development; or recreation and park development, an analysis of soil types and slopes will provide an understanding of the land's suitability for different types of uses.

Soils most suitable for development purposes are well drained and are not subject to a high water table. Adequate drainage is important in minimizing stormwater impacts and the efficient operation of septic drain fields. Adequate depth to the water table is necessary to prevent groundwater contamination from septic systems or other non-point source runoff. Construction of roads, buildings and septic systems on steeply sloped areas, areas with bedrock at or near the surface or areas with organic and hydric soils require special design considerations. In addition, costs for developing these sensitive areas are greater than in less constrained parts of the landscape. If developed improperly, the impacts to natural resources can be far reaching.

The Natural Resource Conservation Service (NRCS) has completed a detailed soil survey of Alpena County. A digital or computerized version of the soil survey maps was acquired from the Michigan Center for Geographic Information (CGI). Using information contained within the published soil survey book, a series of maps is presented that depict hydric soils, slopes 18 percent and greater, building constraints and prime farmland soils. While soil constraints discussed in this section can be used as general guides for the planning process, it should not be used for development of specific sites. Detailed, on-site investigations should be conducted prior to development.

#### Hydric Soils and Steep Slopes

**Figure 4.5** is a color thematic map that classifies hydric soils and steep slopes. Lower density and less intensive development should be directed to areas with severe building constraints. There are limited areas with slopes 15 percent or greater. These short-steep slopes are colored in red on the map. While hills and steeply rolling terrain provide opportunities for spectacular views of the landscape, steeply sloped sites have identified building constraints and therefore are more difficult and costly to develop and maintain. Special design standards such as erosion control measures, limiting size of disturbed areas, retaining natural vegetation, re-vegetation, slope stabilization and on-site retention of water run-off from impervious surfaces would all serve to minimize resource impacts. There are very few sites with slopes 15 percent.

Hydric soils are saturated, flooded or ponded during part of the growing season and are classified as poorly drained and very poorly drained. Due to wetness and frequent ponding, hydric soils have poor potential for building site development and sanitary facilities. Areas with hydric soils are best suited for forestlands, wetlands, wildlife habitat, wildlands recreation and low density residential development. Additionally, sites with high water tables may be classified as wetlands. Functioning as the backbone of a community's green infrastructure, this network of hydric soils/wetlands is often associated with lakes and streams. The system of hydric soils/wetlands can function as natural water quality buffers by accepting and retaining stormwater runoff from developed lands. **Figure 4.5** shows

extensive areas of hydric soils within the Township, particularly in the eastern parts of the Township within the coastal lake plain. In the western half, hydric soils are associated with creeks and streams.

#### Building Site Development

The USDA soil surveys rate soils for various uses such as building site development and identifies the limiting factors such as steep slopes or high water table. The rating system is not limited, somewhat limited, moderate and severe limitations. Using the rating system developed by USDA, soil limitations for buildings without basements have been mapped and are displayed in **Figure 4.6**. Areas with well drained soils and slopes less than 10 percent tend to have no limitations for building development. Soils with no limitations or somewhat limited are scattered throughout the Township, and tend to be concentrated in agricultural areas and within the Presque Isle Harbor Association. Areas with slopes greater than 15 percent, high water tables, bedrock near the surface, large stones and organic soils are considered very limited for building development. Lands with severe constraints are quite extensive and are primarily represented by wetness.

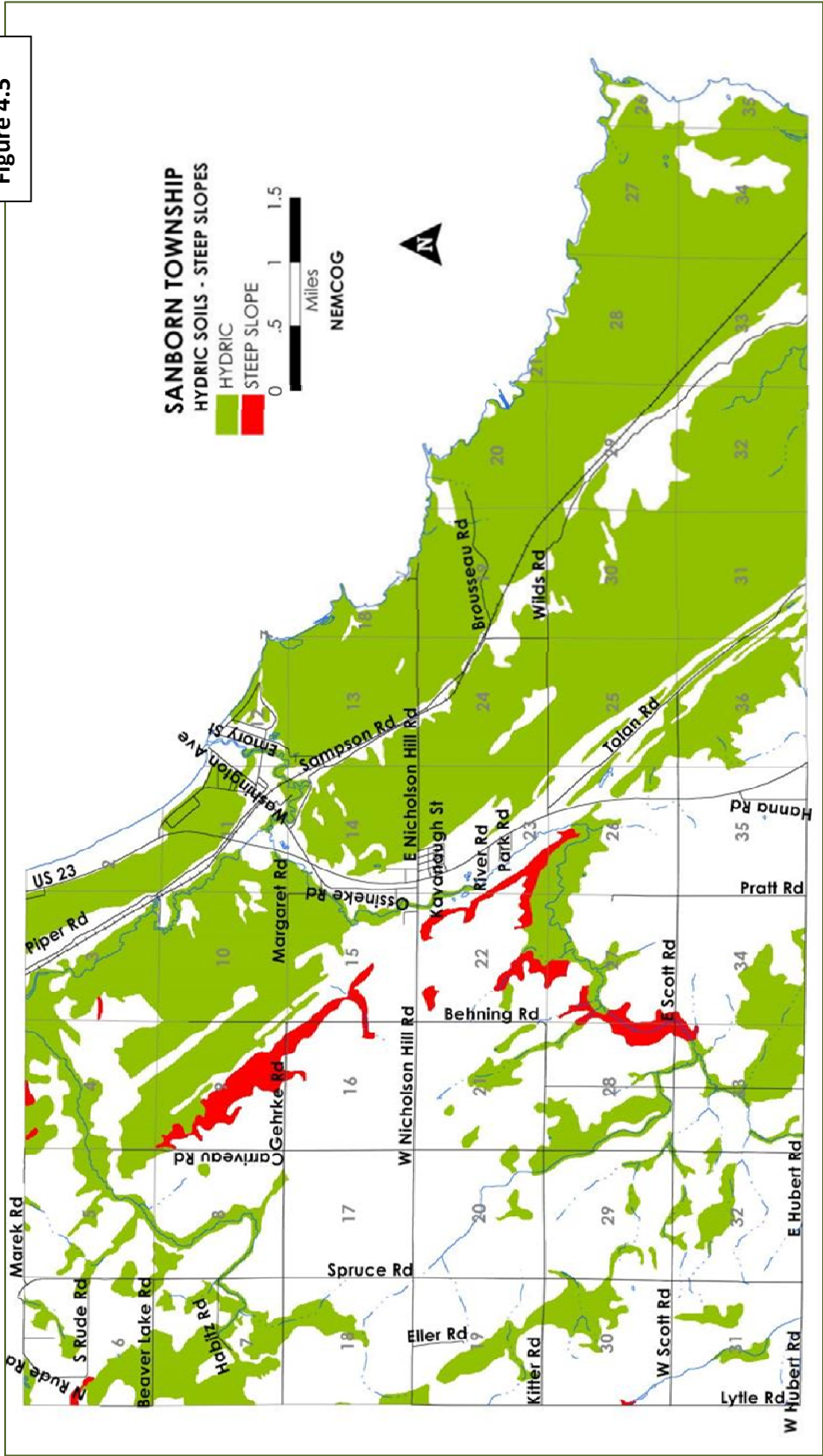
#### Septic System Limitations

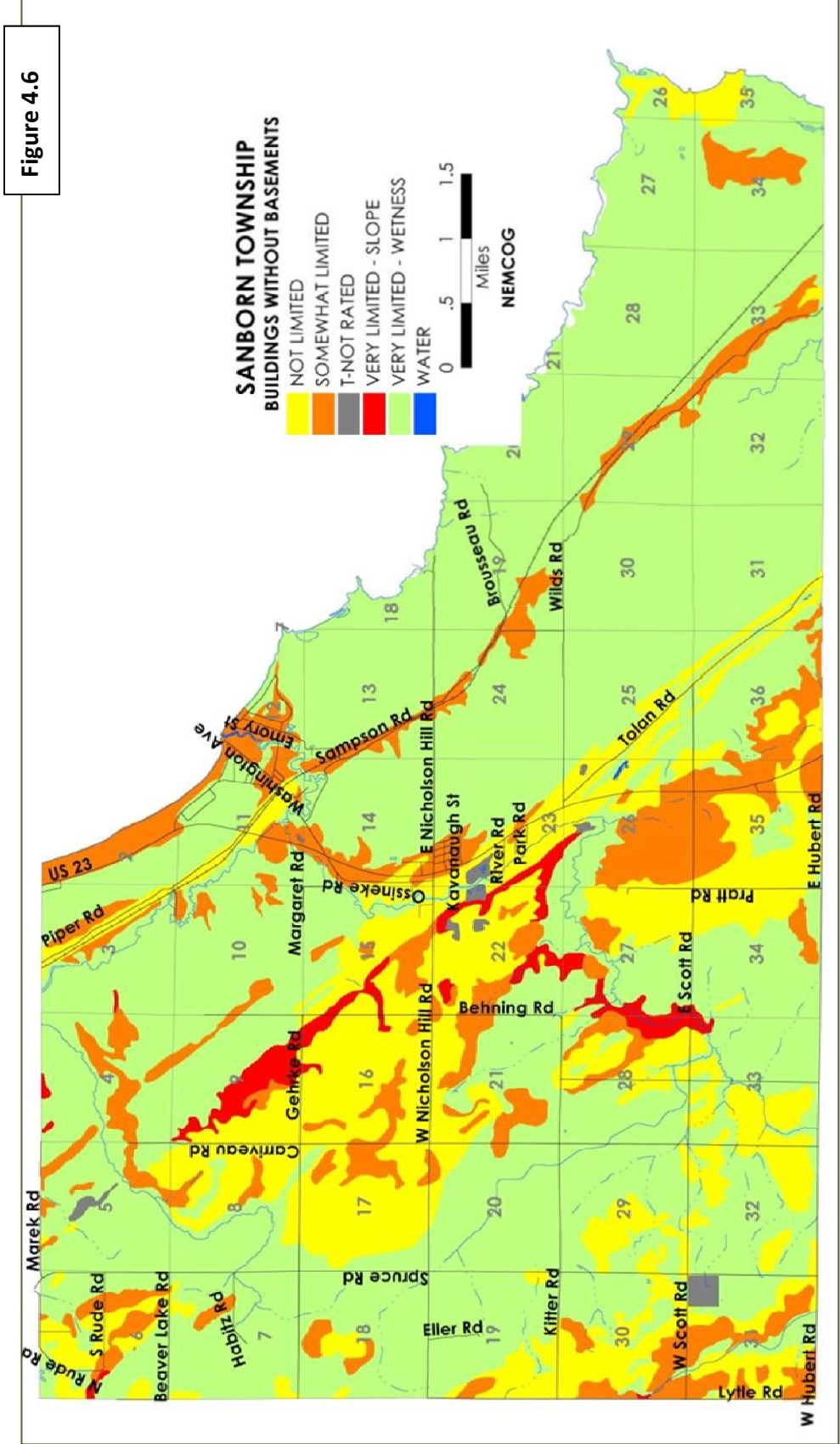
**Figure 4.7** is a color thematic septic system limitations map that show soils constraints ranging from no limitations to very limited. Criteria for determining limitations include depth to water table, wetness, filtering capacity, bedrock, large stones, and ability to infiltrate water. Much of the study area is classified as having severe limitations. Clearly, the greatest limiting factors are the prevalence of high water tables and soils that perk slowly. Limiting types and density of development or making public water and/or sewer available for high density development are likely the best options for protecting the groundwater and surface water resources in these areas. There are no plans to construct community sewer systems in the Township. Therefore, proper installation and maintenance of septic systems is the best option. As well, upgrading older poorly functioning system to newer technologies and engineered systems will help sustain water quality.

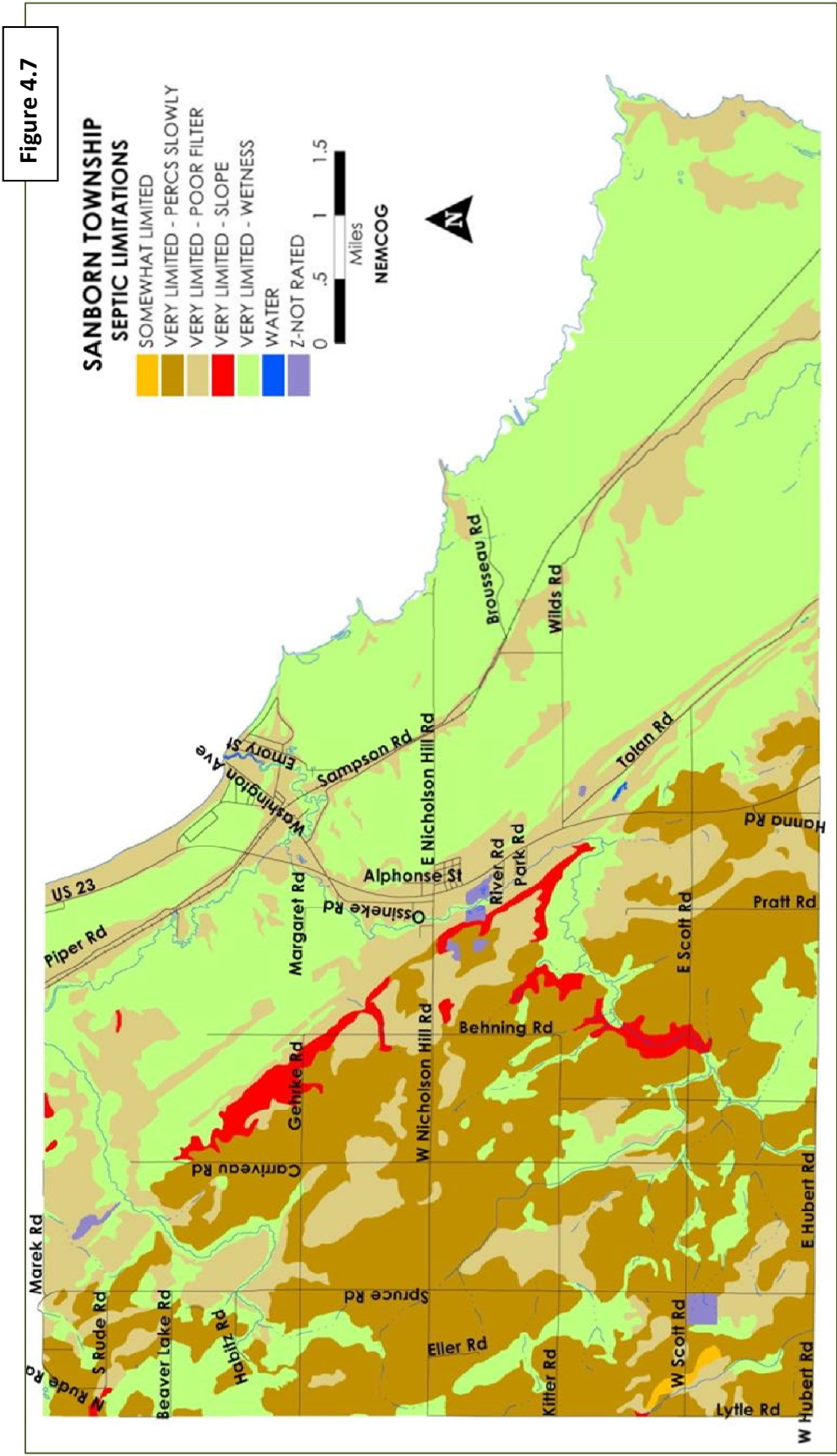
#### Prime Farmland

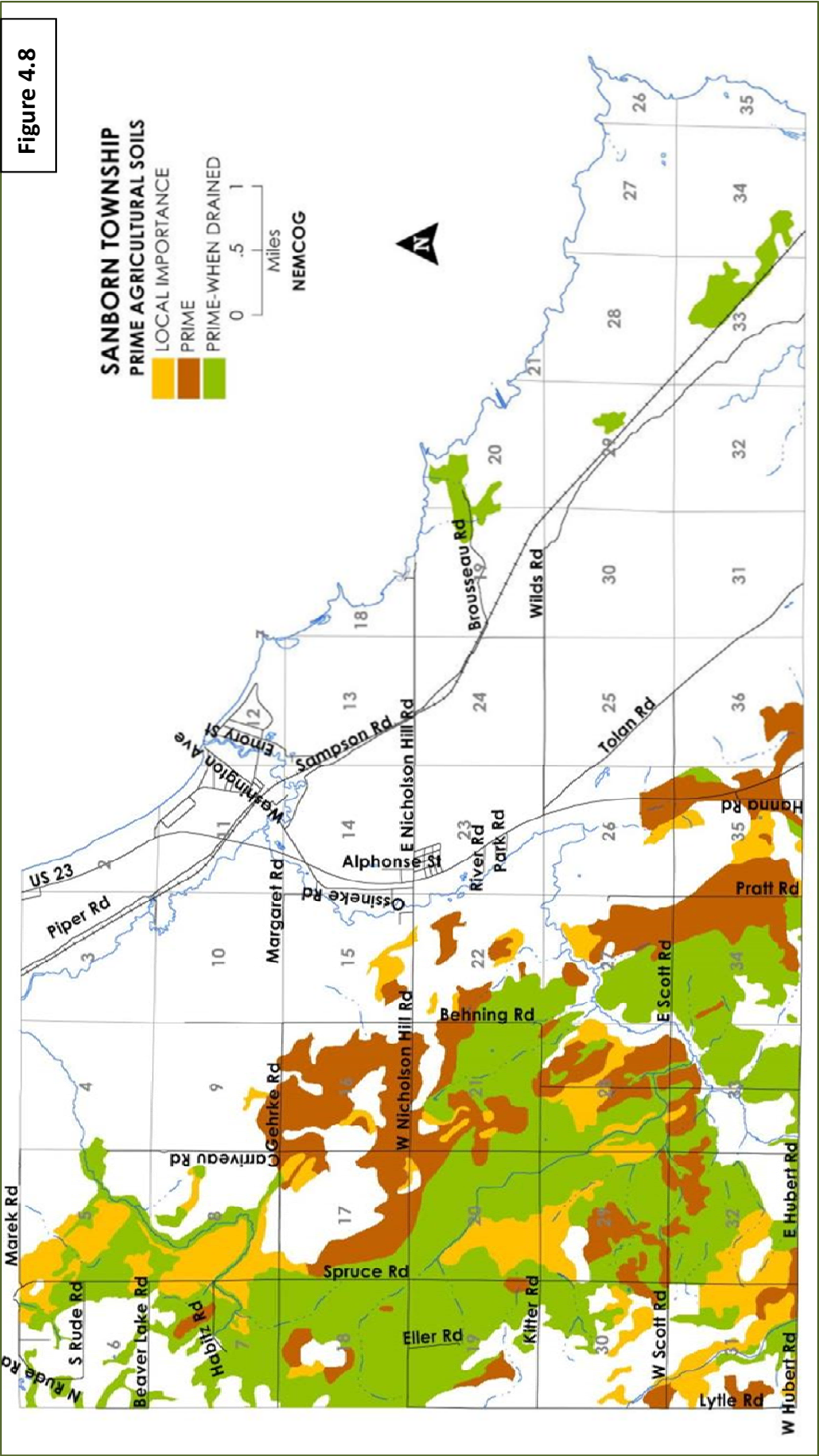
Farming is important to the local economy and is part of the lifestyle of many long-term residents in the area. Furthermore, farmland is an integral part of the rural landscape in the Township. While the amount of land being farmed has decreased, generally the land is converting to less intensive uses of open lands and is not being converted to subdivisions and commercial uses. **Figure 4.8** shows the prime. Locally important and prime if drained farmland soils. **Figure 4.9** is an overlay of farm soils on the existing land use and active farmland.

Figure 4.5











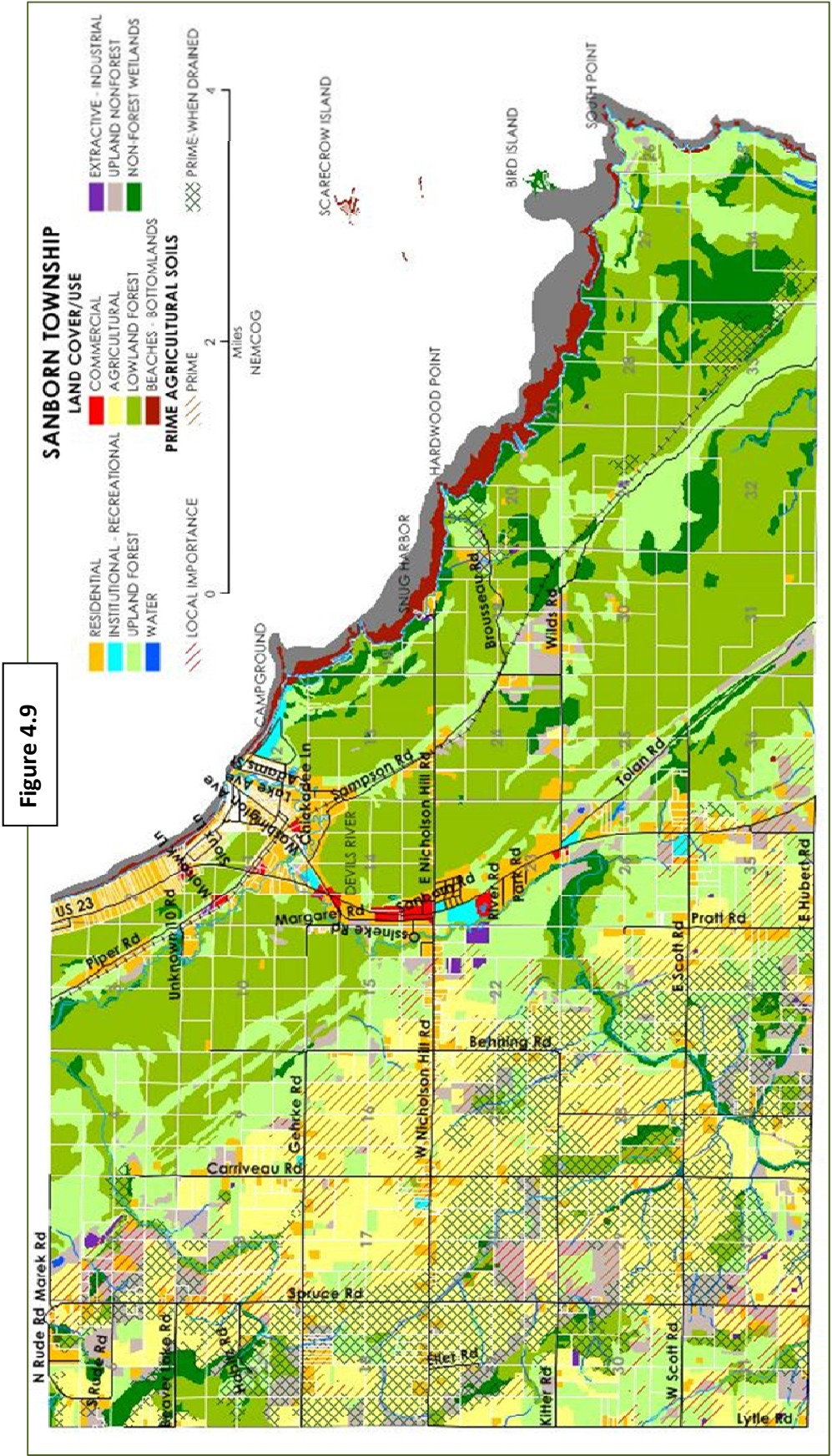


Figure 4.9

## Water Resources

### Groundwater

Maintaining high quality groundwater and surface water is vital to the long term sustainability of the community. Residents and visitors must rely on groundwater for drinking water. All of the drinking water in Alpena, whether municipal or individual private wells, is derived from groundwater in subsurface aquifers. *Groundwater* is water beneath the earth's surface that fills openings (*pore spaces*) in sand or gravel or in fractures of sand, gravel, or rock. It begins as rain or snow and passes through the soil and bedrock. An *Aquifer* is an underground layer of rock, sand, or gravel containing enough groundwater to supply a well.

Groundwater is generally available in adequate quantities throughout Sanborn Township. Water wells are developed in glacial deposits and the underlying bedrock. Since the bedrock is close to the surface in many areas, most water wells are developed in limestone bedrock. Overall, Sanborn Township has good water quality.

### Surface Water

Quality of life and economic base are directly linked to surface water resources. Maintaining high quality surface water is integral to the long term well-being of the community. Streams and lakes provide scenic values and recreational opportunities for residents and visitors as well as critical habitat elements for a wide range of fish and wildlife species. In fact, the tax base and economic base are directly attributed to the abundance of surface water resources in the community. Numerous streams and swamps are found in Sanborn Township. These smaller bodies of water are characterized by seasonal water level fluctuations and various stages of vegetation encroachment. Streams function as resource connections between lakes and wetlands.

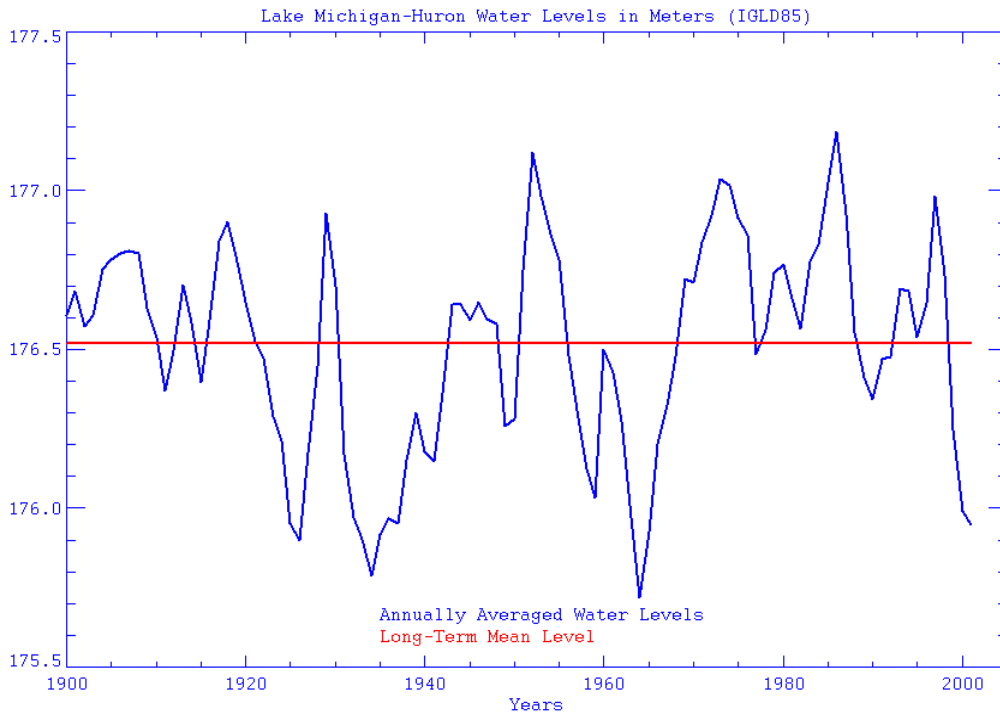
Of course, the largest surface water resource in the county is Lake Huron. The Great Lakes are the largest system of fresh, surface water on Earth, containing roughly 18 percent of the world supply. Only the polar ice caps contain more fresh water. Lake Huron is the second largest of the five Great Lakes in surface area (23,000 square miles). However, due to its many islands and inlets, it has the greatest length of shoreline at 3,827 miles, over 1,000 miles more than Lake Superior, which is the largest in surface area.

There are four delineated watersheds within the Township, Devil's River, South Branch Thunder Bay River, Black River and coastal. There are no inland lakes in Sanborn Township. The Devil's River is the primary surface water resource in the Township. Named streams within the Township include the North Branch, South Branch Main Branch of the Devil's Rivers, Holcomb Creek, Berlinski Creek, and North Branch of the Black River. **Figure 4.10** depicts the water resources and watersheds in Sanborn Township.

Fluctuating Lake Level

The U.S. Army Corps of Engineers have maintained lake level records for Lake Huron since 1900. **Figure 4.11** shows Lake Huron-Lake Michigan Lake levels from 1900 to 2000. During periods of high water levels, shoreline erosion is problematic, particularly where development is close to the lakeshore and on bluffs. Coastal wetlands change in size and species composition as Lake Huron water levels rise and fall. During periods of low water levels, wetland herbaceous vegetation expands out into the exposed bottomlands. Woody plants such as northern white cedar and balsam poplar march outward from the forests edge onto now dryer sites. As the lake level rises, the newly established vegetation is inundated and the plant communities are pushed back inland. The flooded vegetation creates critical habitat for fish and wildlife, in addition to protecting shore areas from erosion. The ebb and flow of lake levels creates a constant see-saw of early succession plant communities along the zones. **Figure 4.12** from "Filling the Gaps" publication by Michigan Department of Environmental Quality depicts the fluctuations of lake levels and the ever changing coastal landscape.

Figure 4.11: Lake Huron – Michigan Historic Water Levels



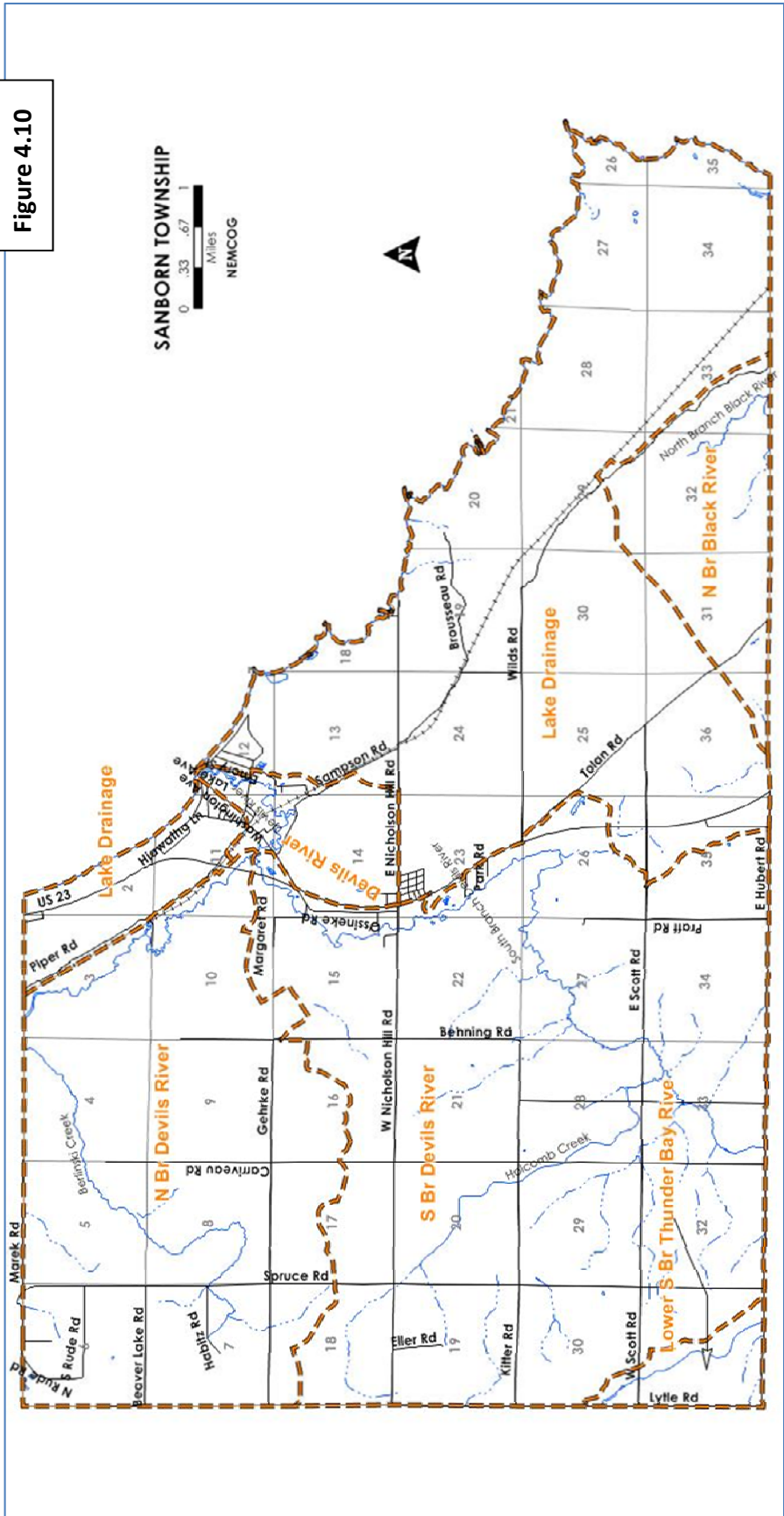


Figure 4.10

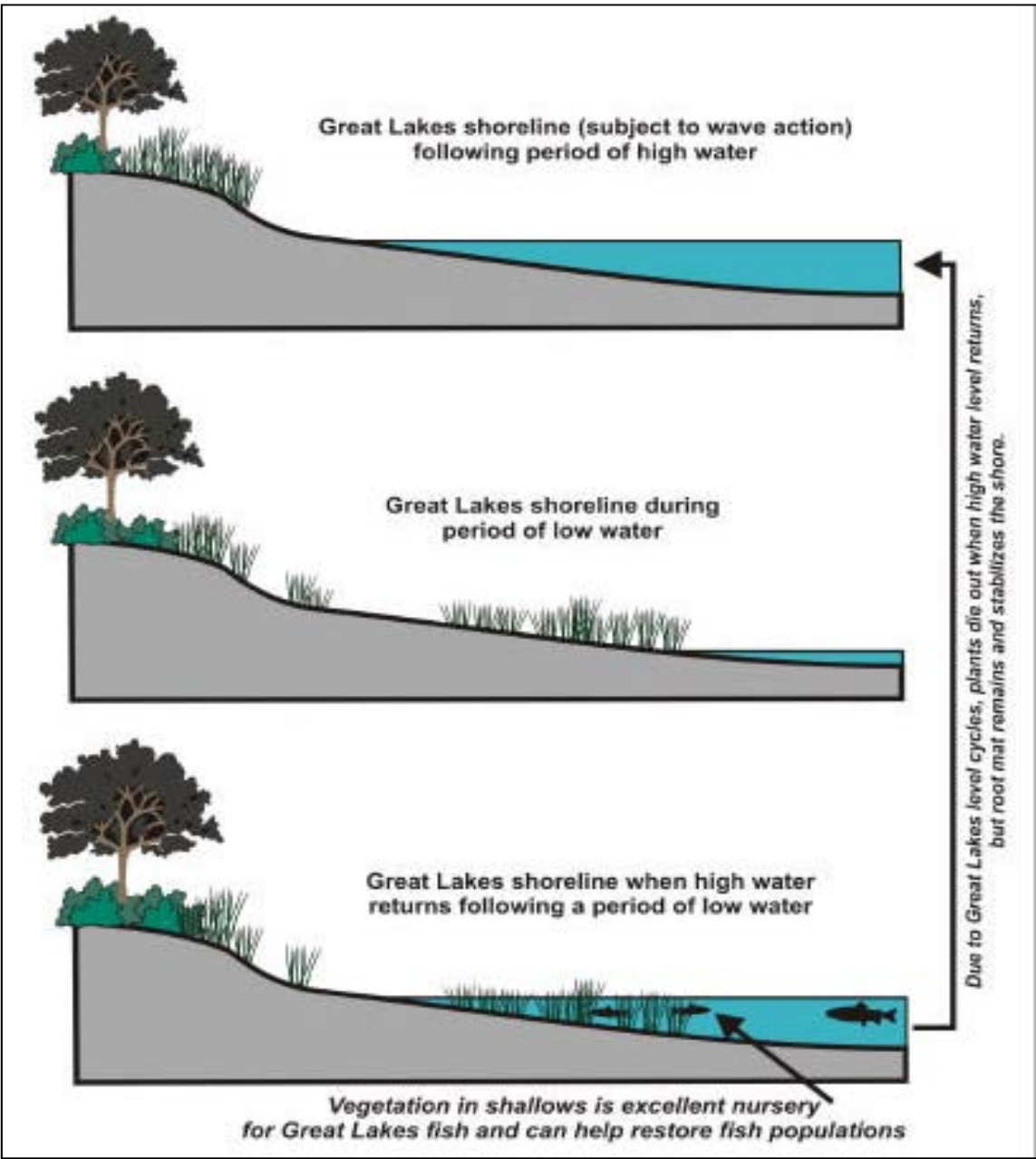


Figure 4.12: Josh Warbach, Planning and Zoning Center, Inc

***Fish and Wildlife Resources***

The predominance of forested land and surface water makes coastal regions home to many species of fish and wildlife. Brook, rainbow, and brown trout are established singly or in combination in streams. Lakes offer warm water fisheries such as walleye, northern pike, largemouth bass, smallmouth bass and panfish.

Lake Huron is an excellent walleye, whitefish, smallmouth bass, salmon and lake trout fishery. The annual Brown Trout Tournament in Alpena is a testament to the high quality fishery.

Deer, rabbit, grouse and woodcock are abundant in the County. Bear, coyote, bobcat, elk and turkey have small to moderate populations that are growing. Wildlife is a resource that brings in hunters and tourists. October and November bring thousands of hunters to the County for small game hunting, bear and bow season (deer), peaking sharply in mid-November with the opening day of deer (rifle) season.

### ***Natural Features Inventory***

**Table 4.2** is the Alpena Element Lists from the Natural Features Inventory. According to the Natural Features Inventory, *"The lists include all elements (species and natural communities) for which locations have been recorded in MNFI's database. Information from the database cannot provide a definitive statement on the presence, absence, or condition of the natural features in any given locality, since much of the state has not been specifically or thoroughly surveyed for their occurrence and the conditions at previously surveyed sites are constantly changing. The County Elements Lists should be used as a reference of which natural features currently or historically were recorded in the county and should be considered when developing land use plans. Included in the list are scientific name, common name, element type, federal status, and state status for each element."* Research has found Great Lakes coastal areas to be biologically rich with the high number of species and communities of special interest (rare, special concern, threatened and endangered). If extensive field surveys were conducted, it is expected a greater number of elements would be identified.

### ***Wetlands and Woodlands***

#### Wetlands

Wetlands are often referred to as marshes, swamps or bogs. The US Army Corps of Engineers defines wetlands as "those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Residents of Michigan are becoming more aware of the value of wetlands. Beyond their aesthetic value, wetlands improve 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.

#### National Wetlands Inventory

The U.S. Fish and Wildlife Service developed National Wetlands Inventory (NWI) program in the 1980's. The data provide consultants, planners, and resource

managers with information on wetland location and type. The purpose of this survey was not to map all wetlands and deepwater habitats, but rather, to use aerial photo interpretation techniques to produce thematic maps that show, in most cases, the larger types that can be identified by such techniques. The objective was to provide better geospatial information on wetlands than found on the USGS topo-quads. A national wetlands inventory map was compiled for Sanborn Township using digital data acquired from the Center for Geographic Information, State of Michigan. **Figure 4.13** is a map depicting forested and non-forested wetlands.

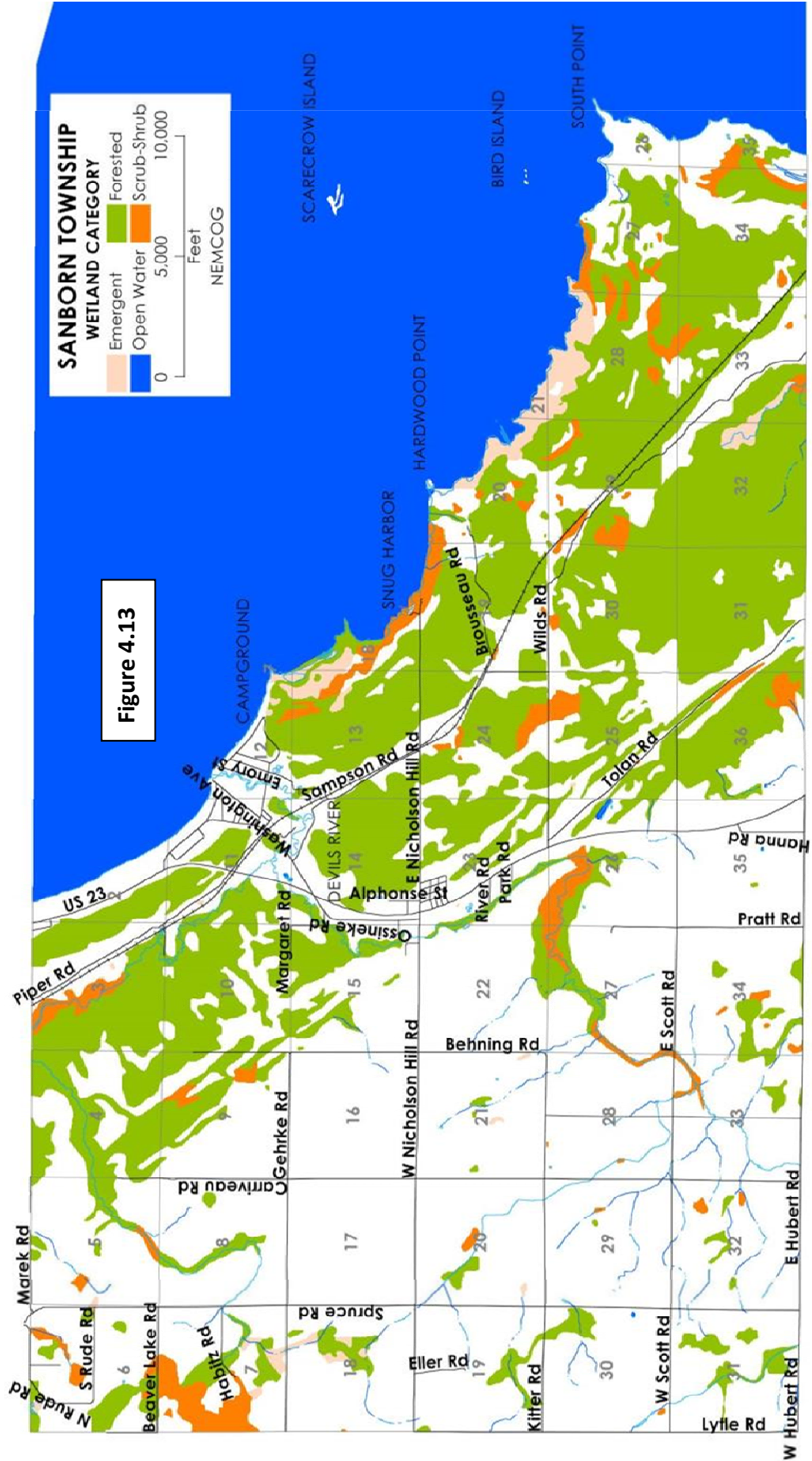
Table 4.2 Natural Features Inventory			
Scientific Name	Common Name	Federal Status	State Status
<i>Acipenser fulvescens</i>	Lake sturgeon		T
<i>Adlumia fungosa</i>	Climbing fumitory		SC
<i>Ammodramus henslowii</i>	Henslow's sparrow		E
<i>Ammodramus savannarum</i>	Grasshopper sparrow		SC
<i>Armoracia lacustris</i>	Lake cress		T
<i>Asplenium rhizophyllum</i>	Walking fern		T
<i>Botrychium hesperium</i>	Western moonwort		T
<i>Buteo lineatus</i>	Red-shouldered hawk		T
<i>Cacalia plantaginea</i>	Prairie indian-plantain		SC
<i>Calypso bulbosa</i>	Calypso or fairy-slipper		T
<i>Carex scirpoidea</i>	Bulrush sedge		T
<i>Charadrius melodus</i>	Piping plover	LE	E
<i>Chlidonias niger</i>	Black tern		SC
<i>Cirsium pitcheri</i>	Pitcher's thistle	LT	T
<i>Coregonus artedii</i>	Lake herring or Cisco		T
<i>Crataegus douglasii</i>	Douglas's hawthorn		SC
<i>Cypripedium arietinum</i>	Ram's head lady's-slipper		SC
<i>Dorydiella kansana</i>	Leafhopper		SC
<i>Dryopteris filix-mas</i>	Male fern		SC
<i>Emydoidea blandingii</i>	Blanding's turtle		SC
<i>Flexamia delongi</i>	Leafhopper		SC
<i>Gavia immer</i>	Common loon		T
<i>Glyptemys insculpta</i>	Wood turtle		SC
<i>Haliaeetus leucocephalus</i>	Bald eagle		SC
<i>Iris lacustris</i>	Dwarf lake iris	LT	T
<i>Lanius ludovicianus migrans</i>	Migrant loggerhead shrike		E
<i>Notropis anogenus</i>	Pugnose shiner		E

Table 4.2 Natural Features Inventory			
Scientific Name	Common Name	Federal Status	State Status
<i>Nycticorax nycticorax</i>	Black-crowned night-heron		SC
<i>Pandion haliaetus</i>	Osprey		SC
<i>Percina copelandi</i>	Channel darter		E
<i>Pinguicula vulgaris</i>	Butterwort		SC
<i>Prosapia ignipectus</i>	Red-legged spittlebug		SC
<i>Pterospora andromedea</i>	Pine-drops		T
<i>Salix pellita</i>	Satiny willow		SC
<i>Sistrurus catenatus catenatus</i>	Eastern massasauga	C	SC
<i>Somatochlora hineana</i>	Hine's emerald dragonfly	LE	E
<i>Spiza americana</i>	Dickcissel		SC
<i>Sterna caspia</i>	Caspian tern		T
<i>Sterna hirundo</i>	Common tern		T
<i>Tanacetum huronense</i>	Lake Huron tansy		T
<i>Trichostema brachiatum</i>	False pennyroyal		T
<i>Trimerotropis huroniana</i>	Lake Huron locust		T

Source: Michigan Natural Features Inventory (Current as of 12/10/10)  
 Codes: E = Endangered, T = Threatened, LE = Listed Endangered, LT = Listed Threatened, C = Species being considered for federal status, SC = Special Concern

Forested wetlands are the most common wetlands type. The NWI classified 8,760 acres of forested wetlands that are located primarily in the eastern coastal regions of Sanborn Township. 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. Northern white cedar dominates the wetland areas where there is good lateral water movement in organic soils and shallow soils over limestone bedrock. Lowland forests are typically located adjacent to water features and function as riparian forests and water quality buffers. The network of lowland forests, associated with rivers and creeks, also function as wildlife corridors and the backbone of large regional ecological corridors. Lowland forests adjacent to rivers and streams may be prone to flooding during the spring snow melt, particularly when combined with heavy spring rains. The NWI identified some 990 acres of shrub-scrub wetlands and 392 acres of emergent wetlands. It is important to note, with the low lake levels, emergent wetlands are increasing along the Lake Huron shoreline. Land use planning activities should focus on protecting and preserving these limited and critical resources.





### Woodlands

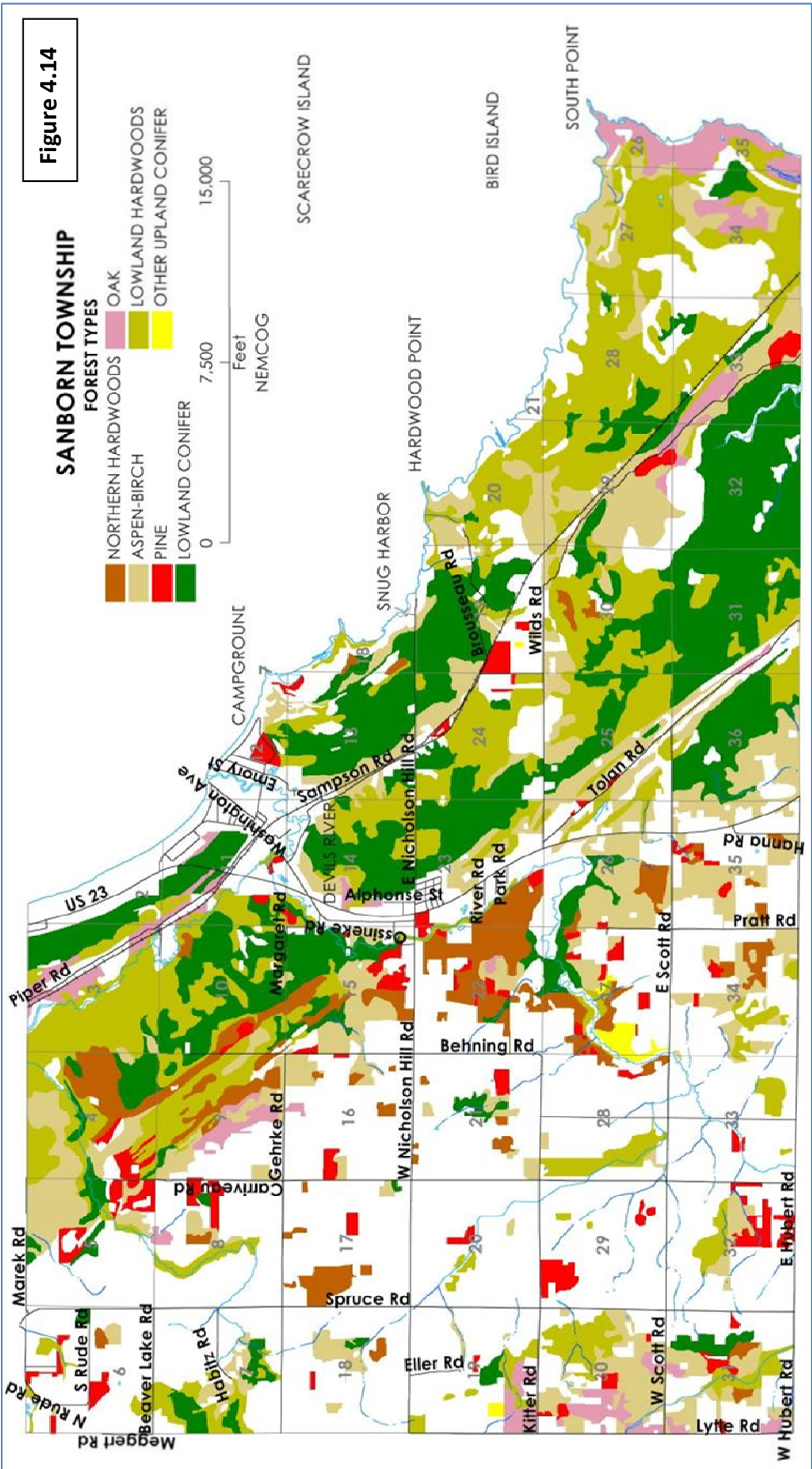
In addition to the scenic characteristics of woodlands, forested areas provide habitat for wildlife, protect the soil from erosion and acts as a buffer from noise on heavily traveled highways. Forested lands are the predominant land cover in the Township and account for 53 percent of the Township's land area. Upland forests cover 21 percent of the Township. Of the forested lands, aspen-birch forests account for a majority of the forests. The aspen-birch type is quite variable in species component and depending upon forest age and soils, other tree species such as white pine, balsam fir, northern white cedar, red maple and sugar maple are mixed with the forest type. Northern hardwoods include species such as sugar maple, red maple, American beech, basswood and yellow birch. Bigtooth aspen, quaking aspen, white birch, white pine, balsam fir and red maple are the primary tree species found in the aspen-birch type. White and red pine trees are found in the pine forest category.

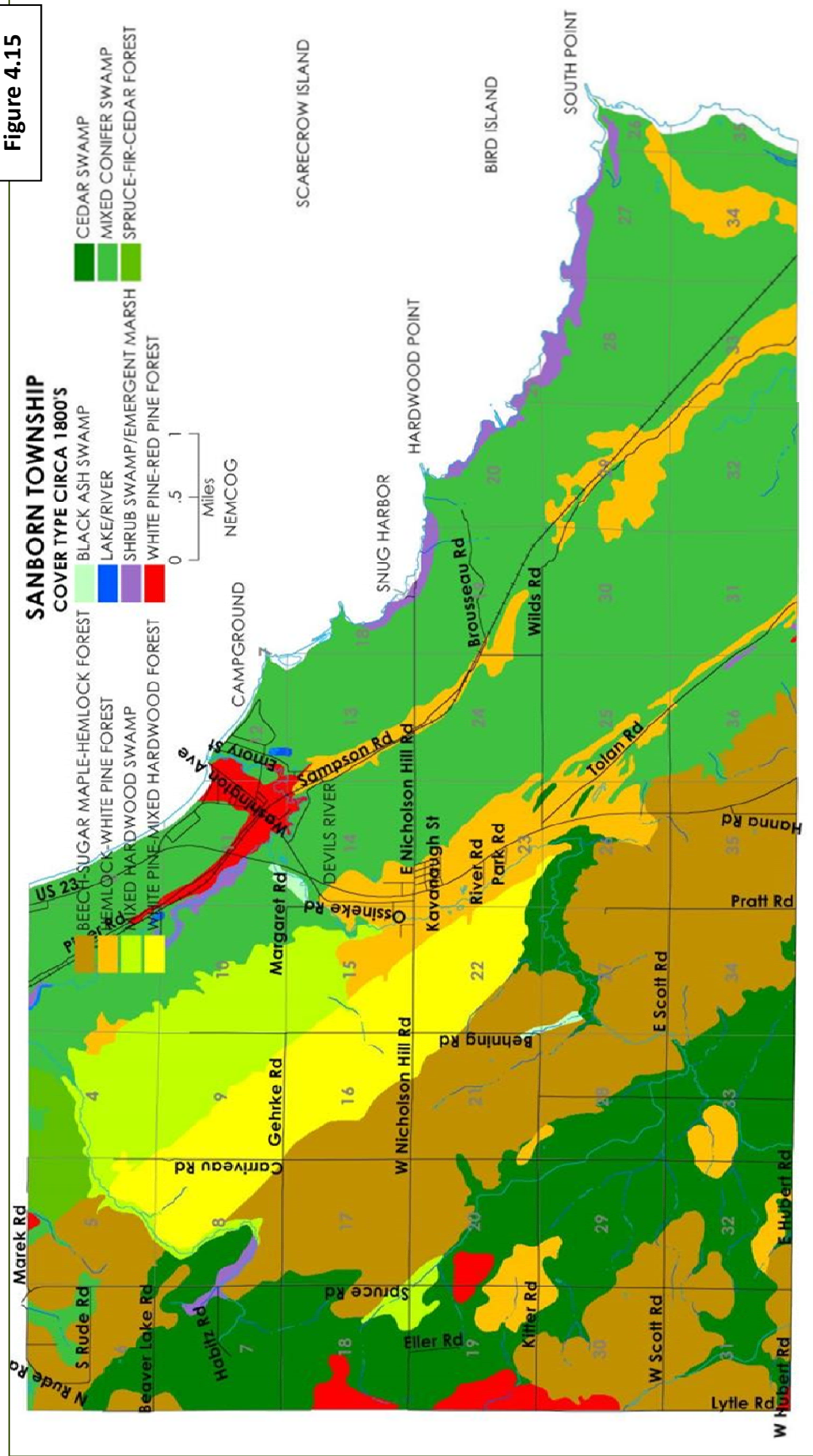
Lowland forests occupy nearly 24 percent of the Township. Lowland forests grow on soils with a seasonally high water table and are often classified as wetlands. Lowland forests include lowland hardwoods like elm, black ash, red maple, balsam poplar, and quaking aspen. The lowland hardwood category covers nearly 4,600 acres. Lowland conifers, such as northern white cedar, black spruce, balsam fir, white spruce and eastern tamarack are estimated to cover around 4,300 acres. It is common to find both hardwoods and conifers growing in mixed forests. **Figure 4.14** depicts the forest types according to the update of the MIRIS Land Cover/Use Data.

### *Pre-settlement Vegetation*

The Michigan Department of Natural Resources has compiled pre-settlement vegetation maps of counties in Michigan. The maps were generated from information contained in the first government land survey notes in the 1800's along with information such as current vegetation, landforms and soils. A review of the pre-settlement vegetation map (**Figure 4.15**) of Sanborn Township shows extensive areas were covered with lowland forests types of mixed conifer swamps, cedar swamps, and mixed conifer swamps. Beech-sugar maple-hemlock forests were growing on well drained sites that today support farms. White pine-red pine forests were found on old beach ridges in the eastern parts of the Township.

Two major events have resulted in major conversions and loss of these pre-settlement forest types. Logging and subsequent wildfires 100 years ago resulted in the shifting of forests from pines and mixed forest swamps to aspen-birch forests. In addition, early settlers sought out "better soils" to establish their farmsteads. Since northern hardwood forests (sugar maple-beech) were the dominate forest type on soils most suitable for agricultural purposes, such as sandy loam, land clearing for farming resulted in a significant reduction in the amount of acres covered by this forest type.





*Sites of Environmental Contamination*

The Part 201 (Environmental Response) of Natural Resources and Environmental Protection Act (P.A. 451 of 1994), as amended, provides for the identification, evaluation and risk assessment of sites of environmental contamination in the State. The Environmental Response Division (ERD) is charged with administering this law. A site of environmental contamination, as identified by ERD, is “a location at which contamination of soil, ground water, surface water, air or other environmental resource is confirmed, or where there is potential for contamination of resources due to site conditions, site use or management practices”. The agency publishes a list of environmentally contaminated sites by county showing the sites by name, pollutant(s) and site status.

**Table 4.3** is a list of environmentally contaminated sites in Sanborn Township that shows the sites by name, pollutant(s) and site status. A Site Assessment Model (SAM) score is computed to assess the relative risk a site may pose and to help determine the aggressiveness of cleanup efforts. SAM scores range from 0 to 48 with 0 being the least contaminated and 48 the most contaminated. In some instances, where the score is high and further contamination is possible, immediate response may be required. Conversely, at a location where the score is low and the conditions of the site are not likely to change, no action may be the preferred course. In Alpena County, there are currently 47 listed contamination sites. The status of 6 of the sites is listed as active, which means that some level of clean up activity is ongoing.

<b>Table 4.3 Alpena County Contamination Sites</b>				
<b>Site ID &amp; Status</b>	<b>Location</b>	<b>Source</b>	<b>Pollutant</b>	<b>Score</b>
04000021 No Action Taken	10628 Ossineke Rd L & M Salvage	Scrap Metal Yard	Gasoline; Oil; Solvents	18
04000055 Active	10401 Piper Road Ossineke Industries	Special Dies Tools Jigs & Fixt	TCE	27
Source: Department of Environmental Quality				

*Leaking Underground Storage Tanks (LUST sites)*

According to the Michigan Department of Environmental Quality data base there are three sites in the Township in the Leaking Underground Storage Tank program.

<b>Table 4.4 Leaking Underground Storage Tanks</b>				
Ossineke Sport & Party Inc.	11923 US Hwy-23 S.	Ossineke	MI	49766-0091
The Barn	11904 Us Highway 23 S	Ossineke	MI	49766-9588
L & K Sunoco	9975 US-23	Ossineke	MI	49766
Source: Michigan DEQ				

## **CHAPTER 5**

### **EXISTING LAND COVER/USE**

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Prior to establishing goals and determining future land uses, a community must have an accurate assessment of existing land uses. This chapter presents information on both the types and location of existing land uses. The process identifies both urban built-up land uses such as residential and commercial, along with natural land cover types like forests and beaches. As a result the final map presented in this chapter is a hybrid that combines land cover and land use.

#### **General Land Division Patterns**

As development occurs, larger tracts of land are subdivided into smaller parcels. Therefore, studying the existing pattern of land divisions is one way to analyze the status of land use and development. Negwegon State Park, located in the eastern edge of the Township, covers 2,045 acres. Mackinaw State Forest accounts for another 3,245 acres. Scarecrow Island is under US Fish and Wildlife Service ownership and covers approximately 14 acres. Eighty-one percent of the Township's land base under private ownership, which consists primarily of large tracts of farmland and hunting land with small lot subdivisions concentrated along Lake Huron, US-23 and within the community of Ossineke. **Figure 5.1** displays ownerships that are 35 acres and larger. As can be seen nearly 80 percent of the land area in Sanborn Township is classified as large tracts. However, while large tract owners hold 80 percent of the land area, they account for only 18 percent of the parcels. In other words, small tract owners account for 82 percent of the parcels, yet own only 20 percent of the Township's land area.

#### **Land Cover and Use**

The existing cover/land use was mapped in 2012. The map of existing land use, shown as **Figure 5.2**, illustrates the distribution of land uses throughout the Township. Michigan Resource Information Systems (MIRIS) land cover/use classification categories were used to map the existing land use. The map was updated with 2012 digital aerial imagery acquired from the USDA. Updated information was computerized to produce the existing land use map and statistics. Ancillary digital map data including parcels, soils, national wetlands inventory and gas wells were used to refine the update. **Table 5.1** presents the land uses, showing the number of acres and percent of the Township in each of the land use categories. Each of the land use categories is discussed later in this chapter.

#### Residential

As can be seen on the Existing Land Cover/Use Map (**Figure 5.2**) and **Table 5.1**, residential use ranks fourth in the amount of land currently in this use. Residential use

occupies 7.7 percent (2,172 acres) of the land in the Township. Residential development is concentrated along Lake Huron, US-23 and within the community of Ossineke. The balance is located on large and small tracts that are scattered throughout the Township.

#### Commercial

Commercial uses are located along US-23. Commercial uses account for 0.4 percent (103 acres) of the township's land area.

#### Industrial and Extractive

Land in this use category covers 0.3 percent or 74 acres of Township. This category includes several sand and gravel pits.

#### Institutional and Recreation

This category includes institutional and recreational uses, which cover 0.4 percent (101 acres) of the Township's land area. Included in this category are the Township hall, public access and campgrounds.

#### Farmland

Agricultural lands ranks second in the amount of land currently in this use. Active farmland accounts for 6,474 acres or 22.8 percent of the Township. Farmland is concentrated in the western parts of the Township.

#### Non-forested Uplands

The non-forested land category consists of herbaceous open and shrub land. As shown in **Table 5.1**, 1,997 acres or seven percent of the Township is in the non-forested category. A majority of the non-forest areas are old farm fields.

#### Upland Forest

Upland forests cover 6,073 acres or 21.4 percent of the Township. Northern hardwoods include species such as sugar maple, red maple, American beech, basswood and yellow birch. Bigtooth aspen, quaking aspen, white birch, white pine, balsam fir and red maple are the primary tree species found in the aspen-birch type. White and red pine trees are found in the pine forest category.

#### Lowland Forests and Wetlands

Wetlands are defined as land that has sufficient water at, or near, the surface to support wetland or aquatic vegetation. These areas are commonly referred to as swamps, marshes and bogs. The wetland category comprises non-forested types such as lowland brush (tag alder and willow), sphagnum bogs, emergent vegetation in lakes and beaver floodings and wet meadows. Non-forested wetlands account for 1,866 acres or 6.6 percent of the Township.

Since the scope of the project did not allow for extensive field surveys typically part of a traditional forest inventory, ancillary data such as USDA hydric soils, National

Wetlands Inventory, and USGS topographic data was used to help delineate upland versus lowland forest. Given this limitation, the forest cover mapping should be used for general planning purposes and in conjunction with other supporting information. Lowland forest lands are the predominant land cover in the Township and occupy nearly 32 percent or 9,020 acres of the Township. Lowland forests include lowland hardwoods like elm, black ash, red maple, balsam poplar, and quaking aspen. Lowland conifers, such as northern white cedar, black spruce, balsam fir, white spruce and eastern tamarack are estimated to cover around 6,757 acres.

Two of the most important functions of wetlands and lowland forests are water quality protection and ecological corridors. As can be noted on the Existing Land Use Map, the wetland areas are found adjacent to water features. The network of wetlands receives surface water and subsurface water discharge, creating the many streams and creeks that in turn flow into the area lakes. The interconnected resources exemplify how activities distant from major water bodies can still have an impact on the water quality.

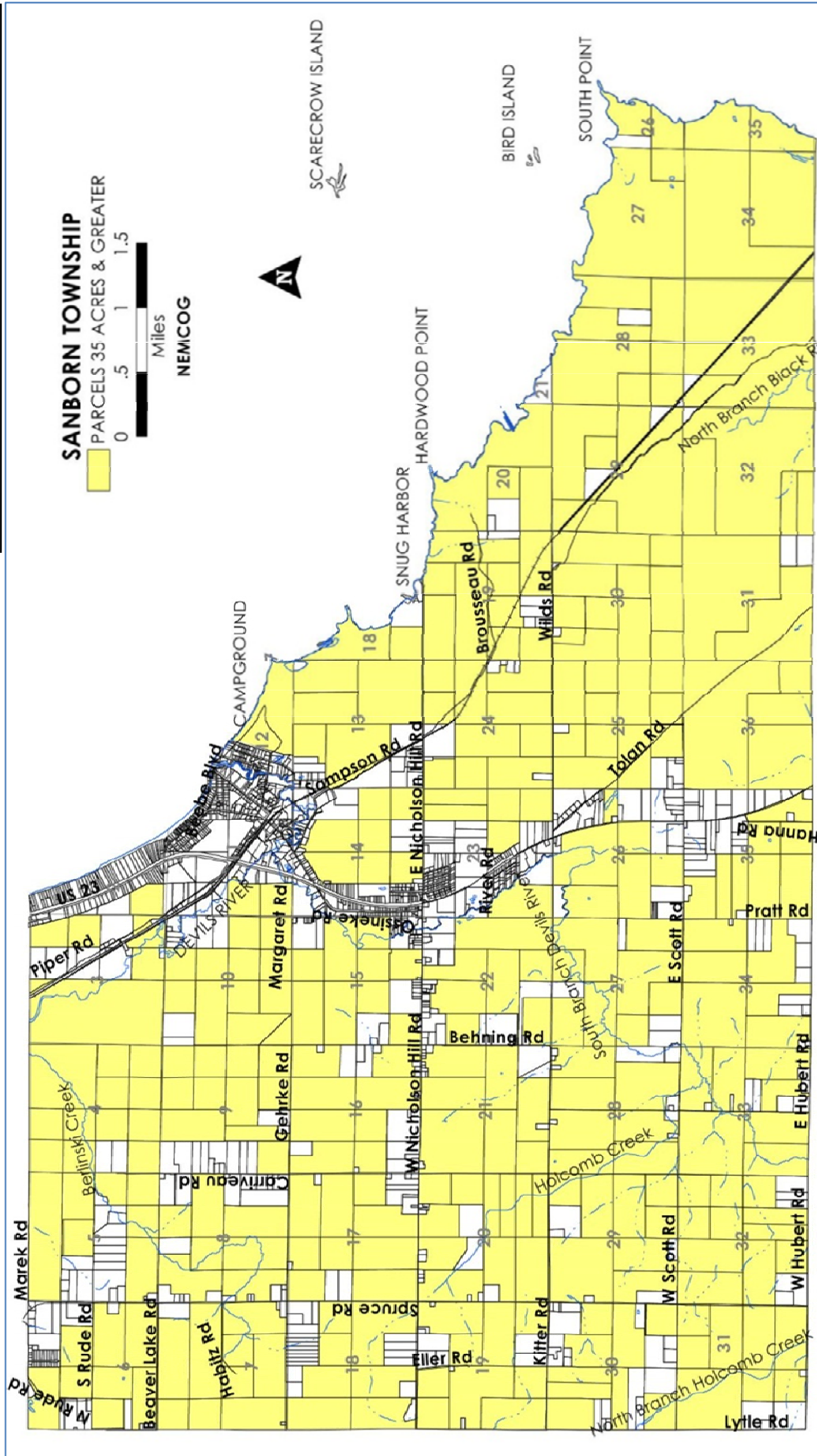
#### Water

Less than one tenth of one percent of the land cover is classified as water. Of course, if Lake Huron were included the acreage would be much higher. In some instances if water areas are covered with emergent wetland vegetation such as cattails and reeds, those sites are mapped as non-forested wetlands and not open water.

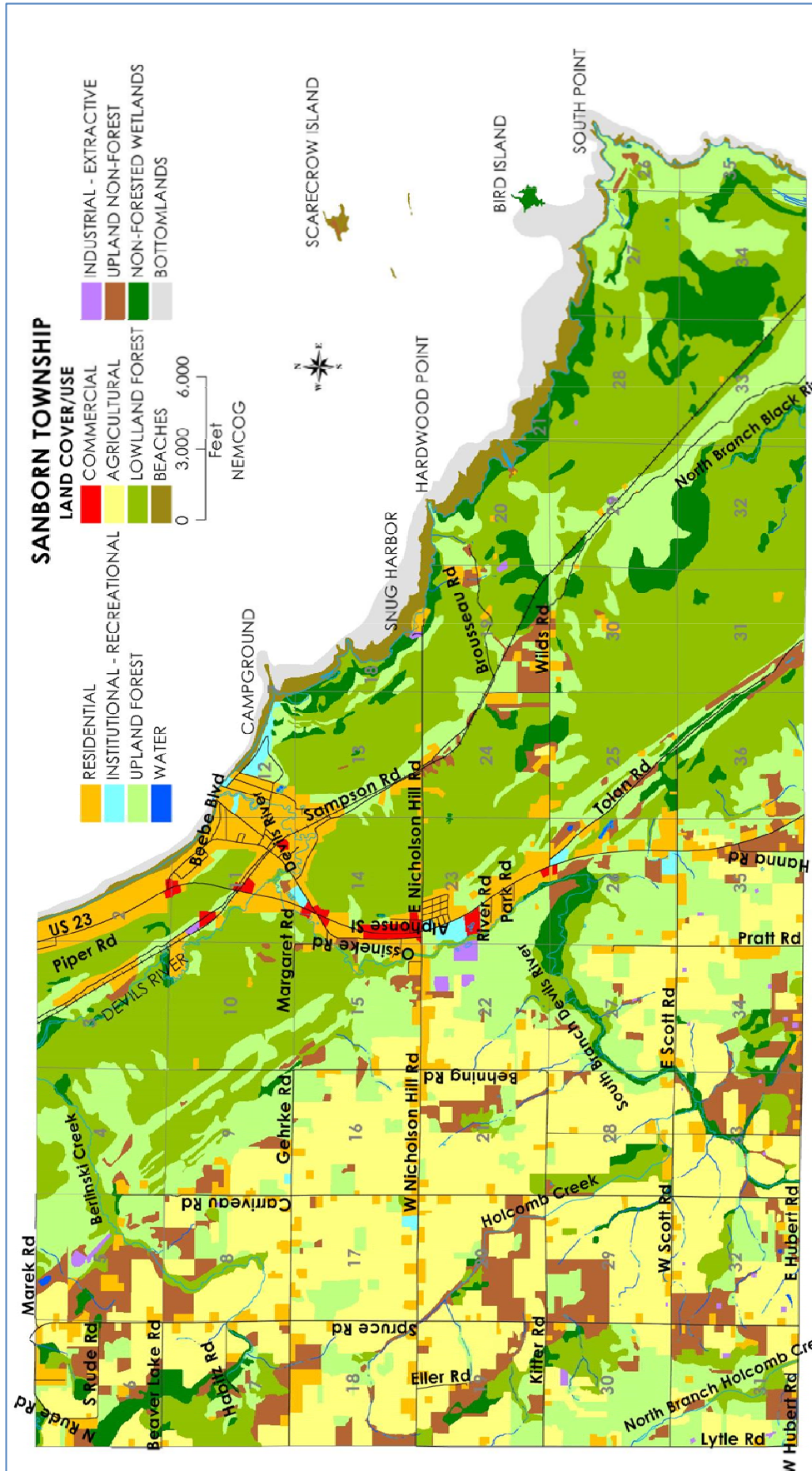


<b>Table 5.1 Existing Land Use Statistics Sanborn Township</b>		
<b>Land Use Category</b>	<b>Number of Acres</b>	<b>Percent of Township</b>
Residential	2,172	7.7%
Commercial	103	0.4%
Industrial/Extractive/Utilities	74	0.3%
Institutional/Recreation	101	0.4%
Farmland	6,474	22.8%
Non-forested Uplands	1,997	7.0%
Upland Forest	6,073	21.4%
Lowland Forest	9,020	31.8%
Non-forested Wetlands	1,866	6.6%
Water	10	LESS THAN 0.1%
Beaches and Bottomlands	497	1.8%
<b>TOTAL</b>	<b>28,388</b>	<b>100.0%</b>
Source: Northeast Michigan Council of Governments		

Parcels 35 Acres and Greater Map Figure 5.1



Land Cover/Use map Figure 5.2





## CHAPTER 6 GOALS AND OBJECTIVES

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### Community Goals and Objectives

After reviewing the community input and considering the existing conditions background information, the planning commission established goals and objectives. These goals and objectives will provide guidance to the Sanborn Township planning commission and board.

#### Quality of Life

***Goal: Maintain and enhance the overall quality of life in Sanborn Township.***

#### Objectives:

1. Implement stated objectives that will improve the overall quality of life for township residents.
2. Strive to balance future growth and development in the Township while maintaining its rural character.
3. Promote the quality of life in Sanborn Township in order to recruit new families to the Township.
4. Keep apprised of and continue to educate members of the Planning Commission regarding the Medical Marijuana issue.
5. Encourage public feedback regarding ongoing efforts to improve the Township's quality of life.

#### Community Character

**Goal: Maintain and enhance the appearance and character of Sanborn Township.**

#### Objectives:

1. Preserve the integrity of existing neighborhoods and residential areas by protecting them from the intrusion of incompatible uses.
2. Enhance community gateways through the implementation of land use controls, landscaping and screening.
3. Strive to balance future growth and development in the township while maintaining its rural character.
4. Investigate the implementation of conservation-based open space or cluster development options as a means to protect community character.
5. Encourage public feedback and input.

Planning and Community Development

***Goal: Guide future development in a manner that will protect existing development; preserve rural community character; and conserve natural resources and environment, yet meets the long-term needs of the community.***

Objectives:

1. Implement the Sanborn Township master plan by updating the Township zoning ordinance.
2. Control the location of new development by designating appropriate areas for new residential, commercial, industrial, and resort/recreational land uses.
3. Concentrate new commercial, service and industrial uses around the community of Ossineke.
4. Concentrate more dense residential development such as single family subdivisions, multi-family residential and elder housing complexes around the community of Ossineke. These areas with higher density developments should be served by parks and non-motorized facilities to promote a walkable community atmosphere.
5. Establish open space and landscape requirements for new development, such as appropriate setbacks, retention of green space, buffer zones between differing land uses, screened parking areas, and roadside landscaping; and encourage the retention of open space and scenic vistas with Planned Unit Developments (PUD's), clustering, and conservation easements.
6. Develop open space residential, commercial and industrial development design standards to preserve scenic views, rural character, farmland, meadows, woodlands, steep slopes and wetlands with a target of preserving 50 percent of the land within a development.
7. Improve regulations and standards to protect the community against high noise levels and exterior lighting glare.
8. Develop access management standards for commercial development along the primary corridors which include US-23 and Nicholson Hill Road.
9. Establish standards that regulate the placement and size of cellular towers, communication towers, transmission towers and wind turbine generators.
10. Review blight ordinance and consistently enforce to work towards improving the quality of housing and protecting property values.
11. Enforce all ordinances in a consistent and fair manner.
12. Promote walkable communities by developing trails, sidewalks and safe pedestrian crosswalks in developed areas of the Township.
13. Increase safety and reduce the visual impact of on-site and offsite signs and billboards, by controlling their size, number, illumination, and configuration.
14. Cooperate with county and regional efforts to promote a Community "Fire Wise" education program to protect existing and new development from wildfires.

Residential Land Uses

***Goal: Allow for suitable housing opportunities for all income levels and age groups, including year-round residents and seasonal residents.***

Objectives:

1. Designate areas appropriate for all types of residential development including single family, multi-family, elderly housing, condominium, low to moderate income housing, and extended care facilities.
2. To preserve open space and vital natural resources, provide the development option of clustered housing in buildable portions of the Township.
3. Site new residential development in a manner that protects the rural character and scenic views by maintaining proper setbacks and providing landscaping screening as appropriate.
4. Encourage existing housing stock and neighborhoods to be kept in good repair, appearance, usefulness and safety.
5. Require adequate buffers and transition areas between residential and non-residential uses to maintain property values and visual attractiveness.
6. Preserve the integrity of existing residential neighborhoods by protecting them from intrusion of incompatible uses.

Commercial Areas and Activities

***Goal: Promote a varied business environment, and encourage the development and expansion of businesses to meet the needs of residents and tourists, while preserving the natural environment and rural character of the community.***

Objectives:

1. Guide commercial development into commercial nodes through the master plan and zoning ordinances.
2. Support the establishment of an Ossineke Business Association.
3. Develop and utilize planning and zoning techniques, such as clustering, shared parking, access management, and landscaping to regulate commercial development along primary county roads and state highways.
4. Make parking (public and private) needs a consideration for all expansions and new development.
5. Require landscape buffers where commercial uses are adjacent to other land uses.
6. Regulate home occupations and home based businesses to assure compatibility with existing residential areas.
7. Work with county and regional organizations to develop strategies for marketing the area as a tourism destination with recreational, cultural and historic components.
8. Improve safety and reduce the visual impact of signs, especially billboards, by controlling their size, number, illumination, and configuration.

Industrial Land Uses

***Goal: Encourage the establishment of new light industries to diversify the local economy and to create more stability and self-sufficiency for the community.***

Objectives:

1. Ensure that industrial uses are developed in an environmentally sensitive manner, are harmonious with the existing community and are located near access to state highways and Class A county roads.
2. Locate light industries and high tech industries that do not pollute the air, soil, or water nor offend because of noise, odor, or visual impact, in industrial zoned areas within the Township. Due to the lack of public water and sewer, these industries should not require high water usage or generate large amounts of septage.
3. Require landscape buffers where industrial uses are adjacent to other land uses.
4. Develop guidelines to ensure that extractive development takes place in an environmentally sensitive manner.
5. Require landscape buffers around extractive uses to screen adjacent properties and public roadways.
6. Establish criteria and require reclamation extractive areas after the operation is complete.
7. Ensure that extractive development takes place in an environmentally sensitive manner.
8. Require landscape buffers for extractive uses between adjacent properties and roadways. Establish criteria for reclaiming extractive areas after the mining operation is complete.
9. Ensure that industrial developments take place in an environmentally sensitive manner and are harmonious with the existing community.
10. Encourage light industries that do not pollute the air, soil, or water nor offend because of noise, odor, or visual impact to locate in zoned industrial areas within the Township.

Infrastructure and Community Facilities

***Goal: Improve the Township's transportation systems, safety, community facilities, and public utilities to accommodate the needs of residents and visitors.***

Objectives:

1. Work with the Alpena County Road Commission to plan for upgrading of roads, maintenance of existing roads, and vehicular and pedestrian safety at intersections and on roadways.
2. Develop a capital improvements plan to address the long term needs for road improvements, township hall maintenance, fire protection, emergency services, trails, and community recreation.
3. Continue to maintain and when necessary upgrade Township Hall and fire station. Investigate outside funding sources such as grants, donations, low interest loans and foundations.
4. Direct development to areas with existing infrastructure and where infrastructure is not adequate require developers to fund the upgrading of infrastructure to support proposed new development.
5. Develop standards for private roads and shared road access.



6. Seek grants through federal, state and other funding sources for infrastructure improvements, community facility improvements, and economic development projects.
7. Explore options for funding road maintenance.
8. Develop standards for private roads and shared road access.
9. Continue to maintain and, when necessary, expand the Sanborn Township Cemetery.
10. Encourage the continued development of public transportation by working with the Thunder Bay Transportation Authority to ensure sufficient public transportation options for township residents.
11. Investigate a wayfinding program designed to enhance tourism opportunities and promotion.
12. Promote, maintain, and expand recreational trails by working with County Road Commission, MDNR, MDOT, and user groups to connect community assets and connect with regional trail systems.
13. Implement land use techniques, such as clustering, shared parking, access management, and landscaping, to regulate commercial development along the state highway and primary township roads.

### Economic Development

***Goal: Provide for economic growth that creates a diversified economic base and improves the competitiveness of the county's economy by enhancing employment opportunities for residents and the profitability of businesses and industries, while maintaining the community character and environment.***

#### **Objectives:**

1. Strive to balance economic development with the rural character of the Township.
2. Encourage a diverse mix of new businesses.
3. Work with Target Alpena Development Corporation to implement existing business retention programs.
4. Continue to investigate and implement methods to develop high speed telecommunication service in rural areas, while maintaining a rural character.
5. Work with Target Alpena Development Corporation to encourage economic expansion through the promotion and attraction of new businesses.
6. Ensure reasonable land use and development regulations and the development of infrastructure and facilities necessary to support economic development in a planned and managed way.
7. Support and cooperate with regional economic development organizations to explore ways that help promote and develop all of Northeast Michigan.
8. Encourage the expansion of the infrastructure required to make the Township attractive to commercial, industrial, and home-based business.
9. Promote the concept of compact development design to maximize potential land uses.
10. Make parking needs, either private or public, a consideration for all expansions and new developments.

11. Investigate the creation of Downtown Development Authorities, Corridor Improvement Authorities, or Tax Increment Finance Authorities in appropriate areas to improve local economic conditions.
12. Implement streetscape projects to increase the attractiveness of commercial areas.

### Recreation and Public Lands

***Goal: Preserve and improve access to public lands and water, and establish recreational trails and public parks for the enjoyment of residents, visitors and future generations.***

#### Objectives:

1. Update as needed the Township Recreation Plan that identifies and prioritizes needed community recreation facilities.
2. Encourage creative design and planning techniques such as PUD's, clustering and conservation easements, for all new development so as to maintain open space and scenic vistas.
3. Through zoning and review procedures, proposed subdivisions, site condominiums, planned unit developments, commercial and industrial developments should be encouraged to provide or participate in the development of neighborhood parks.
4. Pursue outside funding sources, such as grants for land acquisition and/or recreational development either passive or active.
5. Pursue grants and funding sources to establish and maintain community parks.
6. Work with the DNR to expand ORV and snowmobile trails in the area.
7. Retain and where appropriate acquire public water access sites for residents, seasonal residents and visitors.
8. Encourage the expansion and creation of non-motorized recreation trails such as x-country ski trails, bike trails and horse riding trails on both public and private lands.
9. Connect parks, community centers and residential areas with non-motorized trails.
10. Through zoning and review procedures, proposed subdivisions, site condominiums, planned unit developments; commercial and industrial developments should provide or participate in the development of neighborhood parks and open space.
11. Maintain communication with the Department of Natural Resources to provide input into the usage and management of the public lands within the Township.
12. Support the Department of Natural Resources activities related to improvements to Negwegon State Park and additions to the park to expand trails and recreational activities.

Government

***Goal: Provide services in an efficient, cost effective, environmentally responsible and caring manner to meet the needs of the residents, property owners, business people and visitors.***

Objectives:

1. Ensure a responsible fiscal policy and budget process to finance the Township government.
2. Support intergovernmental and regional cooperation on issues of mutual concern.
3. Continue to work with Alpena County to provide emergency services and police services to Township residents.
4. Promote the involvement of volunteers in the government process.
5. Investigate ways to coordinate and collaborate with other local units of government.
6. Explore joint meetings and areas of coordination or cooperation with other local planning commissions.
7. Investigate ways to generate economies of scale and cost savings through collaboration and coordination with other local units of government.
8. Continue to participate in the Alpena Intergovernmental Council.
9. Continue to participate in local meetings of the Michigan Township Association.
10. Work with the Township Board on ways to deliver township services in a wise and efficient manner.
11. Collaborate with the Township Board on planning for future issues impacting Sanborn Township.
12. Work with the Township Board to ensure continued funding and support for the Sanborn Township Planning Commission.
13. Focus on cross-jurisdictional issues when reviewing community master plans and zoning ordinances.

***Goal: Communicate effectively with the public.***

Objectives:

1. Develop a Township Website to provide access to township government activities. This would include posting required forms and permits, publishing Planning Commission and Township Board meeting agendas, notices, and minutes electronically.
2. Continue to use the Township's Facebook page to inform residents and businesses of activities.
3. Inform the public about the scope and value of Township services.
4. Encourage public feedback on issues impacting Sanborn Township.
5. Encourage public feedback from a wider array of Township residents, including younger and newer residents

***Goal: Implement effective blight and nuisance controls within the Township.***

Objectives:

1. Promote effective zoning regulations to control blight and nuisances.
2. Encourage the adoption of uniform blight ordinances with neighboring local units of government.
3. Encourage the Township Board to enforce blight ordinance regulations.
4. Work with the Township Board and the Township Attorney to develop and implement effective zoning regulations to control blight and nuisances.
5. Work with the Township Board and the Township Attorney for blight and nuisance regulations to be enforced by the Township Zoning Administrator.
6. Investigate the feasibility of multiple local units of government adopting and enforcing uniform blight and nuisance control regulations.
7. Work with the Township to increase public awareness regarding the need for blight and nuisance regulations.

### **Overall Resource Conservation Goal**

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***Goal: The overall goal of the Resource Conservation Element is to preserve and maintain the ecological, visual, forest, wetland and scenic resources of the Township, preserve the environment and maintain and enhance the overall quality of life for Township residents.***

#### **Why protect nature in our community?**

1. Natural areas enhance the quality of life for residents and help define community identity by connecting residents to the natural landscape.
2. Healthy, functioning natural areas provide recreational opportunities including hiking, fishing, bird watching, and nature study.
3. Natural landscapes soften the hard edge of urban built-up areas with the greenery of leaves, the many colors of flowers and fruits, the smell of blossoms and the sounds of birds.
4. Parks and open space enhance the economic value of the area. Open lands cost less in services than other uses, and add to the value of properties nearby.
5. Natural landscapes have many environmental benefits- they control erosion, help retain stormwater, help clean the air of pollutants, protect surface water quality, mitigate global warming by absorbing carbon dioxide and other greenhouse gases, and help shelter and cool our homes. All of these services are provided absolutely free.
6. Future generations will enjoy the legacy of today's efforts to protect our natural heritage.
7. Spiritual Values – "A sense of place, a sense of wellbeing, a quiet place to look inward, feeling at one with the earth," there are many ways people express the spiritual values associated with spending time in natural areas.

#### Collaboration

*There are great benefits to communities working together. Watersheds, streams, ecological corridors and wildlife have a complete disregard for political boundaries. The interconnected web of life, the "green infrastructure" was established long before*

*the land area was divided into political units. Without question, the actions of one community can have a direct impact on the resources in an adjacent community. Therefore, it is imperative that adjacent communities coordinate land use planning and development activities. Working together to protect critical area-wide resources and to improve and re-establish degraded ecological corridors is a win-win scenario for all communities.*

***Goal: Use a collaborative approach to protecting and managing natural systems by forming partnerships with local, regional, state and federal agencies, adjacent units of governments, county government, and resource organizations.***

**Objectives:**

1. Participate in organized efforts to manage and protect the community's natural and water resources such as a Devil's River watershed planning effort.
2. Encourage local organizations, businesses, government agencies, educators and private citizens to become active participants in natural resource protection in the community through volunteerism.
3. Work cooperatively with communities, agencies and organizations to develop studies and institute programs that address watershed, woodlands, wildlife and ecosystem management.
4. Support studies that identify ways in which to protect critical resources, wildlife habitat, water resources, ecological corridors, scenic areas and vistas, and other important ecological resources.
5. Continue to participate in the NRTH Advisory Committee, a regional effort to develop and promote Negwegon, Rockport and Thompson's Harbor State Parks.

**Farm and Forest Lands**

***Goal: Recognize the importance of agricultural lands as an economic base, heritage, and way of life in Sanborn Township.***

**Objectives:**

1. Promote agricultural growth and recognize the importance of small family farms in Sanborn Township.
2. Maintain and provide for the preservation of farmland and woodlands where feasible.
3. Discourage the conversion of farmland into other more intensive uses. Recognize farmland as contributing to the scenic and rural character of the Township.
4. Discourage residential and farming land use conflicts.
5. Encourage the use of "Purchase of Development Rights", "Transfer of Development Rights", Clustering, and Conservation Easements to help farmers retain their agricultural acreage.
6. Recognize farmland as part of the Township's active economic base and potential source of jobs for Township residents.
7. Maximize the most beneficial agricultural use of agricultural lands in Sanborn Township, while encouraging environmentally sensitive farming practices to

protect local surface and ground water quality without unnecessarily limiting the economic rights of agricultural landowners.

8. Encourage agricultural landowners to work cooperatively with supportive public agencies, such as the local Michigan State University Extension, Alpena Conservation District, USDA, and National Resource Conservation District offices.
9. Allow farmers to produce, process, and market at wholesale and retail the products grown on their property.
10. Amend Zoning Ordinance to include regulations which encourage and promote agricultural tourism activities.
11. Educate residents and local officials on Michigan's Right to Farm Act.
12. Encourage the use of Generally Accepted Agricultural Management Practices (GAAMPs).
13. Address the issues of improperly managed human waste used on agricultural lands.

***Goal: Support the retention of the forestry and agricultural land base as a viable resource and to insure they are a component of the economic diversity of the Township.***

Objectives:

1. Support and provide for the preservation of woodlands and farmland where feasible.
2. Encourage use of best management practices and science based forest and wildlife management activities on public and private lands in the township.
3. Participate in the Michigan Department of Natural Resources Forestry Planning activities for lands within the Township.
4. Support the retention of agricultural lands, forest lands and ecological corridors through available mechanisms such as open space/cluster development and farmland agreements, forest stewardship programs, and conservation easements, as well as zoning incentives.

### Resource Conservation

Local planning and zoning are the primary tools communities can use to encourage the use of lands in accordance with their character and adaptability, to limit the improper use of land, and to conserve natural resources and energy.

***Goal: Develop planning & zoning strategies that recognize the land's environmental constraints; consider level of infrastructure available/needed; support concept of sustainable development.***

Objectives:

1. Plan for a land use pattern that is oriented to the natural features and water resources of the area by evaluating: type and density of proposed developments based on soil suitability; slope of land; potential for ground water and surface water degradation and contamination; compatibility with adjacent land uses; and impacts to sensitive natural areas like wetlands, greenways and wildlife corridors.

2. Review model ordinance language in the DEQ Filling the Gaps publication and consider use of resource overlay zones; environmental assessment requirements; fees for professional reviews; sensitive areas protection, PUD/cluster development, conservation cluster residential development; site plan review standards; shoreline protection provisions; recommended setback distances; stormwater management guidelines; greenbelt provision language; groundwater protection standards; and coordinated permit review and approval procedures.
3. Adopt zoning and development design standards to supplement State and Federal laws pertaining to wetlands and water resource protection.
4. Encourage the use of native plants for reforestation, wildlife habitat, street and neighborhood trees, landscaping, parks and roadside corridors, by providing a list of recommended native plants.
5. Enact guidelines for, and encourage the use of cluster development that follows a creative design, retains open areas, indigenous vegetation, and other natural features.

***Goal: Support the long term conservation of the natural environment by protecting groundwater, surface water, environmentally sensitive areas, shorelines, and highly erodible areas; and supporting proper management of woodlands, wetlands, open space, fish and wildlife.***

Objectives:

1. Implement groundwater protection and stormwater management regulations in the community's zoning ordinance, while encouraging the continued natural use of wetlands as groundwater recharge, stormwater filtering and stormwater holding areas.
2. Limit development on steeply sloped areas. Require erosion control measures where construction is permitted. Require slope stabilization and revegetation on disturbed slopes or in extraction areas.
3. Integrate wetlands, woodlands and meadows into site development as aesthetic and functional features.
4. Encourage the retention of agricultural lands, forest lands and ecological corridors through available mechanisms such as open space and farmland agreements, forest stewardship programs, and conservation easements, as well as zoning incentives.
5. Consider establishment keyhole development regulations for waterfront areas.
6. Encourage the use of native plant species and naturalized landscape designs, where appropriate, to enhance the community's existing character.
7. Use natural landscaping, where appropriate, in community parks and around public facilities.
8. In recognizing the importance of trees in the suburban environment, encourage the retention of existing native trees and the establishment of street and shade trees in residential neighborhoods and commercial developments.
9. Encourage county departments to effectively administer and enforce regulations such soil erosion and sedimentation control and adopt needed ordinances such as storm water control.

10. Support natural resource education and technical programs that assist landowners, businesses and communities.
11. Due to negative impact to groundwater and surface water resources, discourage the establishment of large scale Confined Agricultural Feeding Operations (CAFO's).
12. Identify non-protected areas within the community that present opportunities for protection, prioritize those areas to maximize biodiversity and community benefits, preserve priority areas using all available resources and techniques.
13. Encourage the preservation, enhancement and restoration of critical wildlife habitat and important ecological corridors.
14. Promote responsible use of water access sites, Lake Huron shoreline and public lands.
15. Encourage the preservation and management of plant communities that provide critical habitat for resident and migratory wildlife species.
16. Support continued efforts to document presence of threatened and endangered species and communities and develop strategies to conserve those finite resources.
17. Support an educational component to increase public awareness about causes of and methods to prevent the spread of invasive species.
18. Sponsor local workshops that focus on water quality, woodlands, wetlands, threatened and endangered species, and wildlife habitat. Workshops should also have a field trip component.
19. Support efforts of the Michigan Sea Grant and the Great Lakes Stewardship Initiative "Placed Based Education Program" with local schools.
20. Support efforts to preserve priority conservation areas through Voluntary Conservation, Conservation Easements, Purchase of Development Rights (PDR) and Fee Simple Purchase.

### Water Resource Protection

***Goal: Preserve and improve surface water and groundwater resources that are essential to the Township's short-term and long-term economic viability and the overall quality of life for Township residents.***

Objective:

1. Regulate the density and type of residential and commercial development adjacent to lakes, ponds, streams, and wetlands.
2. Improve greenbelt areas adjacent to lakes, ponds, streams, and wetlands by reviewing and updating the greenbelt section in the zoning ordinance.
3. *Work cooperatively with private landowners in partnership with local, regional and state agencies to restore and protect natural buffers along the edges of streams, lakes and wetlands.*
4. Evaluate the establishment of a waterfront overlay districts that will set forth consistent special requirements and standards for development along designated waterfronts.
5. *Adopt area-wide stormwater management ordinances to regulate the conveyance, containment and treatment of stormwater run-off.*



6. Assemble water resource educational packets on topics such as septic maintenance, establishing and maintaining greenbelts, lakescaping for water quality and wildlife, proper fertilizer use, and shoreline erosion control.
  - Make an application to local foundations to cover costs associated with assembling the educational packets.
  - Distribute the packets to waterfront landowners.
7. Coordinate with the County in implementing regulations to require regular inspection and maintenance of septic tanks and other environmental alterations.
8. Preserve the scenic and fragile nature of waterfront property from the negative impacts caused by intensive development and provide areas for public access and enjoyment.
  - Consider development of a zoning district specific to waterfront properties in the Township.
  - Develop zoning restrictions that recognize the unique character and sensitive nature of waterfront property.
  - Encourage conservation easements on waterfront properties considered to hold scenic shoreline views.
9. Encourage the use of land and construction of new buildings in ways that protect groundwater from contamination by ensuring storage and use of hazardous substances occurs only in places with adequate secondary containment, separation from wells, and away from drains that discharge into soil.
10. Review and if necessary amend the zoning ordinance standards related to groundwater protection.
11. Site Plan Review standards are included in the Zoning Ordinance to protect groundwater from pollution by addressing secondary containment, drain discharge location, and setback from wells.
12. The Planning Commission and Zoning Administrator will provide educational materials to citizens and stakeholders on protecting groundwater and on the outcome of groundwater monitoring.
13. The Planning Commission and the Zoning Administrator will coordinate the Site Plan Review, and coordinate compliance inspections with the Health Department and Drain Commissioner.



## CHAPTER 7

# FUTURE LAND USE PLAN

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The final step in developing a Master Plan is to determine the types, location and intensities of development that will occur over the next twenty years. With the establishment of a Future Land Use Plan, Sanborn Township intends to ensure that existing land uses such as residential can continue; irreplaceable resources such as water, wetlands, farmlands and forestlands will be protected; and reasonable growth, including residential, commercial and light industrial, can be accommodated with minimal land use conflicts or negative environmental impacts. While future land uses are difficult to predict, a future land use plan provides a scenario which Sanborn Township can use as a guide when considering land use and development decisions.

Future land use recommendations are based on social and economic characteristics, environmental conditions, existing land uses, available community services and facilities, current zoning, community input and community goals and objectives. The future land use plan illustrates the proposed physical arrangements of land use within Sanborn Township. It identifies and defines the major future land use categories as well as the approximate locations for each use. The boundaries reflected on the map are not intended to indicate precise size, shape or dimension; rather they portray a general land use arrangement, which may be refined as the community develops. The plan is prepared to serve as a guide for the Township regarding current issues, land use decisions, investments, public improvements and zoning decisions. The plan is also intended to be a working document which will provide for the orderly development of the Township, assist the community in its efforts to maintain and enhance a pleasant living environment, protect important natural resources and foster economic development and redevelopment.

### Future Land Use Planning Areas

The community has identified seven categories of future land use to serve future development needs. **Figure 7.1** is the future land use map of Sanborn Township that depicts the locations of planning areas. Some lots created prior to this Master Plan and the Ossineke Township Zoning Ordinance may be smaller than the recommended lot sizes called for by this plan. Future development regulations should recognize these conditions and provide for the reasonable continuance of their use and character. The following sections describe the proposed future land use categories

#### Future Land Use Areas

- Neighborhood Residential
- Corridor Residential
- Commercial - Business

- Light Industrial
- Farm and Forest
- Forest Recreation
- Resource Conservation

### Neighborhood Residential

Setting and Location: The Neighborhood Residential future land use area is intended to preserve existing residential development where land has already been subdivided into smaller lots. Smaller homes, located on narrow streets with no curb and gutter or sidewalks typify neighborhood character. These neighborhoods are located within the community of Ossineke and near the intersection of US-23 and Nicholson Hill Road. The lower Devil's River, towering pines and big oaks add to the up-north character of the neighborhoods. See **Figure 7.1** for locations of Neighborhood Residential future land use planning areas.

Development Considerations: Single family dwellings are the principal type development within Neighborhood Residential. Where compatible with residential uses, other uses to be considered include home occupations contained within the dwelling, group homes per state law, bed and breakfast facilities, parks and playgrounds, and community and publicly owned buildings. Parking, lighting, landscaping, screening and signage and other standards should be used to minimize conflicts with residential uses.

Older platted areas were created prior to implementation of the Township zoning ordinance. As a result, some lots (called lots of record) do not meet current zoning standards as far as small lot sizes, and structure setbacks. While landowners are allowed reasonable use of their property, development/redevelopment on lots-of-record should strive to meet current zoning standards.

Areas with high water tables or poor drainage present additional challenges for development on small lots within this area, especially when residences rely on individual water wells and septic systems. Therefore, In order to provide adequate separation zones for individual water wells and septic systems within older platted areas, it is important to follow lot coverage and setback standards. The Neighborhood Residential areas are primarily older year round residential developments. The Township should discourage development that is not compatible with the older stable residential areas.

### Corridor Residential

*Location and Setting:* The Corridor Residential future land use areas are located along major roadways (US-23 and Nicholson Hill Road), see **Figure 7.1**. Current land cover is forest, farmland and residential development. Development adjacent to major roads provide easy access to the highway network. The larger residential lots provide privacy from neighbors and/or other development.

*Development Considerations:* Principal uses include single-family dwellings and two-family dwellings. Where considered compatible with residential uses and do not alter the existing character of the neighborhood other uses to be considered include multifamily residential; group homes per state law; home-based businesses and cottage industries; bed and breakfast facility; churches and associated structures; parks and playgrounds; schools; child care uses; community buildings and publicly owned buildings; public utility buildings; publicly owned and operated parks.

The Corridor Residential category is designed to accommodate single family and two-family dwellings at an average density of one unit per acre. Conforming non-residential uses would require larger minimum lot areas and should be established according to the type and intensity of use.

Provisions should be incorporated into the Zoning Ordinance to allow for a cluster development pattern designed to avoid or minimize development impacts on environmentally sensitive areas and forests. No municipal water or sewer service is currently planned for this area. Due to the lack of community water and sewer, intensive development such as multi-family residential will be dependent on adequately addressing the water and waste disposal issues.

### Commercial - Business

*Location and Setting:* At the present time commercial activity is located along US-23. Commercial development is primarily related to retail and services and provides critical access to goods and services for local residents. Presently, there is a mix of residential and commercial land uses within the areas. This plan does not discourage continued use of properties for residential proposes. As redevelopment of these residential lots occurs, spacing of driveways and access management will be addressed.

*Development Considerations:* Commercial lots along major roads with higher traffic volumes and higher speed limits should have widths that can accommodate recommended driveway spacing in MDOT's access management guidebook for local communities. As an alternative, narrower lots would be acceptable if frontage

roads or shared driveways are incorporated into the development. Commercial lots will vary in size depending upon the location, size of structures and business types.

Compatible uses include retail sales, gas stations/convenience stores, restaurants, personal services, and office uses. The review process for development projects should be set forth in the Zoning Ordinance and provide for a more streamlined review process for less intensive uses that completely fit the given zoning district, and a more thorough review for projects that are more intensive and will be compatible with the given district only if special standards are met.

Businesses should have adequate buffers separating operations from residential and resource uses. Access management, shared driveways and parking lots, stormwater management, groundwater protection, pedestrian access, landscaping, buffering, signage, billboards, traffic and pedestrian safety, and outdoor lighting should be considered in development plans. Roadside landscaping to maintain traffic safety and minimize any negative visual impacts of development should be required along the main roads. Due to the rural character, distance from population centers and low population levels, these areas are not intended for large scale, regional retail/shopping centers.

State law grants the authority to regulate billboards along state and federal highways to townships, cities and villages, but not to counties. Therefore it is recommended the Township consider regulation of billboards along US-23 and primary county roads.

### Light Industrial

Location and Setting: The community has identified the need to improve employment opportunities and expand the local tax base. Industrial future land use areas are designated in purple on **Figure 7.1** Future Land Map. Symbols are also used to show general locations of future light industrial development. These areas accommodate light industry with limited need for water usage. The Township acknowledges there are industrial parks in neighboring communities such as Alpena Township and the City of Alpena. In the short term, until appropriate infrastructure has been put in place, industrial/manufacturing development requiring public water and sewer should be guided to these existing industrial parks.

Development Considerations: The Light Industrial future land use category is designed to provide sites for wholesale activities, warehouses, retail operations that require large outside storage areas, sawmills, and light manufacturing. The review process for development projects should be set forth in the Zoning Ordinance. The process should provide a more streamlined review process for less intensive uses that fit the given zoning district and a more thorough review for projects that are more intensive and require special standards. Developments are subject to

performance standards relative to impacts on the community. This district is compatible with a business district, but not compatible with residential districts without required buffers and other standards to minimize land use conflicts.

Recommended minimum lots sizes are **five acres**. Development standards should address access management, buffering, signs, stormwater management, groundwater protection and landscaping to maintain traffic safety and minimize any negative visual impacts of development along the main roads. Larger scale development often needs municipal water and sewer or may need a satellite water or sewer system. Manufacturing and warehousing development should be located on all-season roads. Due to the lack of community water and sewer, intensive development will be dependent on adequately addressing the water and waste disposal issues.

### Farm and Forest

Location and Setting: Sanborn Township recognizes the presence of farmland as well as wood lots and old farm fields contribute to the local economic base as well as the community's scenic and rural character. The Farm and Forest future land use designation is intended to encourage the continued existence of farms in the Township, particularly on prime agricultural soils and active farms on large parcels. Designated areas are located in the western portions of the Township, as shown on the future land use map, **Figure 7.1**.

Development Considerations: Farm dwellings and agricultural accessory buildings are primary uses, as well as crop production, roadside stands, small scale forestry, raising of livestock normally associated with farming activities, and single family residential. Special uses allowed if they are designed to be compatible with primary surrounding uses would include: plant nurseries, greenhouses, parks, bed and breakfast inns, churches, home occupations, golf courses, telecommunication towers, kennels, private clubs, veterinary services, human care facilities, essential service buildings, publicly owned buildings and publicly owned parks would be allowed.

The plan recommends this category accommodate single-family dwellings at an average density of one unit per acre. There are no current plans for providing municipal water or sewer service. Buffers or physical separation from incompatible uses (commercial and industrial) are necessary when agricultural areas are located next to more intensive development. The plan further recommends incorporating open space development options, into the zoning ordinance.

## Forest Recreation

*Location and Purpose:* Sanborn Township recognizes extensive areas of forests and wetlands contribute significantly to the quality of life and the rural up-north character, which are valued by residents and visitors. The Forest Recreation category is the most extensive future land use category, see **Figure 7.1**. The land cover is a mix of lowland forests, and wetlands, with smaller areas of upland forests; as a result development potential is very limited (see soil constraints maps in Chapter 4. Typical ownership size is greater than 40 acres. Access is limited and seasonal roads are common. Hunting camps, and seasonal and year round homes are located in this area. This category encourages the continuation of resource management and outdoor recreational activities. This land use designation is intended to encourage the continued existence of private forestlands for hunting, wildlands recreation and timber management.

*Development Considerations:* Along with low density residential uses, forestry activities associated with timber and wildlife management would be considered compatible in this area. Other primary uses include seasonal cabins, public and private conservation areas, and hunting camps. If designed to be compatible with surrounding neighborhoods, uses such as recreational camps and clubs, campgrounds, bed and breakfast operations, home occupations, home based businesses, and resorts (recommended on twenty acres or more) would be allowed. Development that generates higher traffic volumes should be located on public paved roads.

Large areas are only served by seasonal roads. Also, karst geology and extensive wetlands constrain development potential. Larger lots provide privacy and tend to maintain ecological integrity of the natural resources. To protect sensitive areas and maintain larger tracts available for other uses, the plan recommends this category accommodates dwellings at an average density of one unit per 5 acres.

Gravel pits with site reclamation plans would be allowed as uses by special approval, provided the activity is compatible with surrounding neighborhoods. No municipal water or sewer service is planned for these areas. Buffers or physical separation from incompatible uses (commercial and industrial) are necessary when Forest Recreation areas are located next to more intensive development. The plan further recommends incorporating open space development options, native vegetation greenbelts, and landscaping requirements into the Zoning Ordinance.



## Resource Conservation

Location and Purpose: Sanborn Township recognizes extensive areas of forests and wetlands contribute significantly to the quality of life and the rural up-north character, which are valued by residents and visitors. The Resource Conservation future land use category includes all MDNR state forest lands and Negwegon State Park. The land cover is a mix of upland lowland forests, wetlands and upland forests. Negwegon State Park is a day use park with large areas only accessible by foot trails and seasonally maintained roads. Locations recommended for this category are shown on the future land use map, **Figure 7.1**.

This plan encourages the retention of large tracts of state lands, contiguous resource areas, river greenbelts, wetlands, scenic areas and wildlife habitat. The Resource Conservation category is designed to provide protection to environmentally sensitive areas and state recreation facilities with the goal of providing low intensity recreational opportunities. Primary uses to be encouraged in this category include hunting, fishing, skiing, hiking, camping, birding, wildlife management and forestry management. Development potential for both public and private facilities is very limited (see soil constraints maps in Chapter 4. Given development constraints, if lands are converted to private ownership a development density of one dwelling per 40 acres is recommended for the category. Gravel pits with site reclamation plans would be allowed, provided the activity is compatible with surrounding neighborhood and show no significant impacts to natural resources.

## Special Issue Areas

### Parks and Community Recreation

The community survey found residents are interested in maintaining and expanding recreational opportunities, and recognizes the importance of outdoor recreation to the local economy. Negwegon State Park, public access sites and waterways are key assets. The community also supports the development of non-motorized trails along the US-23 Corridor and within Ossineke. This plan recommends Sanborn Township work with adjacent communities, MDNR and MDOT to develop these trails.

### Roads

Money for maintaining county roads comes from state and local sources. The Township pays part of the cost of upgrading roads. The Township intends to work cooperatively with the County Road Commission to implement a coordinated asset management program to maintain and improve the road network. However, there are no intentions on upgrading the entire gravel road network to a paved road network. To address safety, maintenance and possible conversion to public ownership, it is recommended the Township adopts driveway, private road and access management standards.

### Open Space Development

The sprawl of subdivisions tends to negatively impact rural character by converting natural and agricultural open spaces to suburban characteristics of homes with manicured lawns. Through the use of clustering homes and limiting the size of improved lawns to smaller *development pads*, developers can preserve substantial areas of space in each subdivision. Where possible, these preserved open space areas should be made visible from adjacent roads and properties.

Methods communities have employed to help protect and preserve privately held forest and farm lands, while protecting a landowner's economic investment, include the Purchase of Development Rights (PDR), conservation open space development standards, clustering requirements for residential uses, and tax breaks or incentives for continuing forestry and farming use. The conservation open space residential and commercial development design standards are effective means to preserve scenic views, rural character, farmland, meadows, woodlands, steep slopes and wetlands. It is recommended that these alternatives be considered in Sanborn Township as a way to balance economic rights with wildlands preservation goals. Incorporating open space requirements into Planned Unit Development zoning is a means of achieving this goal.

### Community Facilities

At the present time residential development within LaBell Subdivision on North Alphonse Street is serviced by a private community water system. All other development relies upon individual private water wells. All development within the township relies upon individual septic systems. Surface and groundwater protection is a primary goal of Sanborn Township's long range planning effort. Constraints analysis in Chapter 4 - Natural Resources found extensive areas with very limited development potential due to wetness, bedrock, large stones, and poor filtering. This plan recognizes existing small lot development along waterways and in older subdivision may someday require public water and/or sewer facilities. While specific sites have not been identified, the Township wishes to recognize potential future needs and the necessity to pursue grant funding to implement common or community water and sewer facilities.

### Resource Protection and Management

The community survey, conducted for this master plan update, clearly shows the rural landscape of forests, wetlands and farms is highly valued in the township. This plan supports the retention of forestlands, farmlands and wetlands in the township. Timber management and regeneration of mature stands are keys to reducing fuel build-up and threats to wildfires. A technique for maintaining a forested atmosphere is to hide development from adjacent roads and properties. Arranging lots and internal subdivision roads to use hills and ridges on the site is an effective way to hide homes, outbuildings, and lawns. Use of woodlands and existing native vegetation may also make very effective screens for all types of development.

Wetlands are an important resource in the Township. The protection and preservation of these plant communities is encouraged. Wetlands can be preserved through 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. Foot trails used for recreation would be acceptable in this buffer area. Other types of development such as roads, parking lots, buildings, septic systems, stormwater detention facilities and lawns are not considered acceptable uses within the wetlands or associated buffer areas.

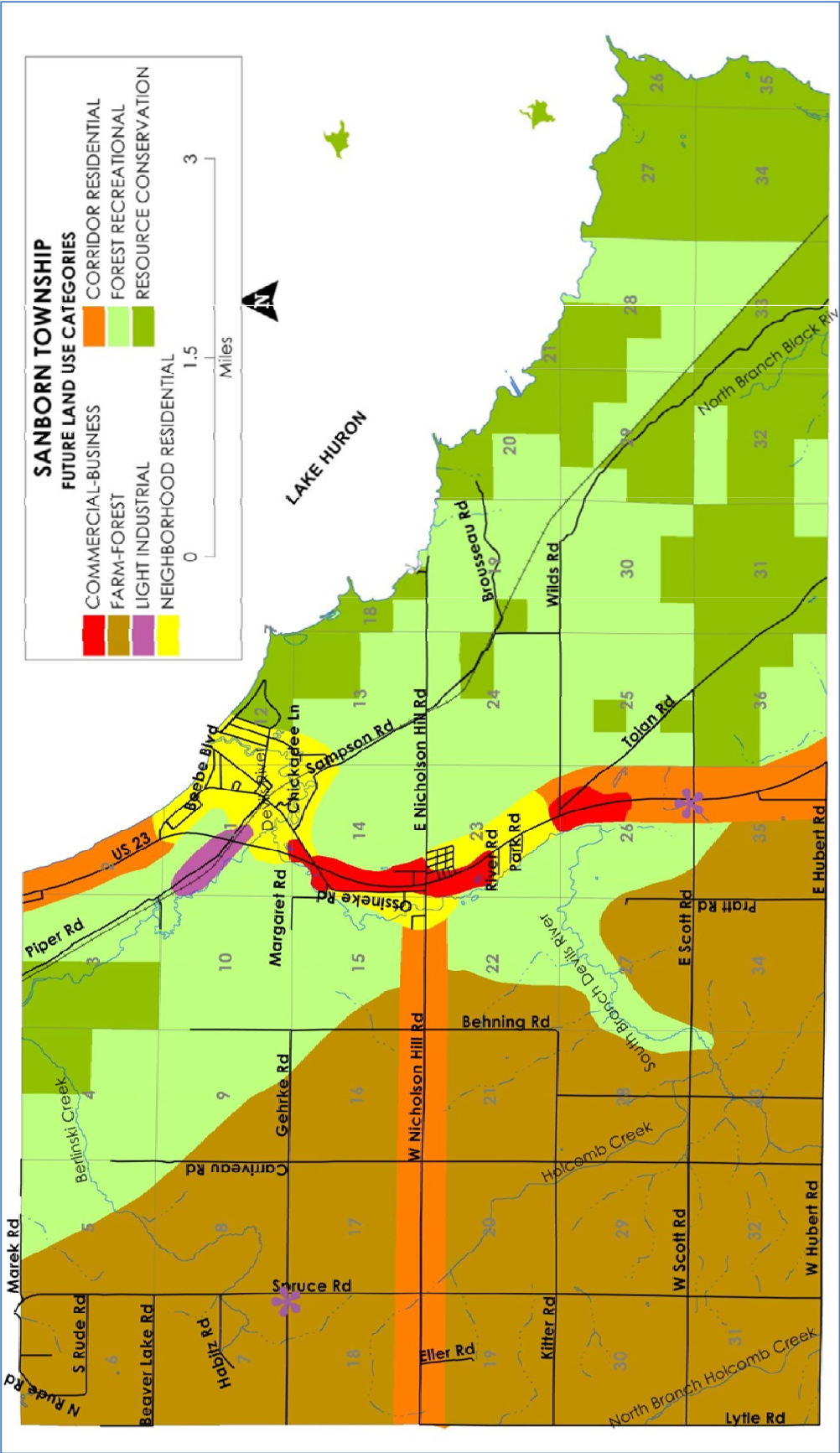
### Hazard Mitigation

The Alpena County Hazard Mitigation Plan ranked the following six hazards as priority concerns: dam failure, infrastructure failures, fixed site hazardous materials, structural fires, winter weather hazards, and transportation accidents. Other concerns included: transportation of hazardous materials, riverine flooding, tornados, extreme temperatures, severe winds and wildfires. Hazard Mitigation actions can be grouped into six broad categories: Prevention, Structural Projects, Public Education and Awareness, Natural Resource Protection, Emergency Services and Property Protection. The Township has a primary role in implementing the hazard mitigation plan, in particular the following three action categories.

*Prevention:* Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital improvement programs, open space preservation, and storm water management regulations.

*Natural Resource Protection:* Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

*Emergency Services:* Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.



## **CHAPTER 8**

### **ADOPTION AND IMPLEMENTATION**

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#### **Plan Coordination and Review**

As required by the Michigan Planning Enabling Act of 2008 (P.A. 33 of 2008 as amended), notification of intent to develop the Sanborn Township Master Plan was sent on December 17, 2012, to all adjacent communities and other relevant entities to request cooperation and comment. A copy of the notice letter, affidavit of mailing and entities notified can be found at the end of this chapter.

After the draft plan was completed by the Sanborn Township Planning Commission with the assistance of NEMCOG, the draft was transmitted to the Sanborn Township Board of Trustees for approval to distribute the plan for review and comment. The draft plan was transmitted on November 12, 2013 to entities notified at the initiation of the plan development. After the required comment period, a public hearing notice and notice of plan adoption of the final plan was transmitted to all required entities. A copy of all relevant information can be found at the end of this chapter.

#### **Public Hearing**

A public hearing on the proposed Master Plan for Sanborn Township, as required by the Michigan Planning Enabling Act of 2008 (P.A. 33 of 2008 as amended) was held on March 17, 2014. Section 43 of the Act requires that a 15 day notice of the public hearing be given in a publication of general circulation in the municipality. A notice of the public hearings was published in the Alpena News. Copies of the public hearing notice are reproduced at the end of this chapter. The purpose of the public hearing was to present the proposed Master Plan and to accept comments from the public.

#### **Plan Adoption**

The Sanborn Township Planning Commission formally adopted the Master Plan on March 17, 2014. The Sanborn Township Board of Trustees passed a resolution of adoption of the Master Plan on April 14, 2014.

#### **Plan Implementation**

The Master Plan was developed to provide a vision of the community's future. It will serve as a tool for decision making on future development proposals. The plan will also act as a guide for future public investment and service decisions, such as the local budget, grant applications, road maintenance and development, future capital improvements, community group activities, tax incentive decisions, and administration of services.

On an annual basis, the Sanborn Township Planning Commission will review the goals and objectives of the Master Plan and identify and prioritize three to four working objectives per year. These identified priority items will be the focus of the Planning Commission's activity throughout that particular year. This will allow the Planning Commission to work on a proactive basis in order to better accomplish the goals identified in the Master Plan.

The Michigan Planning Enabling Act of 2008 (P.A. 33 of 2008 as amended) recommends that all master plans be reviewed and updated, as necessary, every five years. The Sanborn Township Planning Commission will review the Master Plan on a five-year schedule and develop updates as necessary.

### **Grants and Capital Improvement Plan**

The 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 prioritize and budget for capital improvement projects, (such as infrastructure improvements, park improvements, etc.). A Capital Improvements Program (CIP) typically looks six years into the future to establish a schedule for all anticipated capital improvement projects in the community. A CIP includes cost estimates and sources for financing for each project. It can therefore serve as both a budgetary and policy document to aid in the implementation of a community's master plan.

### **Recreation Plan**

The Townships must have a current DNR approved Community Recreation Plan to be eligible for recreation grant funding. Background information presented in this Master Plan update would serve as part of a township recreation plan. Additional work would include developing information on existing recreational facilities within the Township and the region, recreation goals and an action program for existing and proposed facilities. The DNR approved Recreation Plan would cover a five year planning period. Grant funds would be pursued for recreation projects identified in the Master Plan and Community Recreation Plan. Project may include improvements to the ball fields, expansion of indoor and outdoor recreation facilities, bike and hiking trails, and public access onto the lakes and streams.

### **Zoning Plan**

The Master Plan serves as the foundation upon which the Sanborn Township Zoning Ordinance is based. Section 33 of P.A. 33 of 2008, as amended, requires the Master Plan to contain a Zoning Plan – an explanation of how the land use categories on the future land use map relate to the districts on the zoning map. The zoning ordinance is the primary tool for implementing the Sanborn Township Master Plan.

This plan recommends the Township zoning ordinance be reviewed to ensure the ordinances are consistent with the goals and the future land use plan. At that same time the zoning ordinance should be reviewed to assure it conforms to current State of Michigan regulations.

Current zoning standards and allowable uses in each district will be reviewed and evaluated to determine if changes are needed in order to facilitate the orderly development of Sanborn Township while maintaining its existing rural character and providing for innovative approaches for new development and re-development. Regulations will be reviewed to ensure that they are consistent with the existing character of the Township and do not create an abundance of nonconforming structures. Regulations will be considered which allow a mixed use within neighborhoods to encourage the development of shops and recreational opportunities. Allowing this range of uses and densities contributes to the sustainability of a community in a changing economy. Chapter 6 addresses many general and specific goals and objectives that will be achieved through zoning updates.

Amendments to zoning ordinances' general provisions section should consider, but not be limited to: waterfront greenbelts, waterfront setbacks, private roads and driveways, landscaping and screening, parking and loading standards, stormwater management, access management, home-based businesses, groundwater protection, outdoor lighting, and signs and billboards. The Township should consider amending site plan review, uses subject to special approval (conditional uses), supplemental site development standards, administration and enforcement and zoning board of appeals. Amendments to supplemental site development standards provisions should consider, but not be limited to: bed and breakfast facilities, gasoline-service stations, motel, hotels, Planned Unit Development, open space developments, sexually orientated businesses, telecommunications towers, wind turbine generators, car wash facilities, nursing homes-assisted care facilities, and storage facilities.

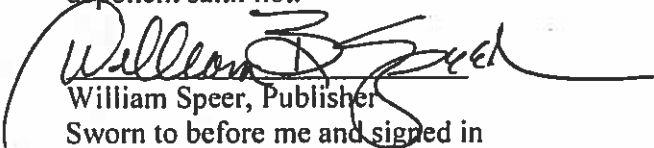
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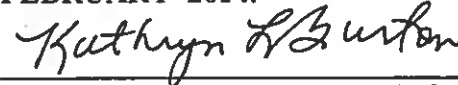
State of Michigan)  
County of Alpena) ss:

Personally appeared before me,  
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Alpena Newspapers Publishing  
A newspaper printed, published and  
circulated in said county, and that he  
knows of his own Knowledge that the

Sanborn Township – master plan

Made solemn oath that the attached  
notice was inserted for 1 time(s) in said  
newspaper; and that the first of said  
publication was on the 24th day  
**FEBRUARY 2014** and the last of said  
Publication was on the 24th day of  
**FEBRUARY 2014**. And further  
deponent saith not.

  
William Speer, Publisher  
Sworn to before me and signed in  
my presence, this 24<sup>th</sup> day of  
**FEBRUARY 2014**.

  
Kathryn L. Burton, Notary Public for  
Alpena County, Acting in Alpena County.  
Notary Expires: 9/3/19.

Public Hearing Notice  
Sanborn Township  
Master Plan

The Sanborn Township Planning Commission will hold a public hearing on the draft Master Plan at 7:00pm on March 17th, 2014, at the Sanborn Township Hall located at 12011 US-23 South, Oshtemo, MI. The draft Master Plan can be viewed on NEMCOG's Web Site, <http://www.nemcog.org/docview.asp?dld=422> For further information please call Lynda VanDusen, Township Clerk, (989) 471-5138 (February 24)



**RESOLUTION OF CONCURRENCE**  
**Sanborn Township Board**  
**Sanborn Township Master Plan**

WHEREAS: Sanborn Township, Alpena County, Michigan re-established a Planning Commission under State of Michigan Public Act 33 of 2008, as amended, and;

WHEREAS: The Sanborn Township Planning Commission is required by Section 31 of P.A. 33 of 2008, as amended to make and approve a master plan as a guide for the development within the Township, and;

WHEREAS: Sanborn Township retained the services of Northeast Michigan Council of Governments (NEMCOG) as its consultant to assist the Planning Commission in preparing this plan, and;

WHEREAS: The Sanborn Township Planning Commission, in accordance with Section 39(2) of the Act, notified the adjacent communities and the Alpena County Planning Commission of the intent to develop a plan and, in accordance with Section 41(2) of the Act, distributed the final draft to adjacent communities and the Alpena County Planning Commission for review and comment, and;

WHEREAS: The plan was presented to the public at a hearing held on March 17, 2014, before the Planning Commission, with notice of the hearing being published in the Alpena News on February 25, 2014 in accordance with Section 43(1) of the Act;

WHEREAS: The plan was adopted by the Planning Commission on March 17, 2014;

NOW THEREFORE BE IT RESOLVED THAT,

The Township Board of Trustees of Sanborn Township does hereby concur with the action of the Planning Commission by means of passing this resolution on the 14<sup>th</sup> day of April, 2014.

Motion: Lynda VanDusen                      Second: Mary Eaton

Ayes: Kenneth Gauthier, Wayne Liske, Mary Eaton and Lynda VanDusen

Nays: none

Absent: Lisa Timm

**Certification**

I hereby certify that the above is a true and correct copy of the resolution adopted at the 4-14, 2014 meeting of the Sanborn Township Board of Trustees.

  
Sanborn Township Clerk

**RESOLUTION OF ADOPTION  
SANBORN TOWNSHIP PLANNING COMMISSION  
Sanborn Township Master Plan**

WHEREAS: Sanborn Township, Alpena County, Michigan re-established a Planning Commission under State of Michigan Public Act 33 of 2008, as amended, and;

WHEREAS: The Sanborn Township Planning Commission is required by Section 31 of P.A. 33 of 2008, as amended to make and approve a master plan as a guide for the development within the Township, and;

WHEREAS: Sanborn Township retained the services of Northeast Michigan Council of Governments (NEMCOG) as its consultant to assist the Planning Commission in preparing this plan, and;

WHEREAS: The Sanborn Township Planning Commission, in accordance with Section 39(2) of the Act, notified the adjacent communities and the Alpena County Planning Commission of the intent to develop a plan and, in accordance with Section 41(2) of the Act, distributed the final draft to adjacent communities and the Alpena County Planning Commission for review and comment, and;

WHEREAS: The plan was presented to the public at a hearing held on March 17, 2014, 2012, before the Planning Commission, with notice of the hearing being published in the Alpena Tribune on February 25, 2012 in accordance with Section 43(1) of the Act;

NOW THEREFORE BE IT RESOLVED THAT,

The content of this document, together with all maps attached to and contained herein are hereby adopted by the Sanborn Township Planning Commission as the Sanborn Township Master Plan on this 17th day of March, 2014.

Motion: Lynda VanDusen                      Second: Gerald Gonyea

Ayes: Domrase, VanDusen, Prittie and Gonyea

Nays: none

Absent: Bob Lee

**Certification**

I hereby certify that the above is a true and correct copy of the resolution adopted at the March 17, 2014, meeting of the Sanborn Township Planning Commission.

  
\_\_\_\_\_, Chair  
Sanborn Township Planning Commission

  
\_\_\_\_\_, Secretary  
Sanborn Township Planning Commission

SANBORN TOWNSHIP  
PLANNING COMMISSION  
ORGANIZATIONAL & PUBLIC HEARING

March 17, 2014

Sanborn Township Planning Commission meeting was called to order at 7:00 p.m. by Chairman Richard Prittie. Roll call taken: Jennifer Domrase, Lynda VanDusen, Gerald Gonyea, and Richard Prittie. Bob Lee was absent. Also present: Ken Gauthier, Chad McNeal and Richard Deuell.

OPEN PUBLIC HEARING was motioned by Domrase, supported by Gonyea to open the Public Hearing on the Master Plan. Motion carried.

Chairman Prittie asked for comments which there were none. With no public input a motion was made by VanDusen to adopt the Sanborn Township Master Plan and forward onto the Sanborn Township Board. Supported by Gonyea. Motion carried.

CLOSE PUBLIC HEARING: Motion made by VanDusen, supported by Gonyea to close the Public Hearing and reconvene to Regular meeting. Motion carried.

Minutes of January 20, 2014 were approved as printed on a motion made by Domrase, supported by Gonyea. Motion carried.

ORGANIZATIONAL MEETING

Motion made by VanDusen to retain Richard Prittie as Chair and Jennifer Domrase as Vice Chair. Supported by Gonyea. Motion carried. Motion made by Gonyea to retain Lynda VanDusen as Secretary with Domrase supporting the motion. Motion carried.

Dates were discussed and approved for the following dates:

April 8 (Tuesday)	April 15	September 15 <sup>th</sup> (Monday)
May 19 <sup>th</sup> (Monday)		October 6 <sup>th</sup> (Tuesday)
June 2 <sup>nd</sup> (Tuesday)		NO MEETING IN NOVEMBER
July 21 <sup>st</sup> (Monday)		December 15 <sup>th</sup> (Monday)
August 18 <sup>th</sup> (Monday)		January 19, 2015 (Monday)

March 16, 2015 (Monday-Organizational Meeting)

Motion made by Domrase to set the dates above. Supported by Gonyea. Motion carried. Rick Deuell from NEMCOG handed out binders for the zoning ordinance worksheets. Board members went through Section 2 of Construction of Language & Definitions. At April's meeting the Board will go through the General Provisions section.

Meeting adjourned at 9:05 p.m.

Lynda VanDusen  
Secretary

**Affidavit of Mailing**  
**Draft Sanborn Township Master Plan**

I Debbie Nash certify communities and utilities on the attached list were sent a draft copy of the Sanborn Township's Master Plan sent on 11-12-13. The master plan was transmitted in accordance with MICHIGAN PLANNING ENABLING ACT, Act 33 of 2008

Debbie Nash  
Name

11-12-13  
Date

Entities who received notice of intent and review draft of Sanborn Township Master Plan

Alpena Township  
Wilson Township  
Ossineke Township  
Caledonia Township  
Alcona Township  
Alpena County PC

Cody Stevens  
Atlanta Unit Manager  
MDNR Forest Resource Div.

Anna Sylvester  
MDNR Parks and Recreation



TO: Local Entities  
FROM: Richard Deuell, AICP  
DATE: November 12, 2013  
SUBJECT: Sanborn Township Draft Master Plan

Sanborn Township has completed a draft Township Master Plan update. As required by the Michigan Planning Enabling Act, a draft of the master plan is being transmitted for your community's review and comment.

According to the act, townships, cities, villages, counties, utilities, railroads and agencies have 63 days to comment on the draft master plan. Those comments must be received within 63 days of date of the transmittal of the draft master plan. Comments should be addressed to the Sanborn Township Planning Commission.

**Comments should be transmitted to: Sanborn Township Planning Commission, C/O Richard Deuell, NEMCOG, P.O. Box 457, Gaylord, MI 49734.**

Thank you for your cooperation and we look forward to your participation in this important process. If you have any questions please contact: Richard Deuell, NEMCOG, 989-705-3733.

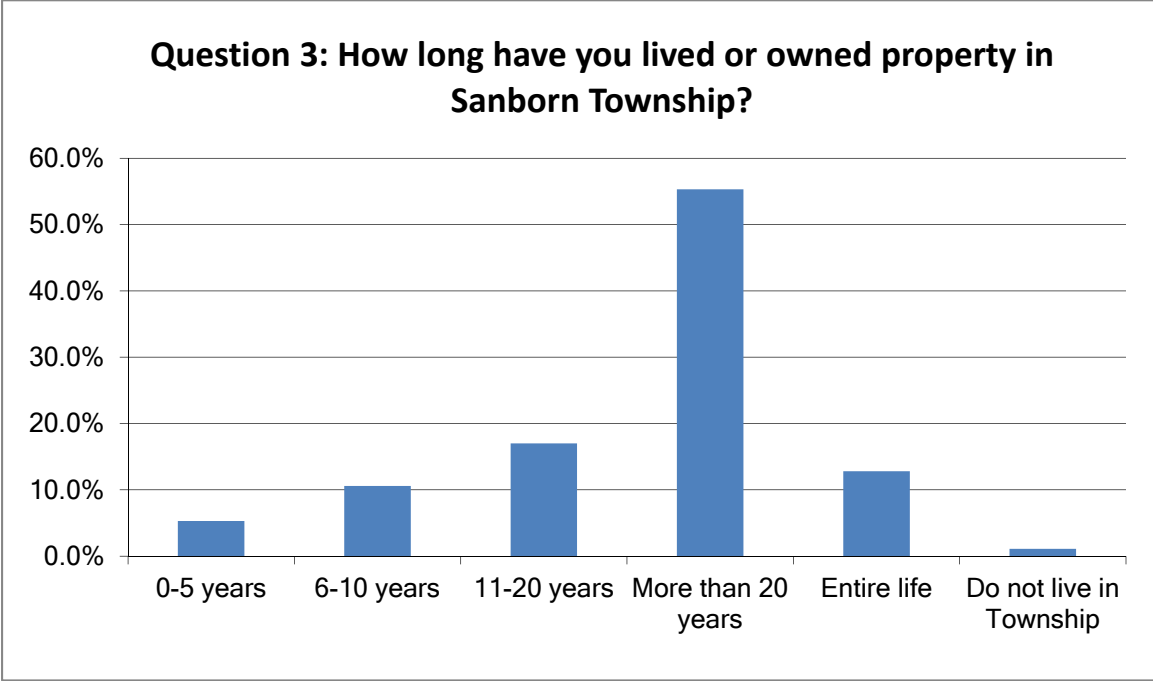
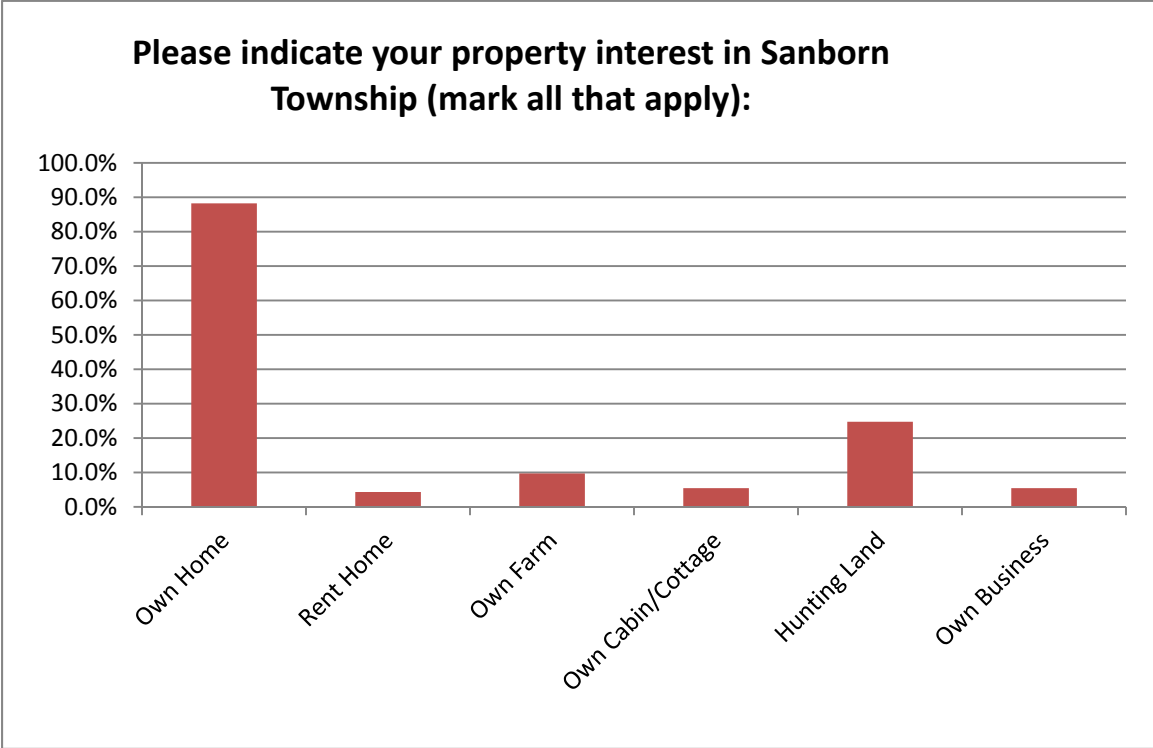
## APPENDIX A GATHERING COMMUNITY INPUT

### Web Survey

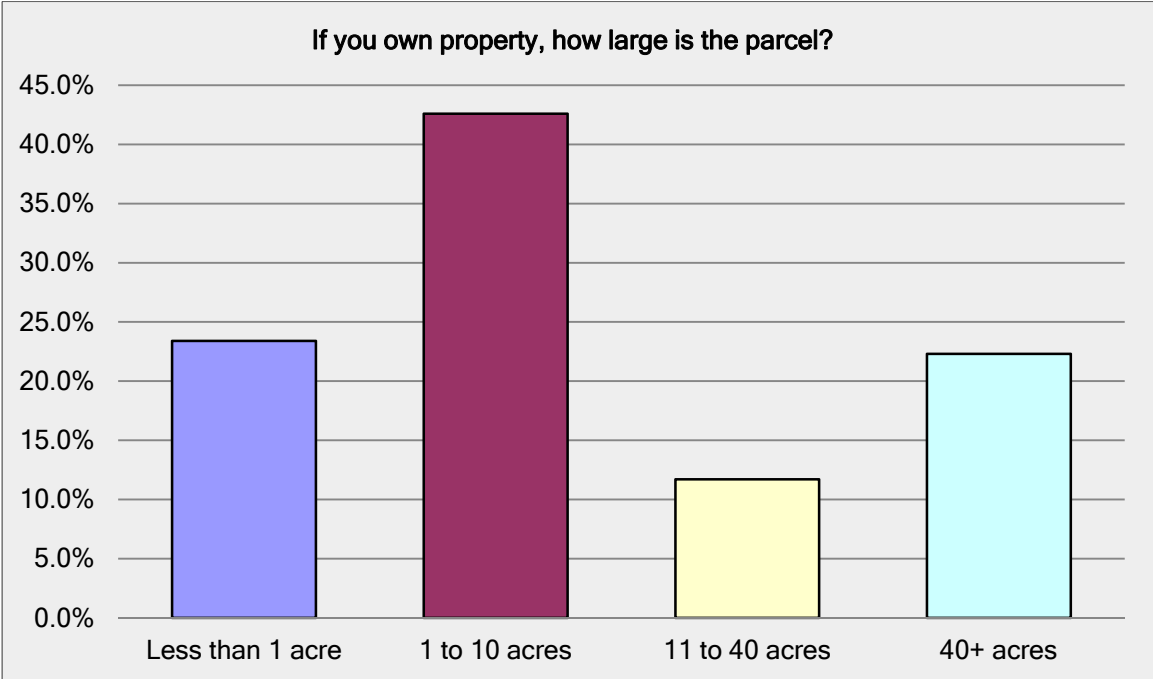
The planning commission, with developed a set of questions and posted the survey instrument on a web service called, "Survey Monkey." A note announcing the web survey was inserted in the winter tax notice. In addition, a link was placed on the Township's Facebook page, and printed copies of the survey were made available by the Township. To promote the survey, an article was printed in the Alpena News. There were 93 surveys completed, which included both on-line and mailed-in surveys.

<b>Question 1: Please indicate your residency status:</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Year-Round Sanborn Township Resident	86.0%	80
Seasonal Sanborn Township Resident	5.4%	5
Non-Resident	8.6%	8

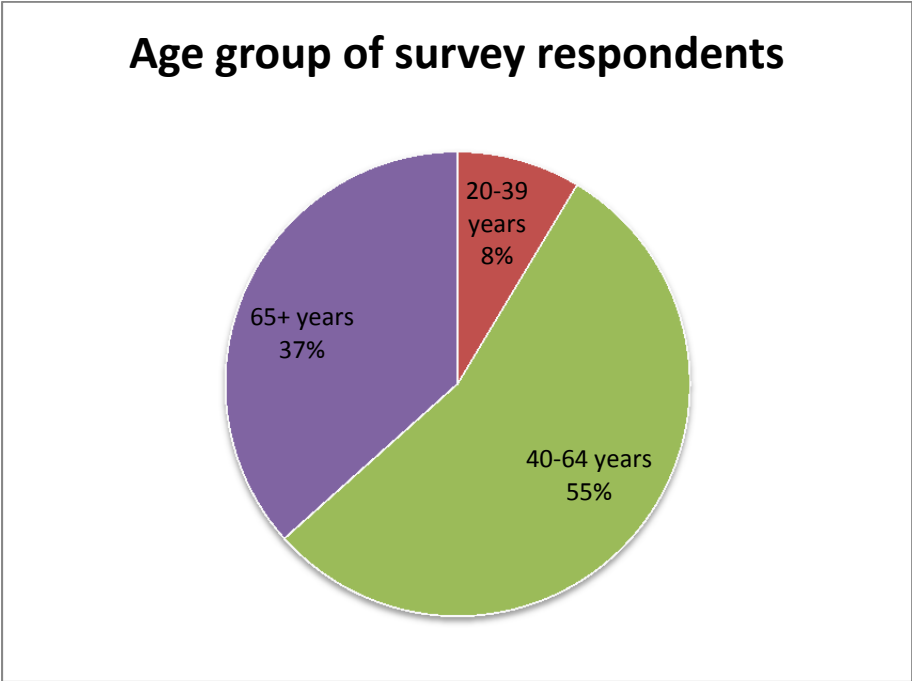
<b>Question 2: Please indicate your property interest in Sanborn Township (mark all that apply):</b>		
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
Own Home	88.2%	82
Rent Home	4.3%	4
Own Farm	9.7%	9
Own Cabin/Cottage	5.4%	5
Hunting Land	24.7%	23
Own Business	5.4%	5



Question 4: If you own property, how large is the parcel?

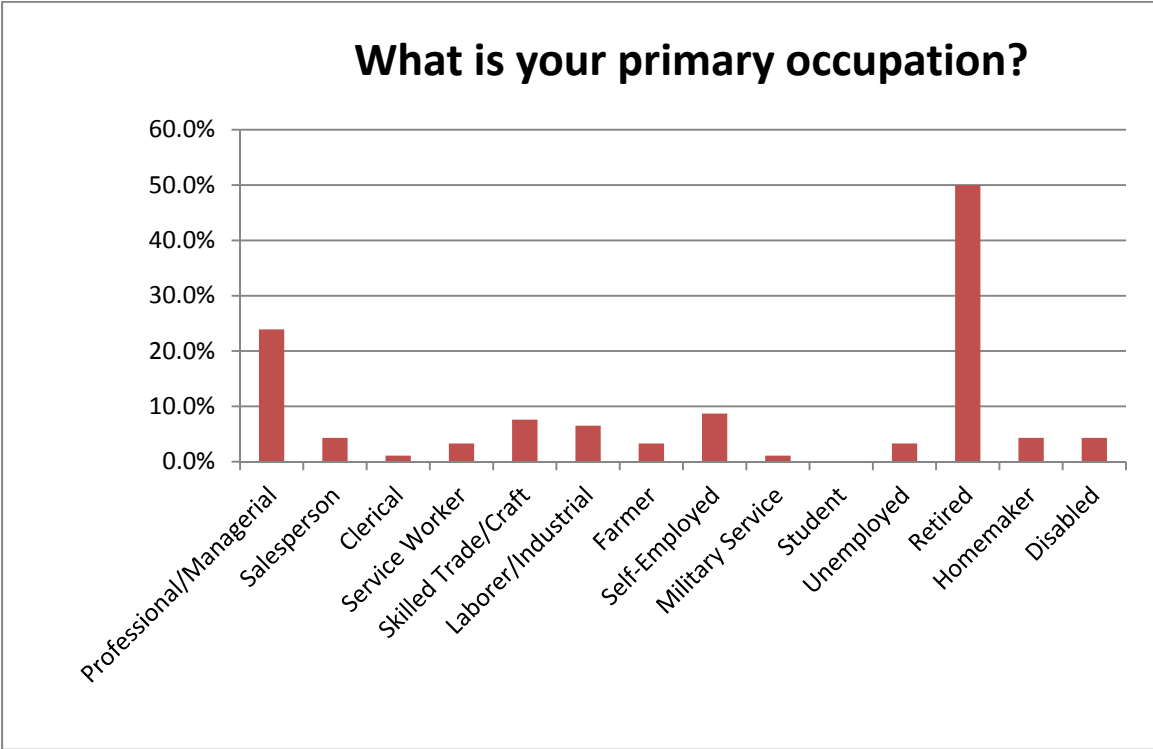


Question 5: What is your age group?



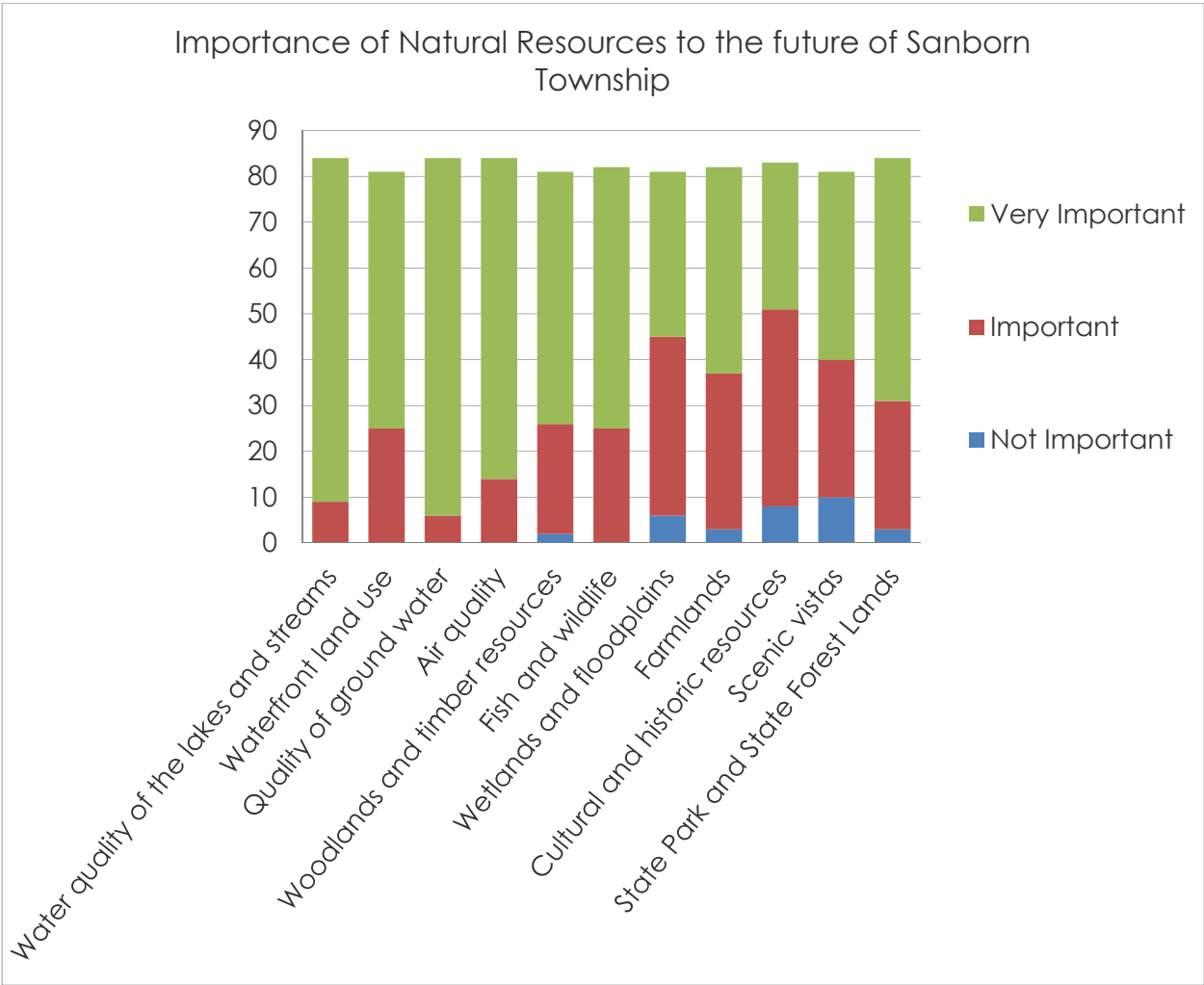


Question 6: What is your primary occupation?

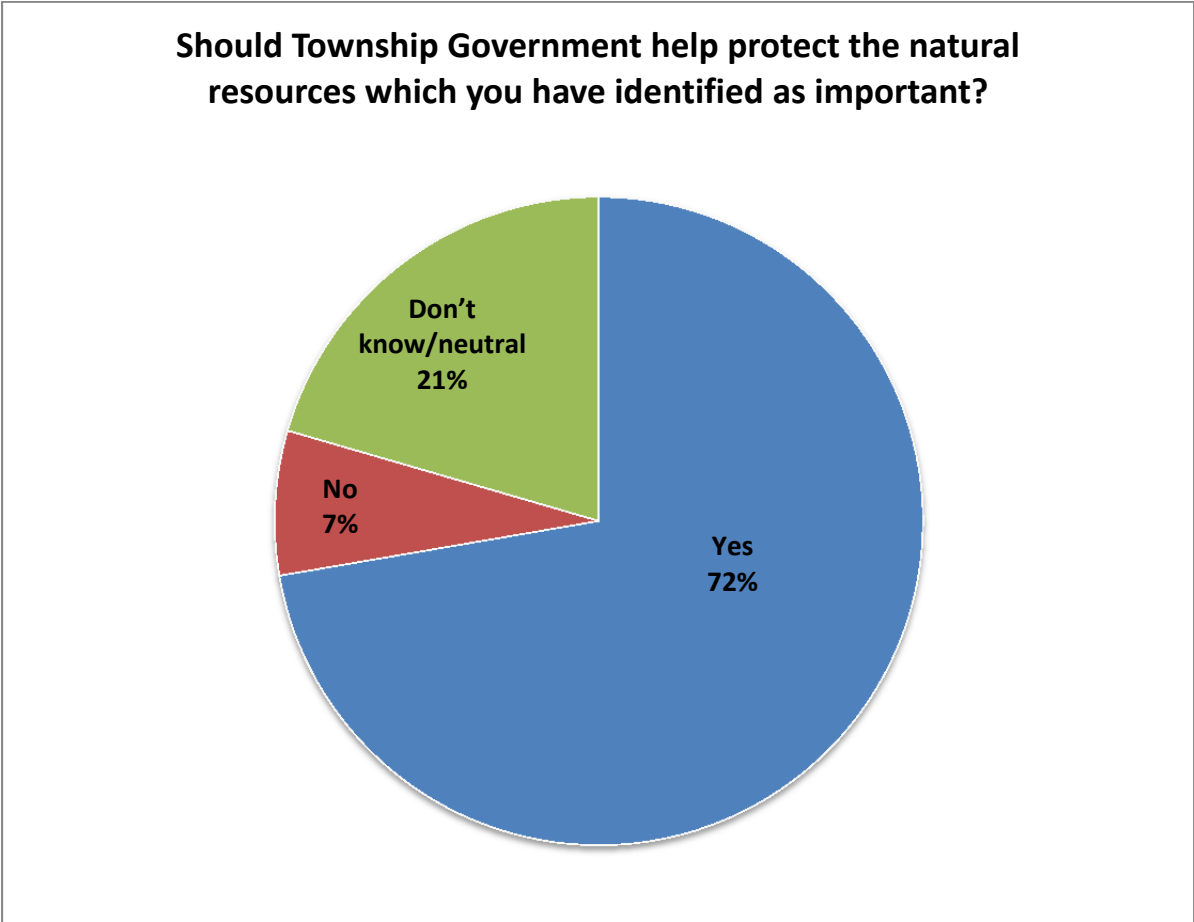


Question 7: If working, where do you work?		
Answer Options	Response Percent	Response Count
Alpena County	94.6%	35
Alcona County	10.8%	4
Iosco County	5.4%	2
Montmorency County	10.8%	4
Otsego County	0.0%	0
Oscoda County	2.7%	1
Presque Isle County	8.1%	3
Question 8: Generally speaking, how satisfied are you with Sanborn Township as a place to live or own property?		
Answer Options	Response Percent	Response Count
Very satisfied	36.5%	31
Satisfied	60.0%	51
Dissatisfied	3.5%	3

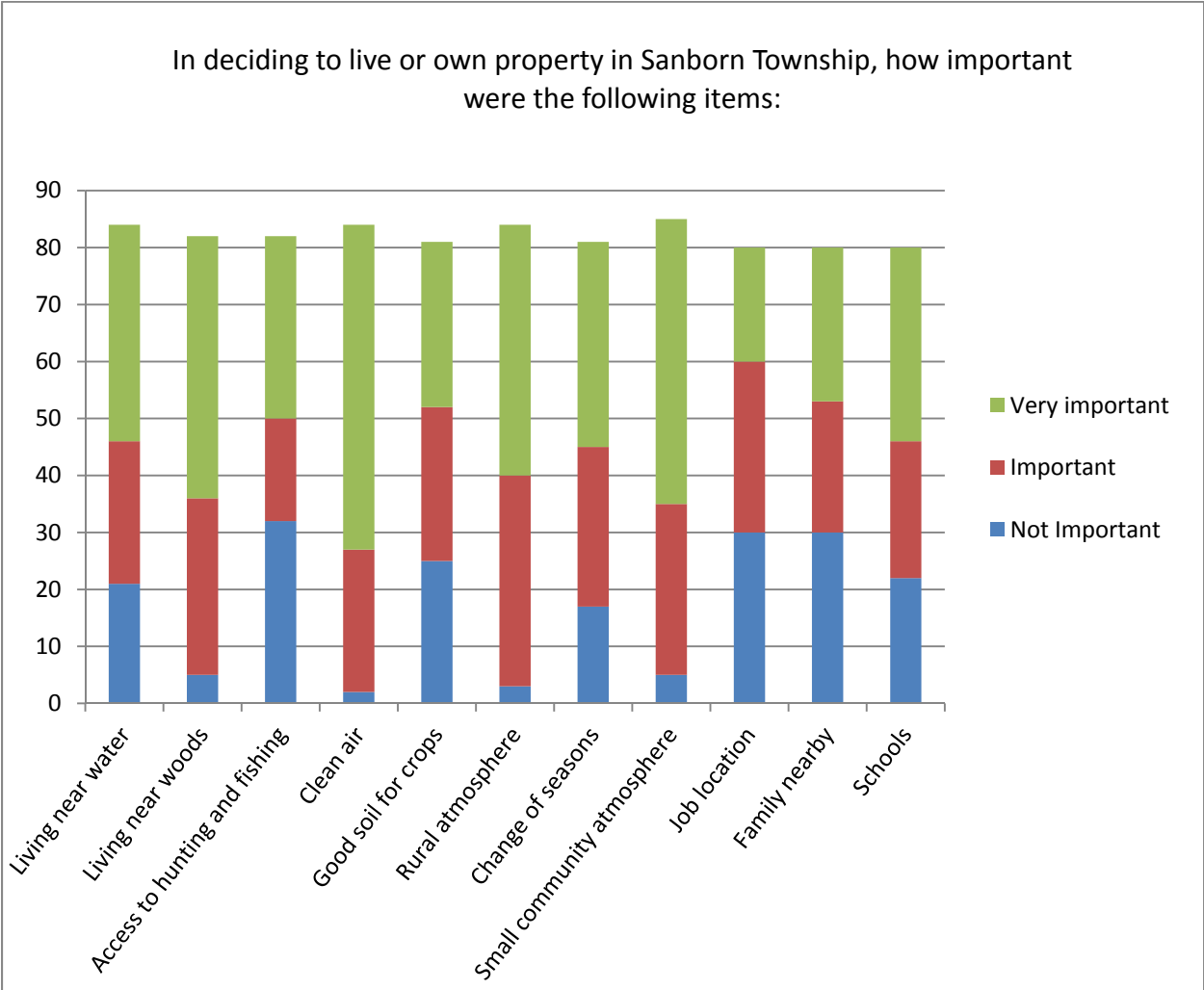
Question 11: In your opinion, how important are the following resources to the future of Sanborn Township?



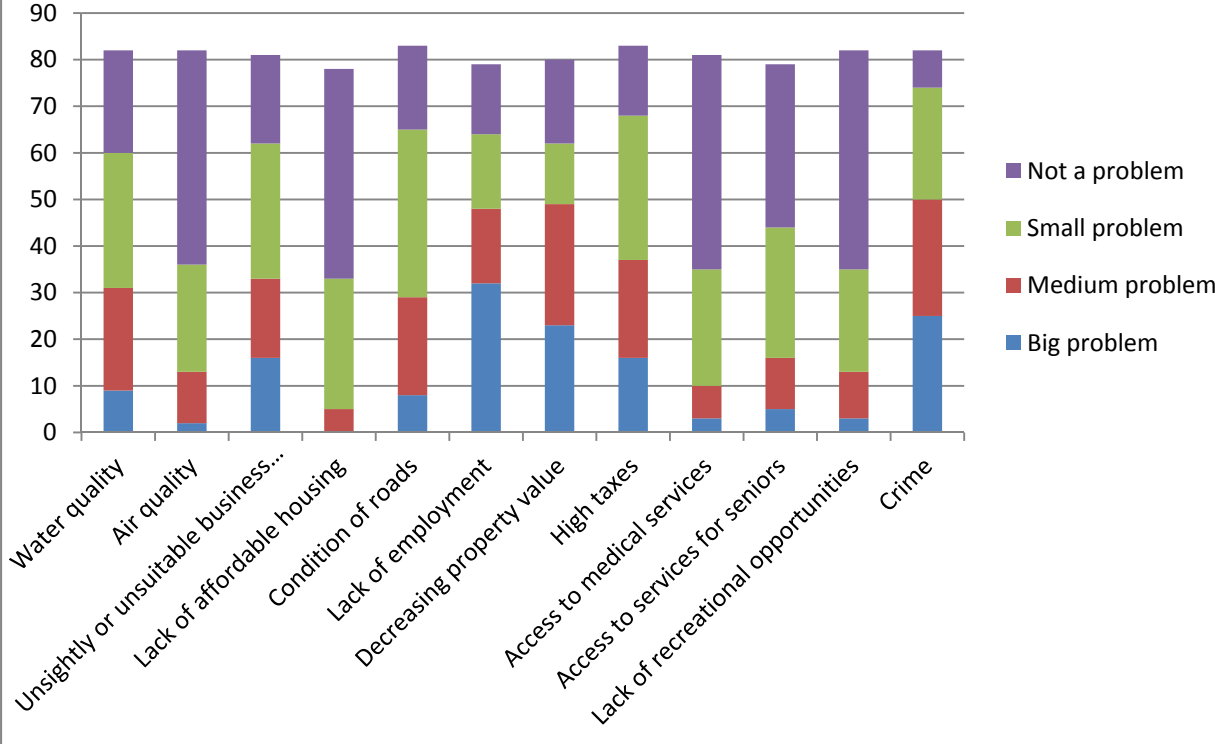
Question 12:



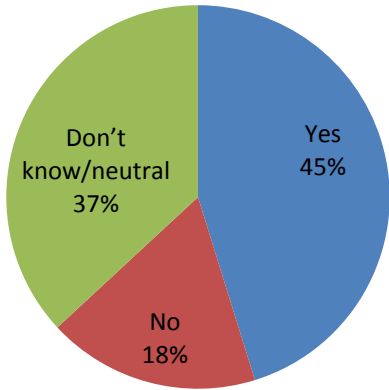
Question 13:



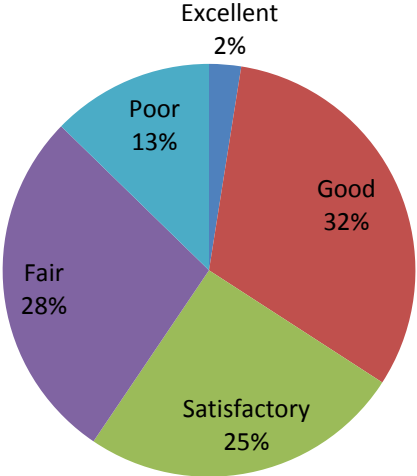
**How much of a problem are these issues in Sanborn Township? Check one choice for each item.**



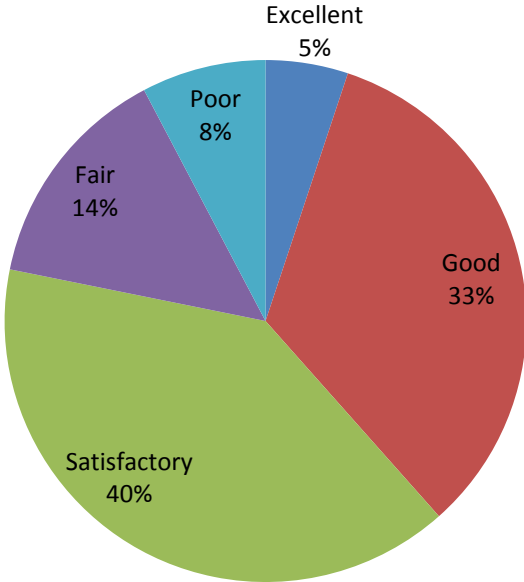
**Do you feel the Township government is responsive to your needs?**



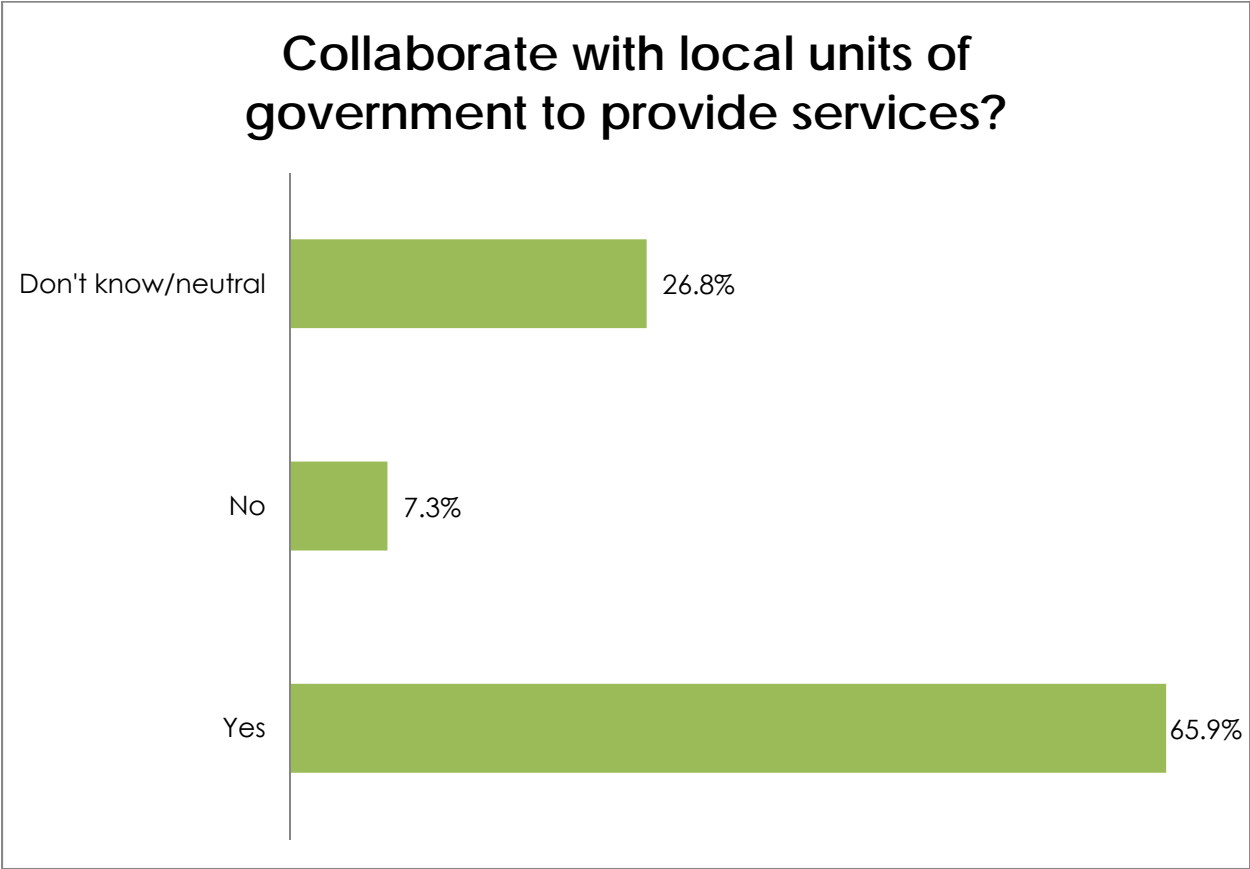
**How would you rate the Township's efforts to guide and direct growth?**



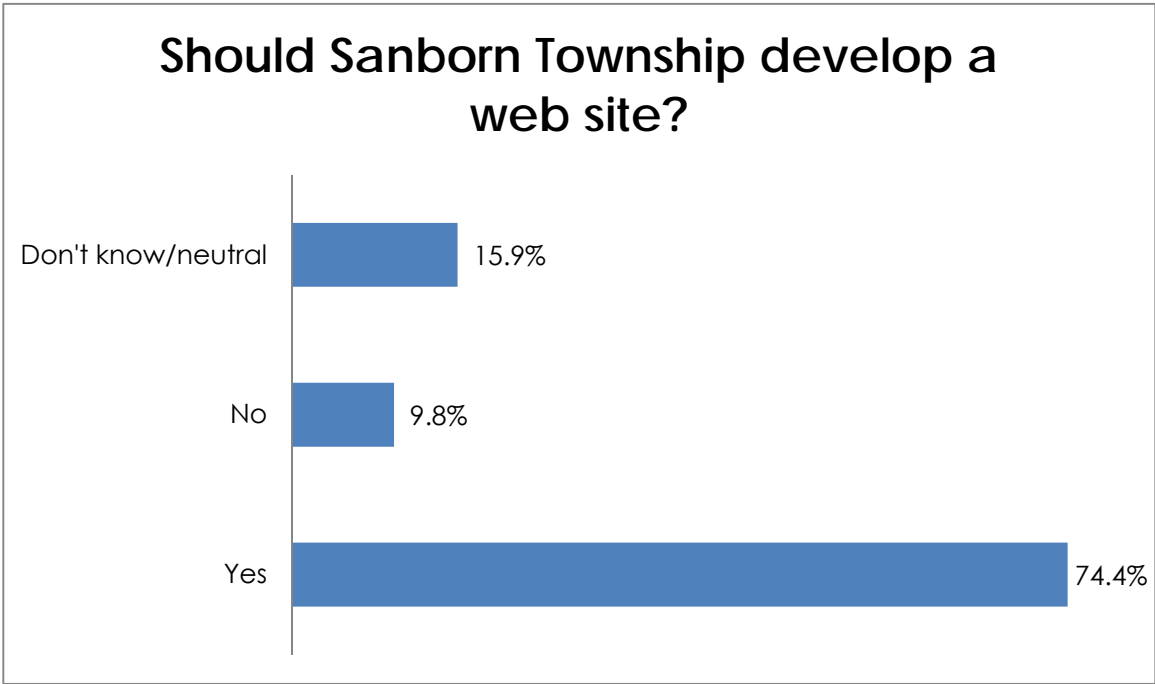
**How would you rate the Township's efforts to protect the natural environment?**



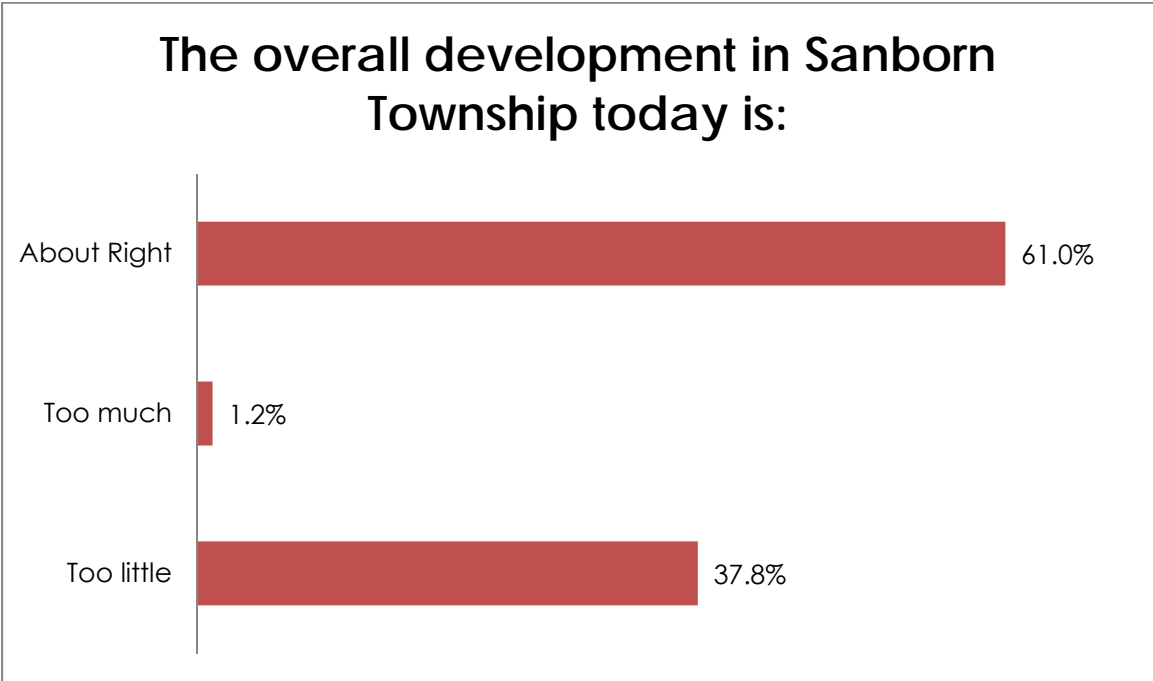
Question 18: Do you think Sanborn Township should collaborate with local units of government to provide services?



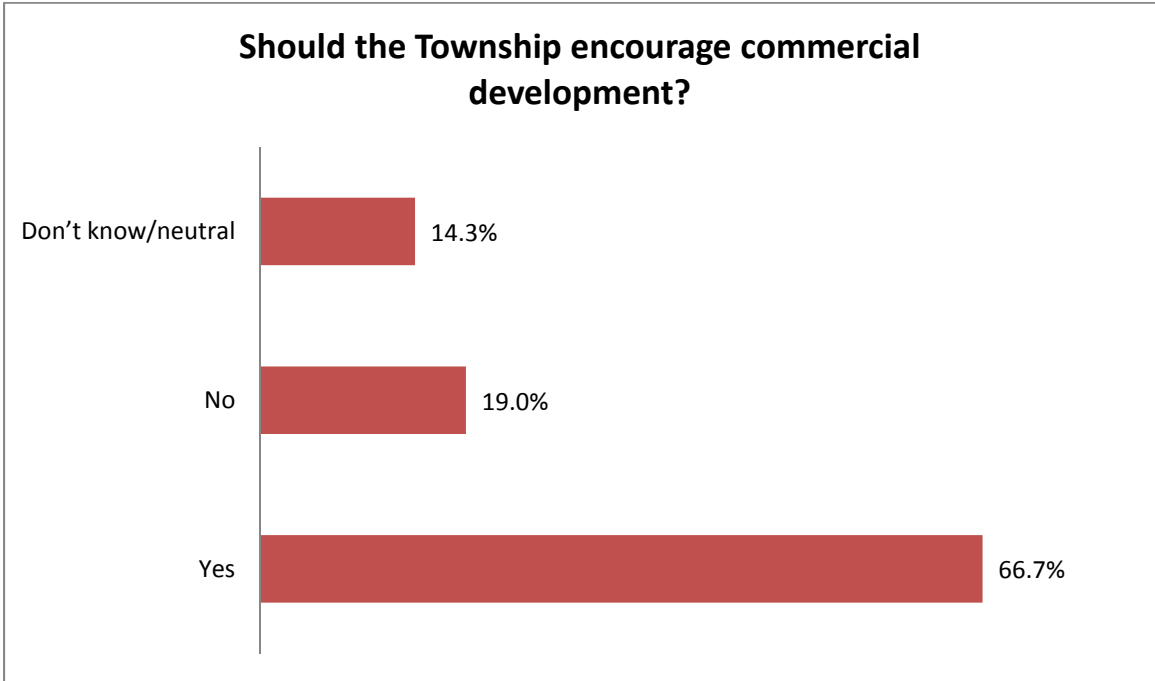
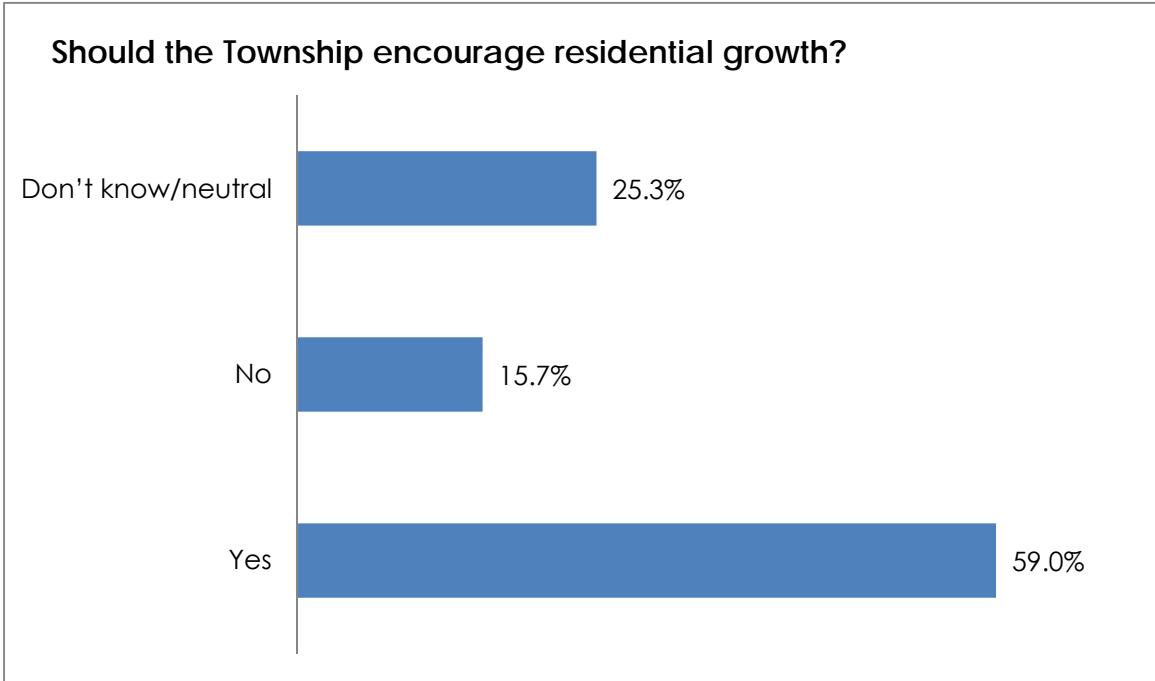
Question 19: Should Sanborn Township develop a web site to inform residents of township activities, disseminate information, and provide township forms?

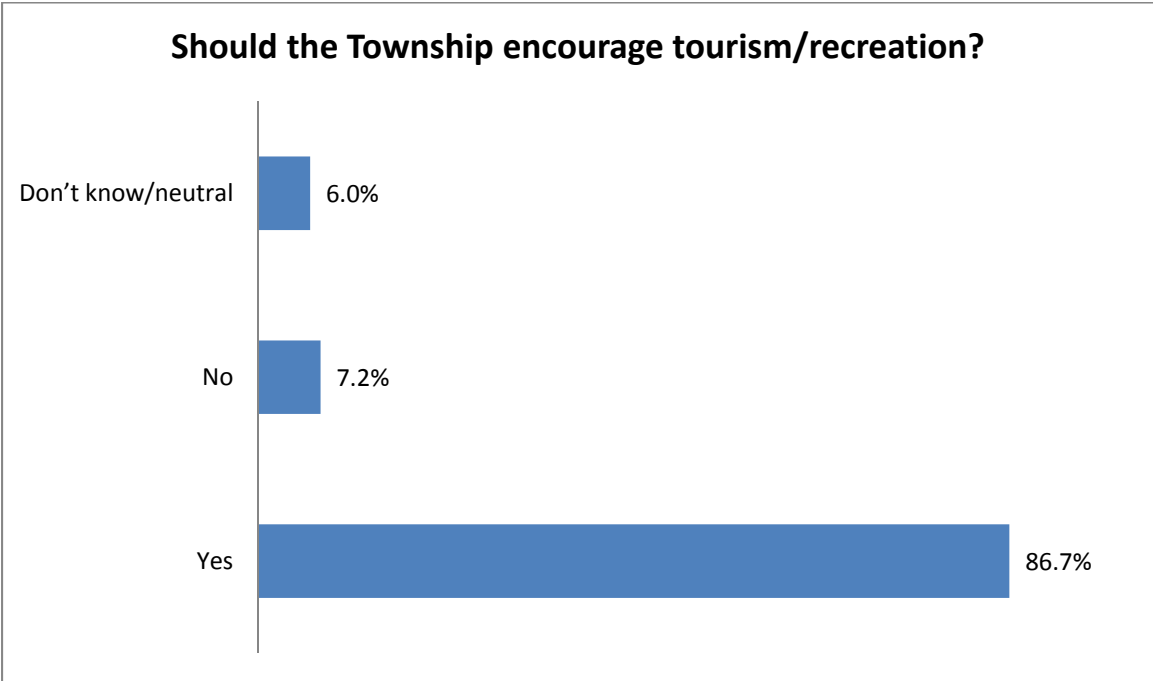
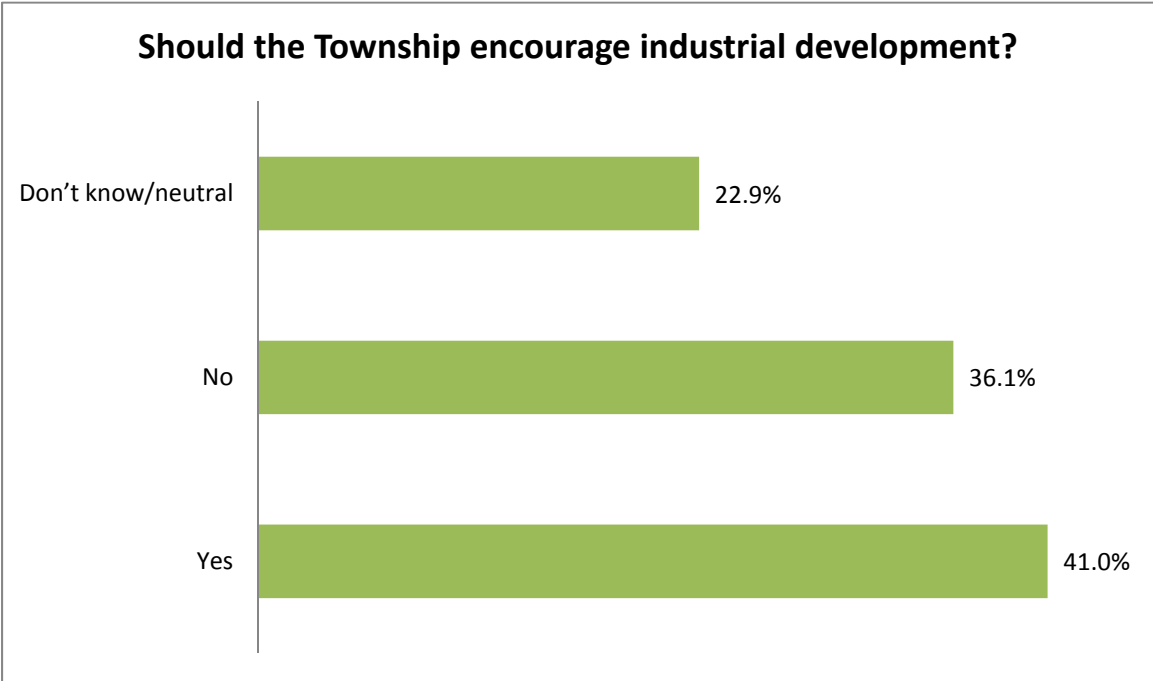


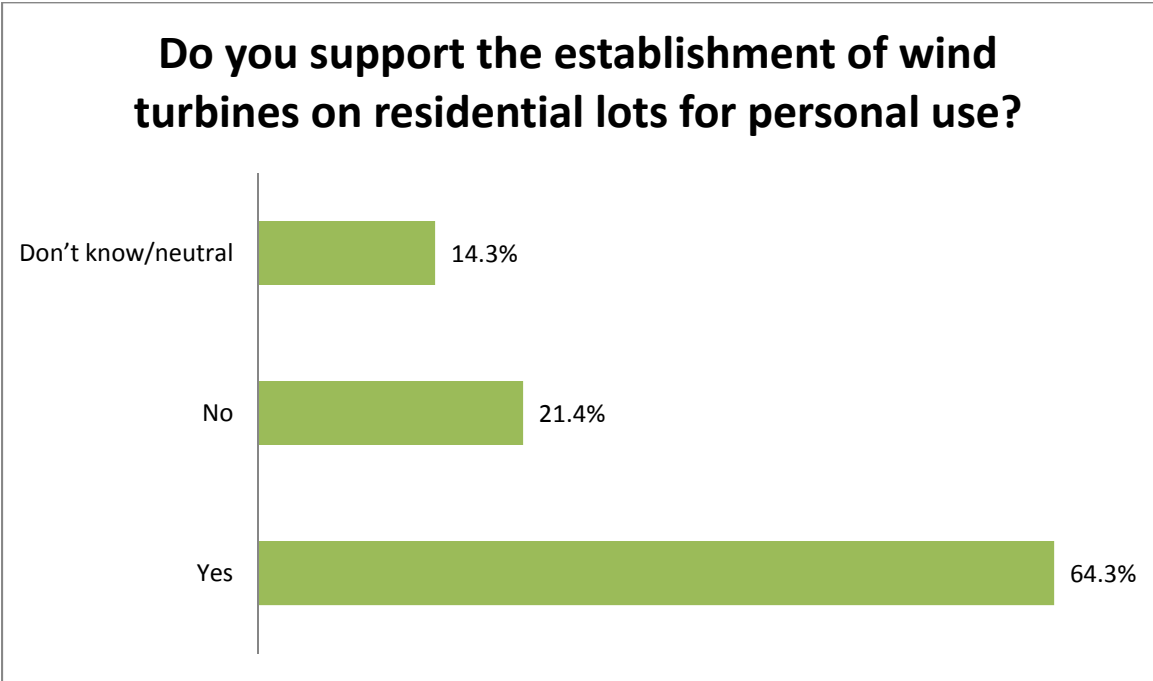
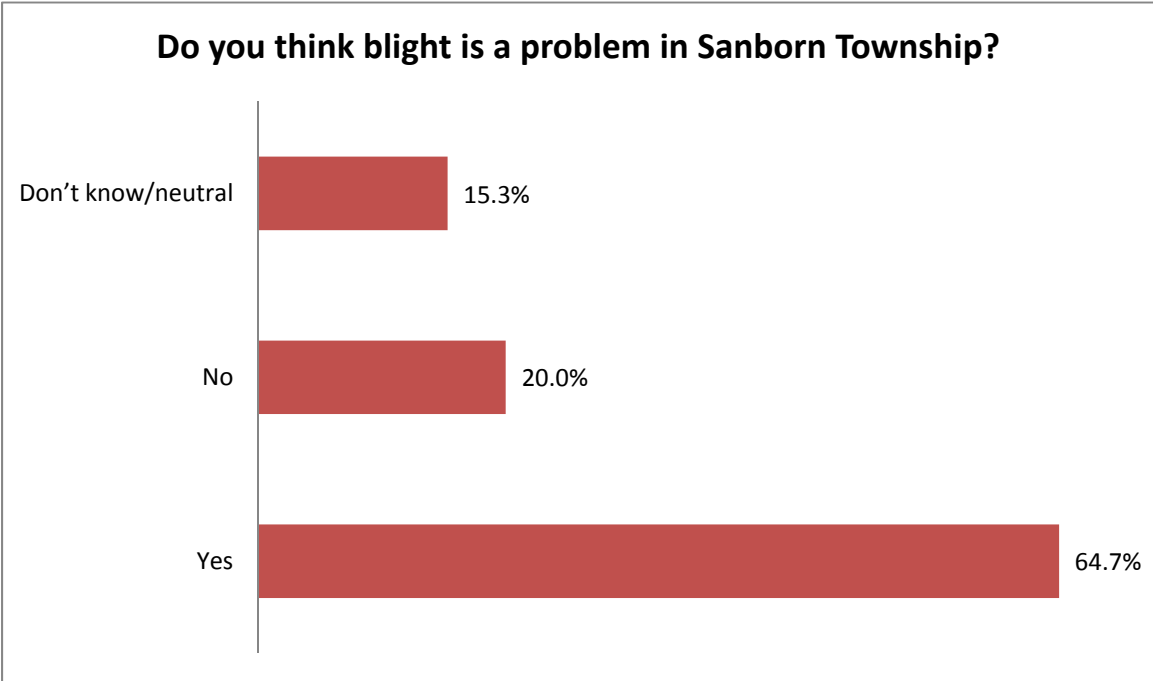
The overall development in Sanborn Township today is:

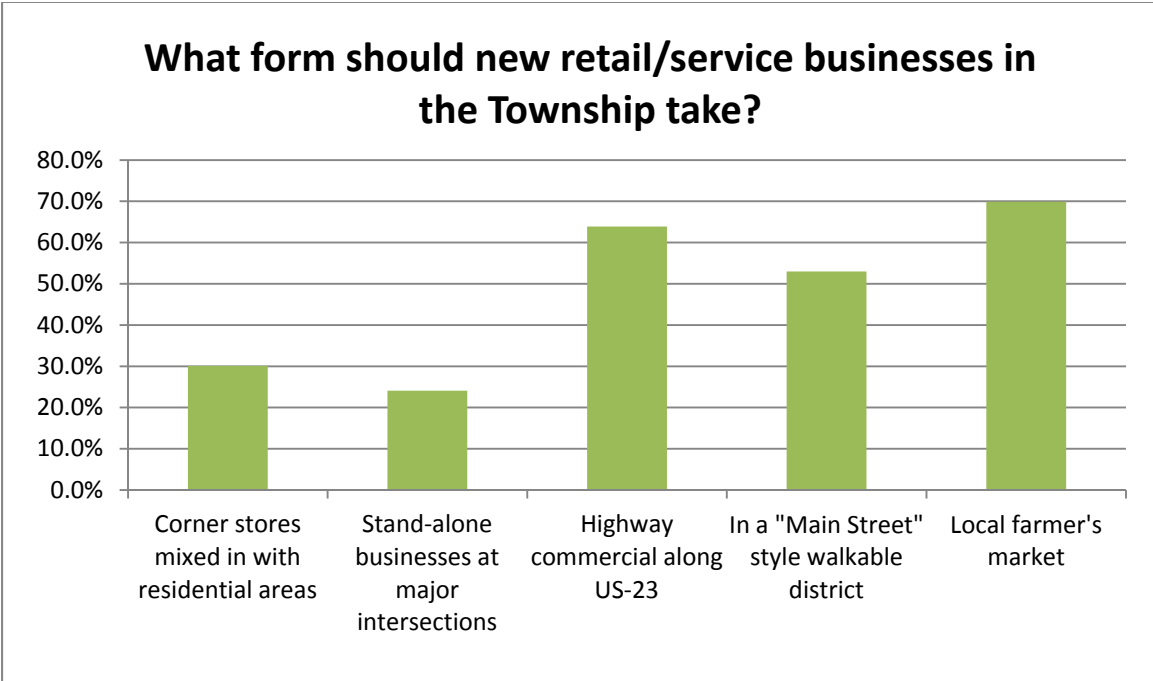
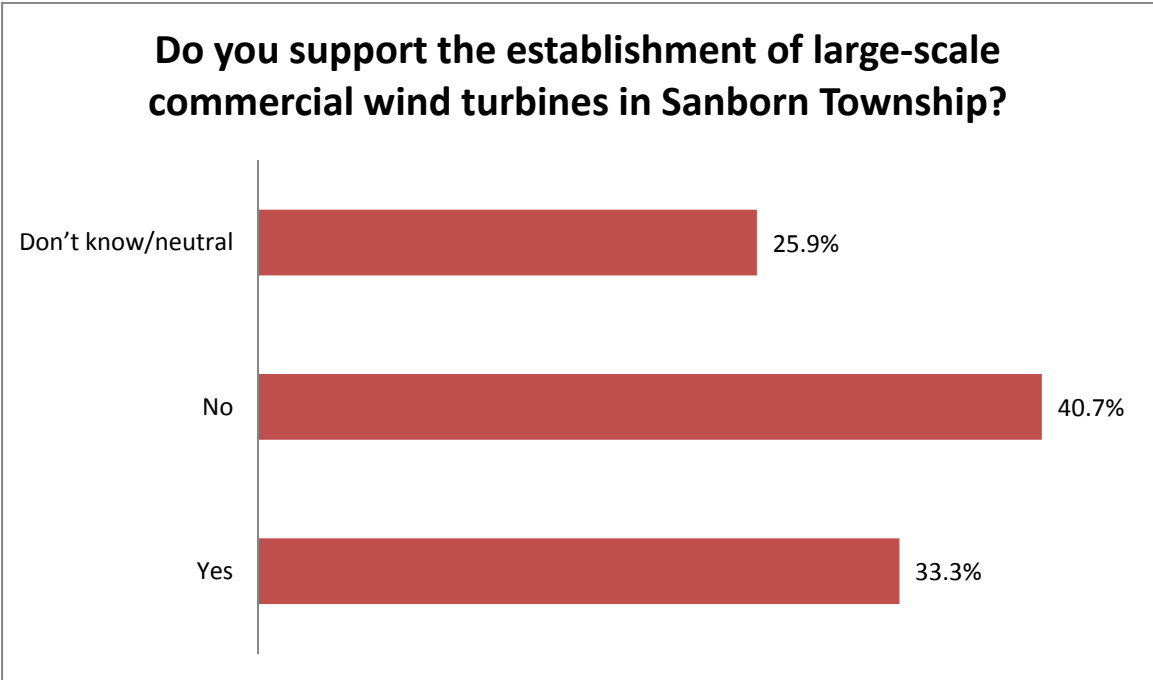


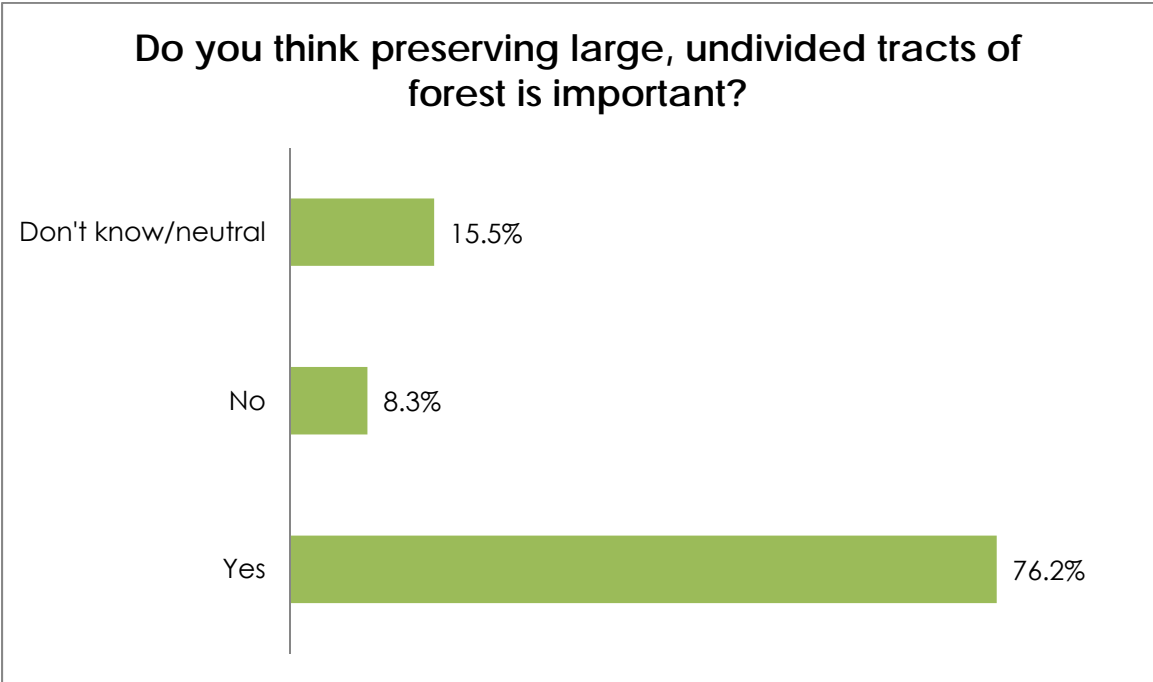
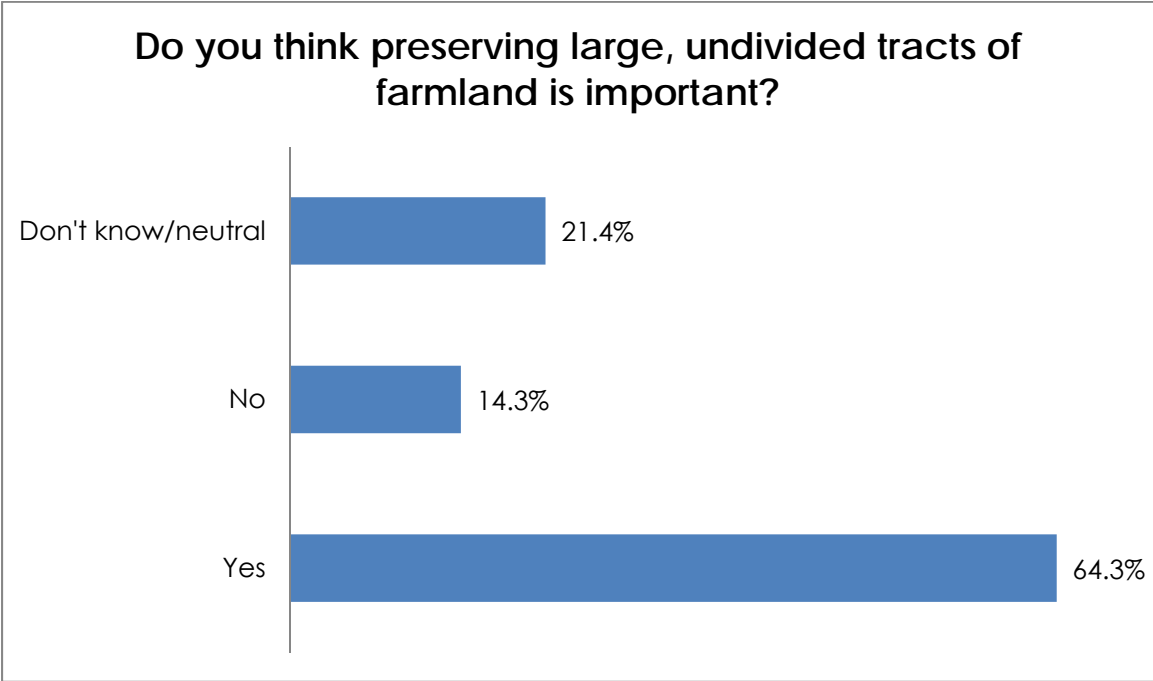


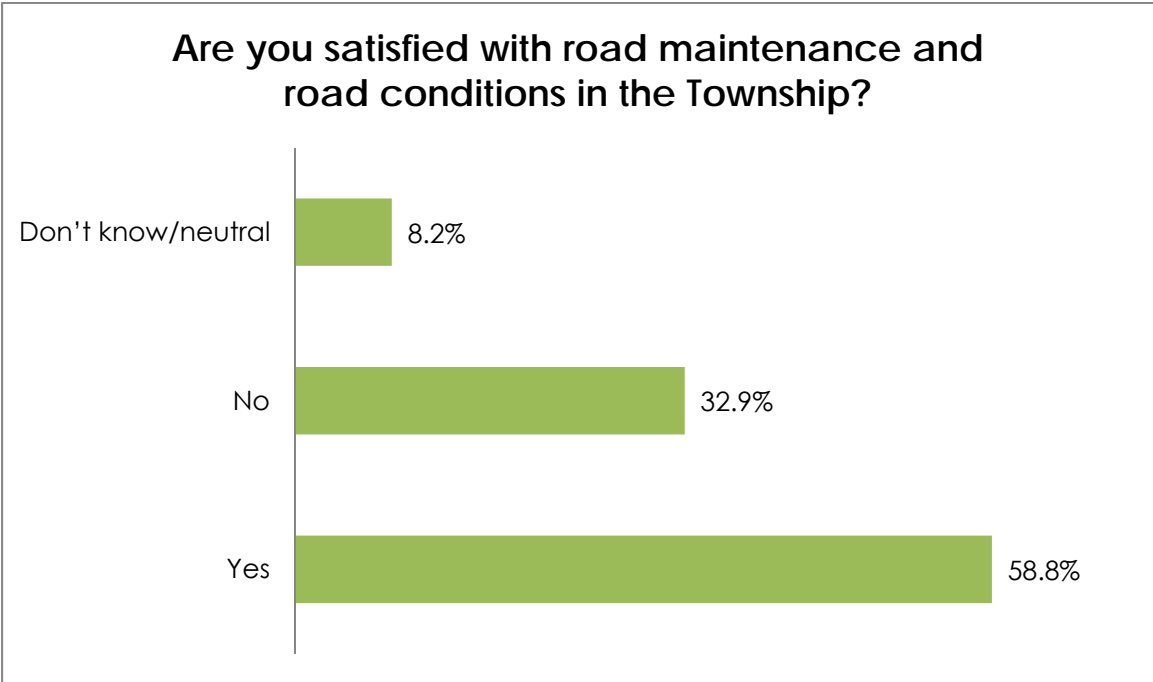
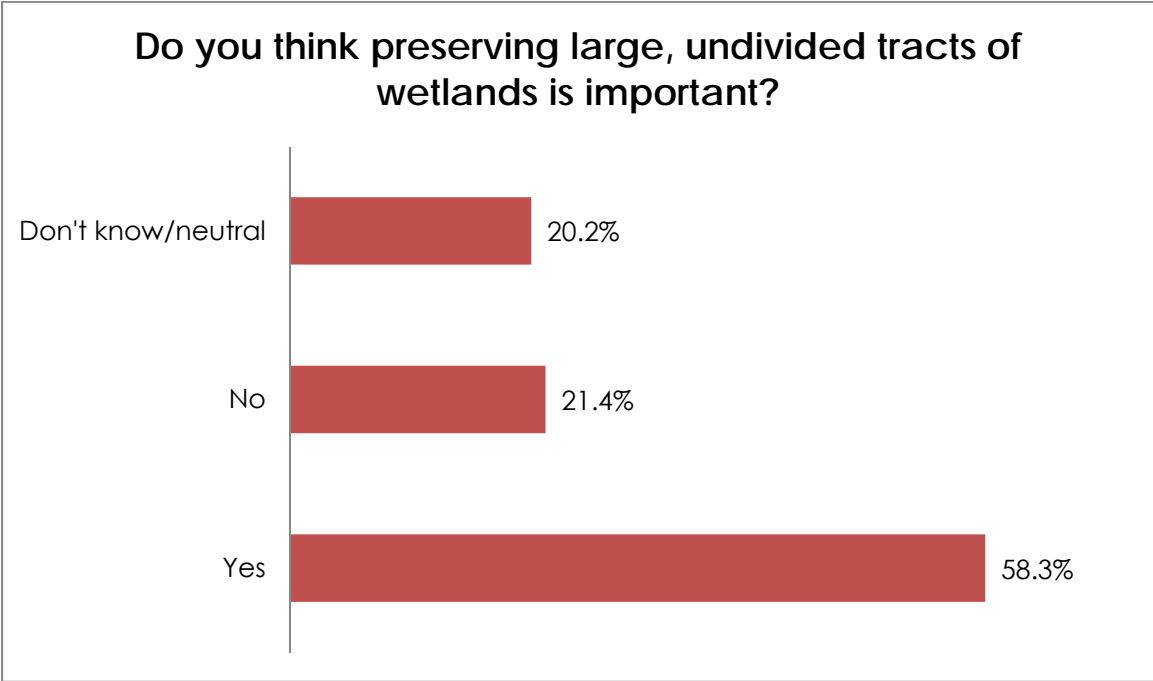


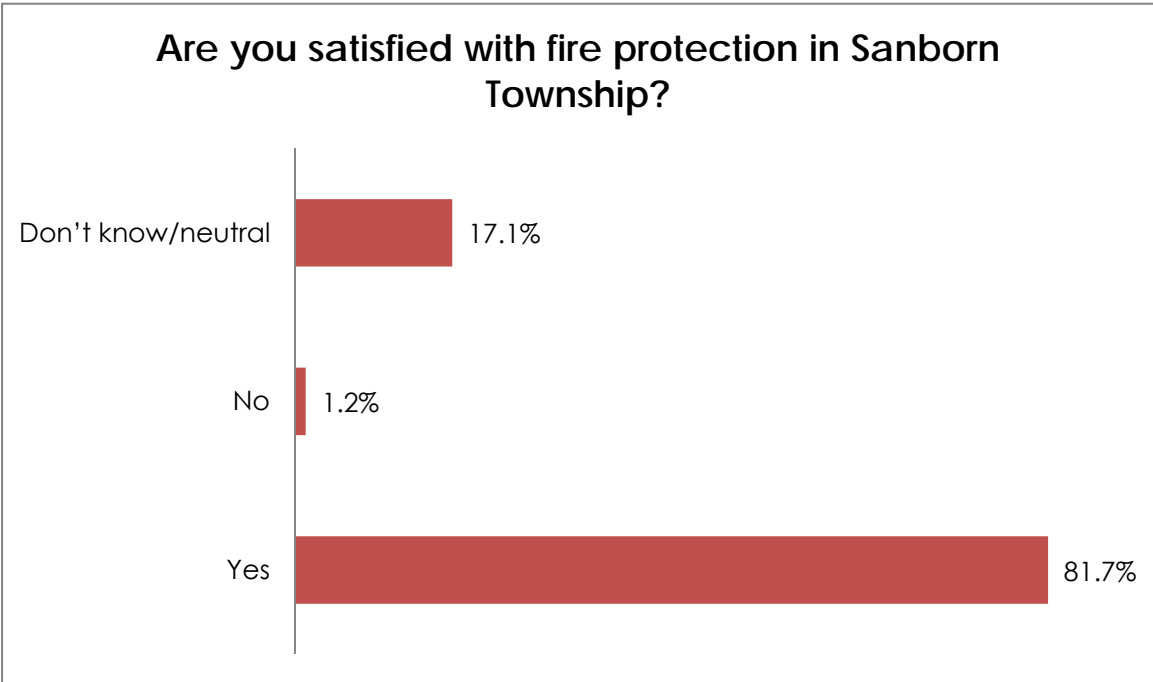
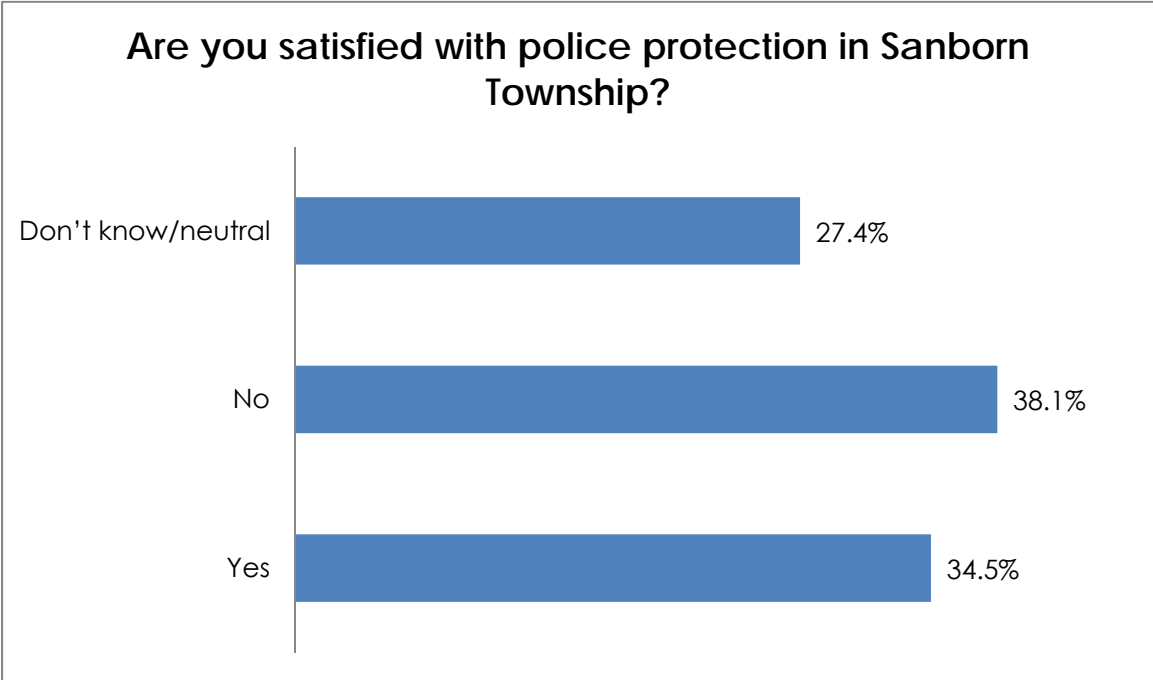


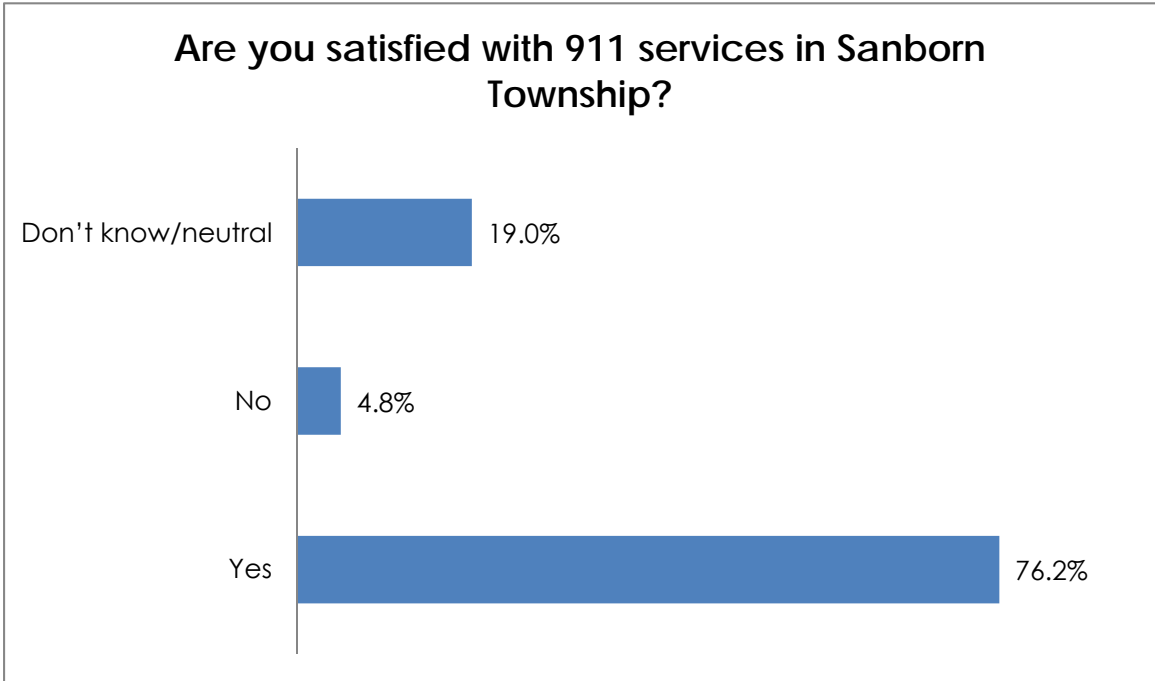
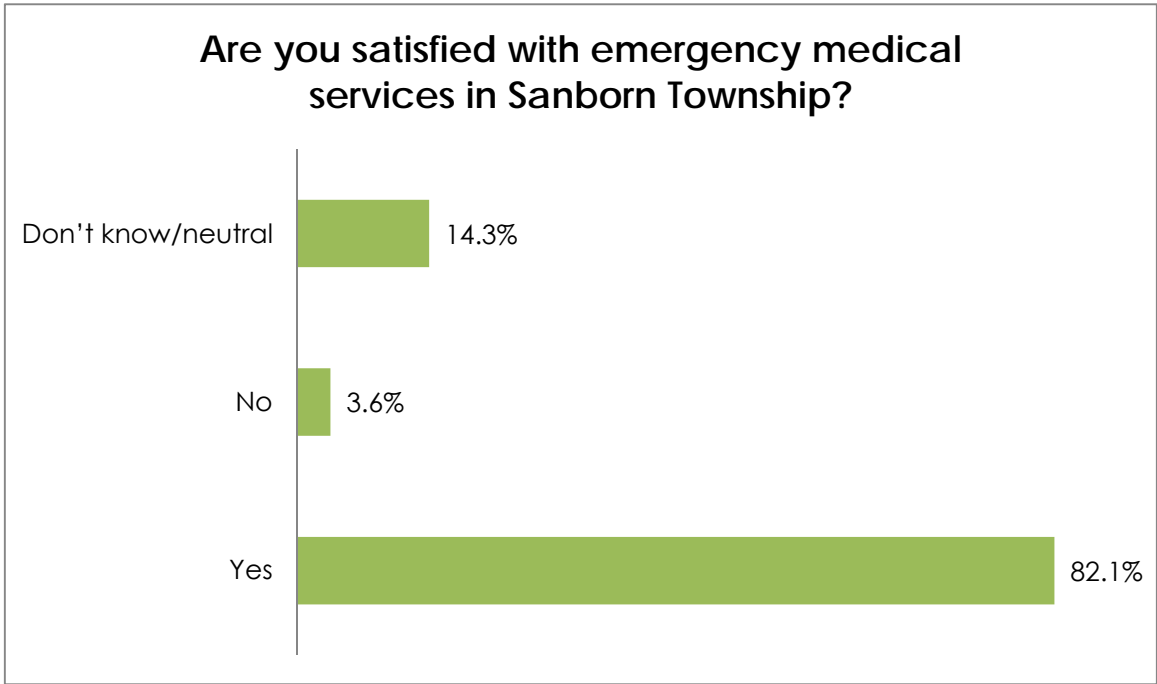




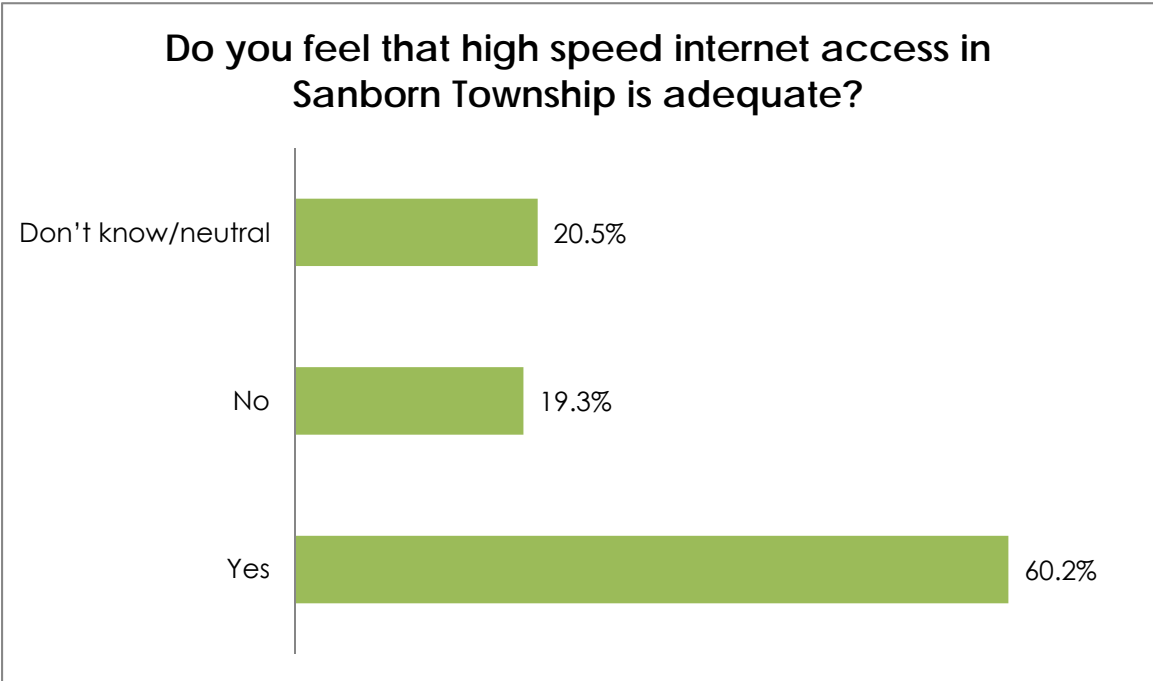
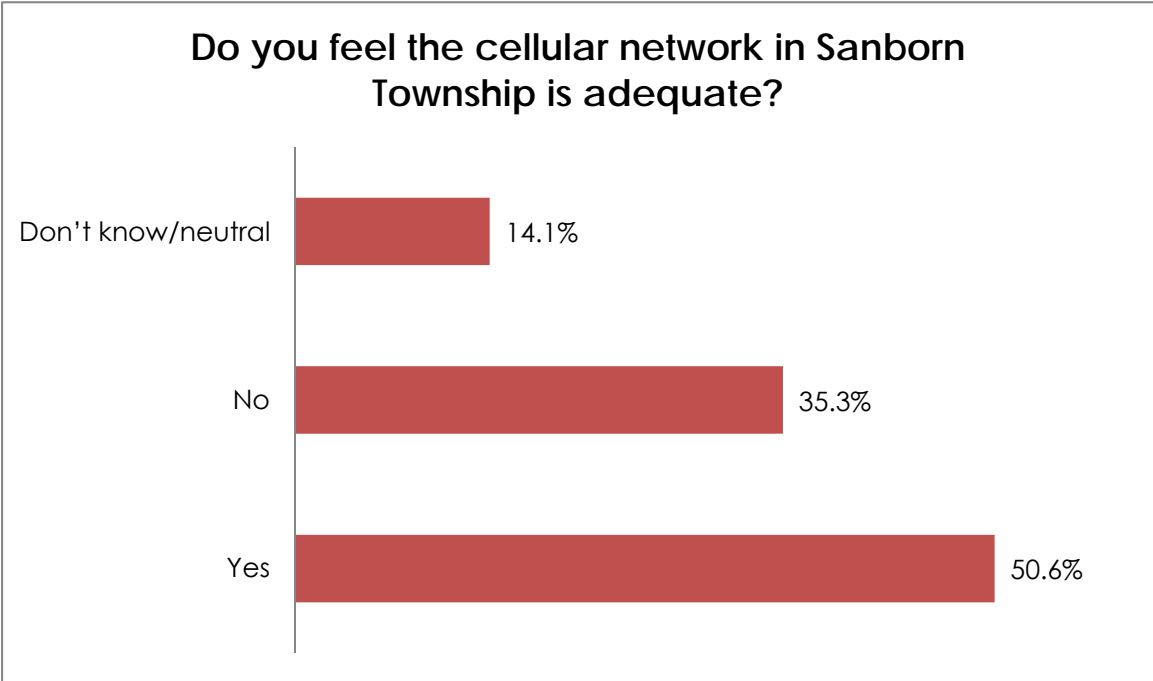


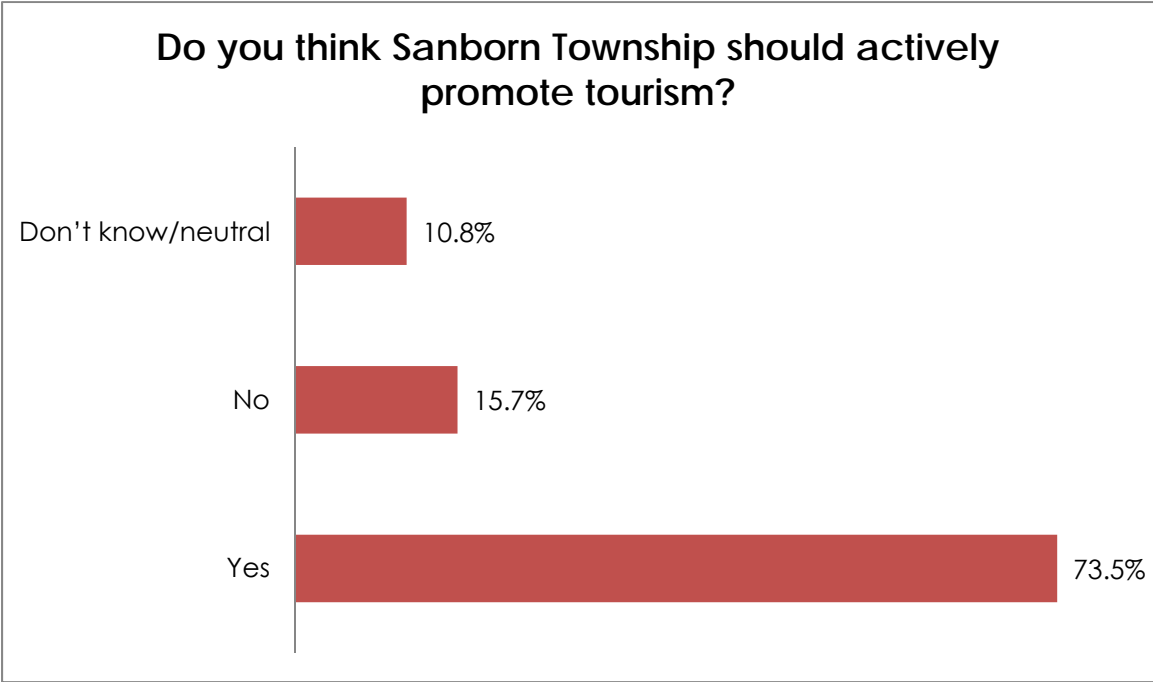
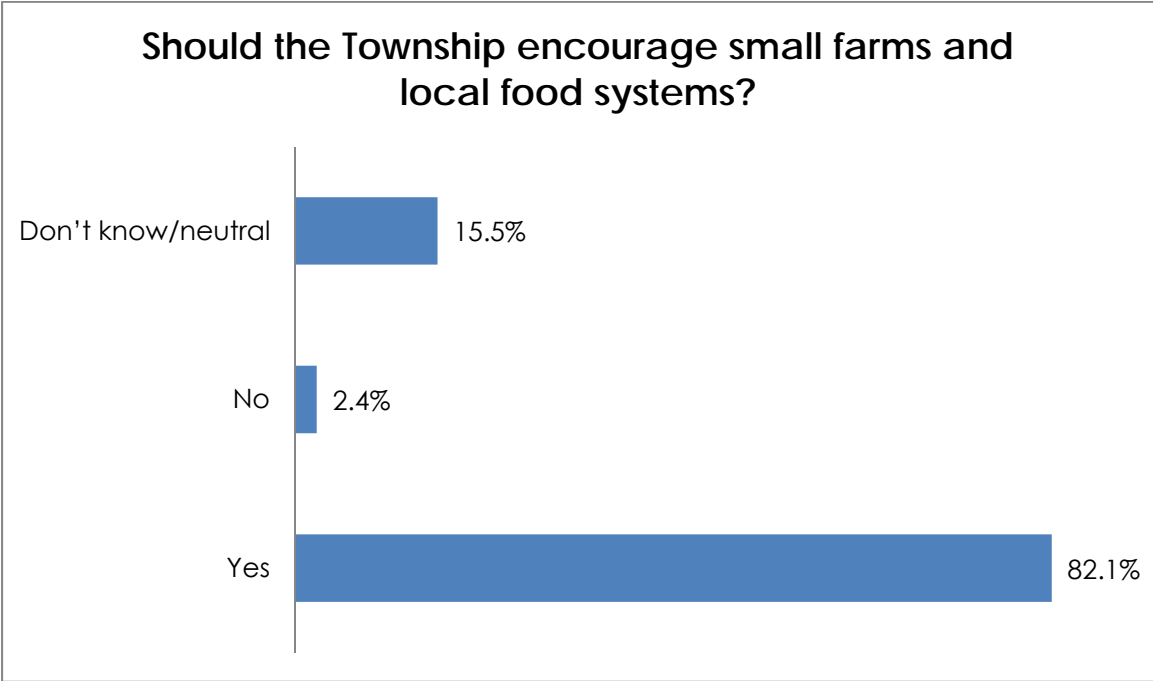


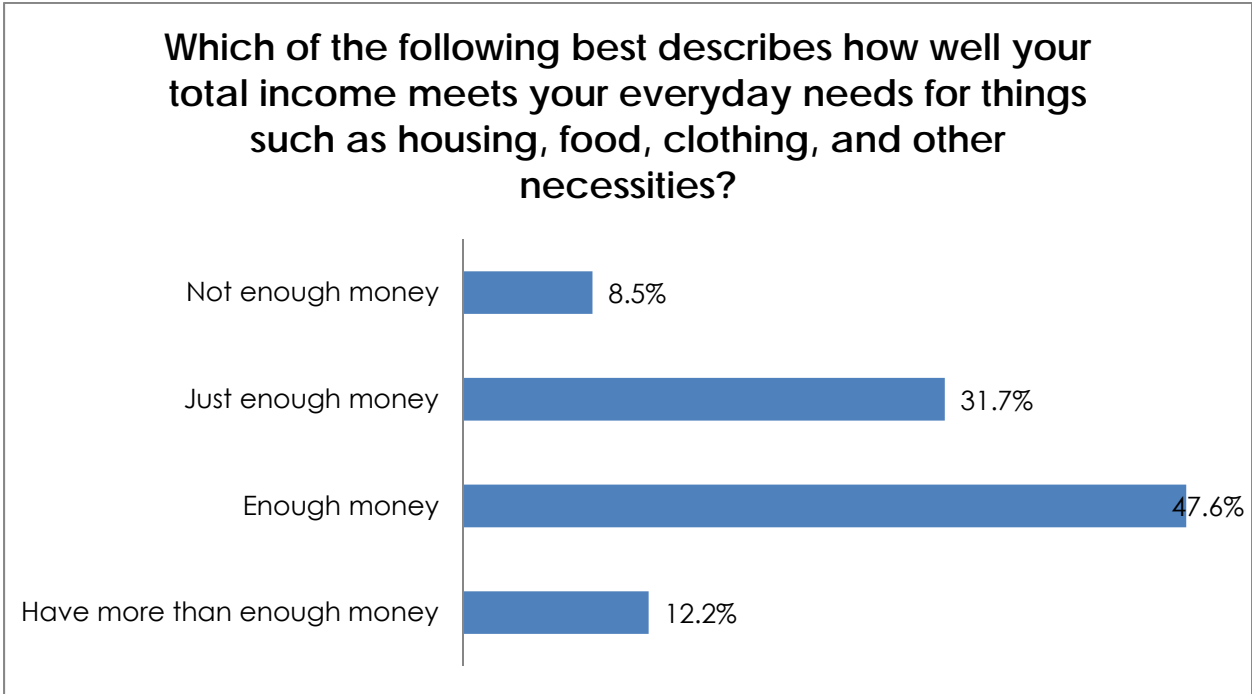
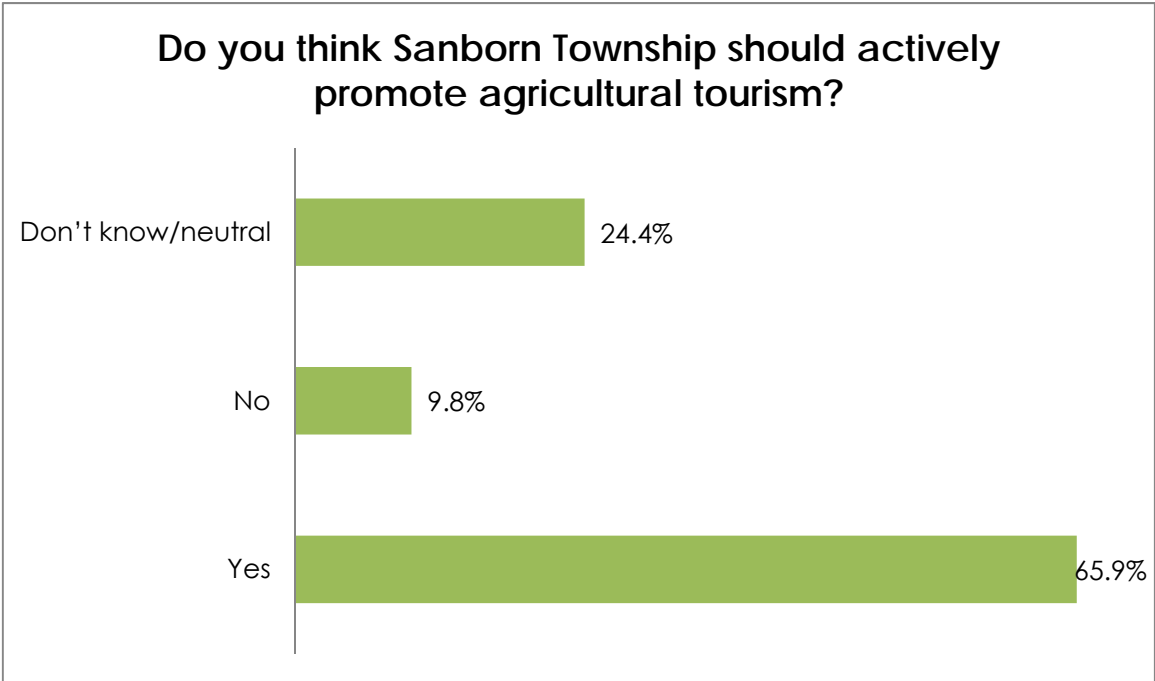












How Important are each of the following as guiding principles in your life?

